## **TechRentals**



















**2025** RENTAL SOLUTIONS GUIDE

#### Message from the CEO



Dear Valued Customers,

It is with great pride and excitement that I welcome you to our latest product catalogue. At TechRentals, we believe in serving our customers with quality, and a relentless commitment to excellence through our

rental products and services. Every product in this collection has been carefully chosen and curated to meet the highest standards, ensuring that we deliver not just products, but solutions that enhance your life and business.

Our team continues to push boundaries, staying ahead of trends and investing in the right rental solutions to meet your needs. As you browse through this catalogue, I hope you'll find inspiration, new ideas, and products that will help you achieve your goals.

Thank you for being part of the TechRentals journey. We look forward to continuing to serve you with excellence and dedication.

Yours Sincerely,

Davia

David Gallagher, CEO

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## 11 Reasons Why You Should Rent

#### **Stretch Your Budget**

Test equipment is often used just some of the time. Rental allows you to pay for it only when you use it, as well as stretching your budget by accessing more equipment than you could if you purchased it outright.

## 2

#### **Utilise Operating Expense**

Test equipment is expensive often sitting on a shelf collecting dust—not an effective use of your valuable business capital. Rental allows you to free up cash for other parts of the business where it can be used to generate additional profits.

## 3

#### **Conduct Product Research Before Purchasing**

It is not always clear immediately which make and model will fulfill your requirements best. Trialling it on casual rental gives you hands-on experience to guide purchase decisions.

## 4

#### **Recover Costs Quickly**

Generally rental payments are fully tax deductable and the expense can be recovered far more quickly than the tax allowances for ongoing asset depreciation.<sup>†</sup>

## 5

#### **Eliminate Running Costs**

The expense of maintaining, calibrating and warehousing your test and measurement equipment can be high. With rental you avoid these costs, as well as freeing up storage space within your premises.



### 6

#### **Cost Allocation is Simplified**

Rental payments are easy to track and account for in your business, making it easy to allocate appropriate costs to departments, clients or specific projects.

## 7

#### **Respond to Sudden Demands**

At peak periods, for unexpected projects, or when essential equipment breaks down, rental can put the necessary equipment in your hands ensuring seamless operations.

## 8

#### **Apply New Technologies and Avoid Obsolescence**

Rental allows you to update your equipment in line with other businesses and take advantage of new technologies. It also avoids the potential cost of owning equipment that can be quickly superseded.

## 9

#### **Preserve Credit**

Renting avoids the potential cost of utilising credit facilities such as an overdraft or credit cards, which are often used for equipment purchases.

### 10

#### **Technical Support**

When you rent from TechRentals you'll have the support of an experienced team of product experts, who'll help you get the most from your equipment. And in the unlikely event of equipment failure we will do our utmost to rectify the issues as soon as possible.

### 11

#### **Reduce Carbon Footprint**

Rental is an inherently more environmentally friendly business model compared to ownership, as the sunk carbon footprint of an asset can be optimised across many users and throughout time.



<sup>†</sup>Please ensure you obtain independent professional taxation advice.

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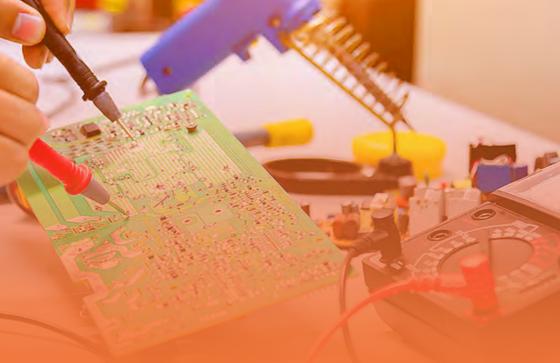
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## **Electronic Test Equipment**

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#### Multimeters & Electrometers

▶ See also Data Loggers on pages 91-94.



## Fluke 233 Digital Multimeter with Remote Display

FLU,233 (1224) AU

The removable display has a range of 10 meters and allows the user flexibility when the meter and the display need to be in separate places. Features temperature, True-RMS AC voltage and current for accurate measurements on non-linear signals, can measure up to 1000VAC and DC, up to 10A (20A for 30 seconds), and features a capacitance range of 10,000µF.



## Fluke 28II EX Intrinsically Safe True-RMS Multimeter

FLU,28II-EX (1239) AU · MY · SG

Intrinsically Safe Multimeter is a completely sealed IP67 rated case. For use inside and outside of hazardous zones. Measures up to 1000V, 10A AC and DC with true-RMS for accurate measurement on non-linear signals. Frequency measurements to 200kHz, resistance, conductance, diode test, capacitance, and temperature. Results are displayed on the bright, 4-1/2 digit LCD (20,000 counts).



## Fluke 87-5 Industrial True-RMS Multimeter with Thermometer

FLU,87-5 (1205) MY · SG

Unique function for accurate voltage and frequency measurements on adjustable speed True-rms AC voltage and current for accurate measurements on non-linear signals. Built-in thermometer. Measures up to 1000VAC and DC. Measures up to 10A (20A for 30 seconds). 10,000uF capacitance range. Frequency to 200kHz and % duty cycle. Peak capture to record transients as fast as 250µs.  $4\frac{1}{2}$  digit mode.



#### **Electronic Test Equipment**

## Keysight 34461A Digital Multimeter 6½ Digit Truevolt

#### KEY,34461A MY • SG

Precision 6.5 digit multimeter. 100% drop-in 34401A compatibility, graphical views of your measurement results, long-term trends and measurement histograms for a statistical view. Control, capture and view your DMM's data on your PC. Measures noise and injected current, input bias current, AC RMS (3Hz to 300kHZ), DC and AC V (100mV to 1000V), resistance (100 $\Omega$  to 100M $\Omega$ ), frequency, period, continuity, diode (5V), current and temperature. Using TrueVolt technology the analogue to digital converter displays results on a clear 11cm hi-res display.



#### Simco-Ion FMX-004 Electrostatic Fieldmeter

#### SIM.FMX-004 (1245) AU

Compact electrostatic fieldmeter used for locating and measuring static charges. Its pocket size and 3-button operation makes it convenient and easy to use. Auto range switching up to 30kV, digital and bar graph display with ± indicators, with audible alarm.



#### **Vermason 222541 Electrostatic Meter**

#### VER,222ES NZ

Precision field meter is designed to measure electrostatic voltage potentials over selected distances from 1 to 20cm. Ideally suited to periodic audits of facilities, monitoring packaging, materials, machines and other electrostatic generative equipment or processes. Range at the standard distance of 2cm is 20kV. Range: 1 to 20cm. Display: 2 range, 3 digits in V or kV.





#### **Function Generators**

▶ See also RF Signal & Sweep Generators on page 16.





## **Keysight 33612A 80MHZ 2 Channel Waveform Generator**

#### KEY,33612A (1612) AU

80MHz, 2 channel waveform generator, sine, square, pulse, ramp, triangle, Gaussian noise, PRBS and arbitrary waveforms. Capable of modulation, sweep, burst, waveform summing and combining. Maximum output into  $50\Omega$ , 1mVpp to 10Vpp. Up to 120MHz sine and Gaussian noise at <= 4 Vpp. Memory is 4M Samples deep.

#### Digital Storage Oscilloscopes



## Keysight DSOX3024A Oscilloscope 200MHz 4 Channels

#### KEY,DSOX3024A (1350) AU

4 channel 200MHz digital storage oscilloscope. Sampling rate 2G/s (4G/s half-channel interleaved mode). 2Mpts memory depth, waveform update rate 1 million waveforms/s, sensitivity 1mV/div to 5V/div. Pass/fail masks can be automatically created based on an input reference waveform or on a PC then imported via USB, also store and remove waveforms via USB.



## **Keysight MSO6104A 1GHz Digital Oscilloscope** with Logic

#### KEY, MSO6104A (1320) AU

1GHz 4 + 16 channel mixed signal oscilloscope (MSO). 4Gsa/s. XGA Colour display updates 100,000 waveforms/s with 256 levels intensity. 4 analogue channels and 16 logic channels. Deep memory, 8 digit frequency counter function. Triggering includes video, HDTV, I2C, SPI, LIN, CAN, & USB. FFT analysis included. LAN, USB, GPIB, & XGA interfaces standard. Certified ISO/IEC 17025 (AU only).



#### **Electronic Test Equipment**

#### Fluke 200MHz 4 Channel ScopeMeter 190-204/S

#### FLU,SCOPEMETER 204 (1361) AU · MY · SG

200MHz 2.5GS/s (1.25GS/s 4ch), 4 channel digital oscilloscope. Features Persistence mode, Connect-and-View triggering for intelligent, automatic triggering on fast slow and complex signals. 10,000 points per trace waveform capture (scope mode), USB host port for direct data storage, automatic capture and replay of 100 screens. Roll mode gives 30,000 points per channel for low frequency signal analysis, TrendPlot paperless recorder. Isolated inputs and safety rating CAT III 1000V/CAT IV 600V.





#### Fluke 190-504 500 MHz 4 Channel Scopemeter

#### FLU,190-504 NZ

500MHz bandwidth, 4 channel colour oscilloscope with DMM feature. Digital display persistence giving analog oscilloscopelike waveform decay. Sampling rate: 5 GS/s. Sensitivity: 2 mV-100 V/div plus variable attenuation. Trigger types: Connectand-View™, Free Run, Single Shot, Edge, Delay, Dual Slope, Selectable pulse width, N-Cycle. Glitch capture: 8ns. Measures electrical power properties VDC, VAC rms, VAC + DC rms, Current (through clamp or shunt). Independently floating isolated inputs up to 1000 V CAT III/600 V CAT IV between inputs, references and ground. 30,000 data points stored per channel. Captures intermittents and fast glitches. Software supplied. Battery powered.





#### Probes & Accessories

#### Fluke 80i-110s AC/DC Current Probe

#### FLU.I-PROBE (1460) AU · NZ

Current clamp for oscilloscopes which uses a Hall effect cell for the measurement of DC or AC current. Measures currents from 0.05 to 100A peak. A thumbwheel can be used to reset zero for adaption to the measurement environment. The clamp can be used with any measurement instrument which has a BNC input and an impedance of  $1M\Omega$ , <100pF. Maximum conductor diameter, 11.8mm.





#### LCR Meters



#### Hioki 3532-50 5MHz LCR Meter

#### HIO,LCR 3532-50 (1290) AU

Frequency range 42Hz to 5MHz. 5ms high speed measurements. Basic accuracy of ±0.08%. Memory for 30 sets of measurement conditions, including comparator values. Includes correlation correction function, interactive touch panel operation and enlarged display function. Applications include laboratory use for evaluation of operating characteristics, production line use or R&D. Measurement data captured by a personal computer can be displayed graphically by using standard spreadsheet software.

#### DC Power Supplies & Loads



#### BK MR 160V, 120A 3KW DC Power Supply

#### BK,MR 160-120 (8122) AU

Multi-ranging DC power supply allowing any combination of the rated 160V and 120A up to the maximum output power of 3000W.



#### BK MR 600V 8.5A 3kW DC Power Supply

#### BK,PVS 600-8.5 MR (8120) AU

Multi-ranging DC power supply allowing any combination of the rated 600V and 8.5A up to the maximum output power of 3kW.



#### Kikusui PLZ1003W Electronic Load

#### KIK,PLZ1003W (8110) AU

1000 watt electronic load. Voltage range 1.5 to 120V. Current range 0 to 200A. Provides constant current, resistance, voltage, and power modes (CC/CV/CR/CP). A multiple number of setting conditions can be stored in memory. Sequence function allows setting conditions to be changed automatically. Applications include characteristic or lifetime tests of a variety of DC voltage sources such as switching power supplies, primary and secondary batteries or as burn in loads.



#### **BK 1902B DC Power Supply**

#### BK,1902B MY • SG

Multi-ranging laboratory grade DC Power Supply. Voltage 1-60 V and Current 0 - 15A. USB interface with PC software for remote control and external timed programming. Maximum output power of 900W.



#### **Electronic Test Equipment**

#### **Electronic Calibrators**

▶ See also Industrial Process Calibrators on pages 81-88.

#### Fluke 5500A Multi Product Calibrator

#### FLU,5500A (1660) AU

Calibrator sources direct voltage & current, alternating voltage and current, with multiple waveforms and harmonics, 2 simultaneous voltage outputs or voltage & current. Simulates power with phase control, resistance, capacitance, thermocouples and RTDs. Selectable ranges include the following outputs VDC from 0~1.02kV, VAC from 1mV~1.02kV with output from 10Hz~500kHz. AC current from 0.01µA~11A with output from 10Hz~10kHz. DC current from 0~11A. Resistance values from short circuit to 330Mohm. Capacitance values from 330pF~1,100µF. Temperature t/c B, C, E, J, K, L, N, R, S, T, U, RTD Pt385 100ohm, Pt3926 100ohm, Pt3916 100ohm, Pt385 200ohm, Pt385 500ohm, Pt385 1kohm, Ni120 120ohm & Cu427 10ohm. Certified ISO/IEC 17025 (AU only).



#### Genrad 1433F 111kΩ 7 Decade Resistance Box

GR,1433F MY • SG

Seven decades by  $0.01\Omega$  to  $111k\Omega$ . Accuracy  $0.01\% + 0.002\Omega$ . Useful for platinum resistance thermometer calibration.



## IET Resistance Temperature Detector Simulator RTD-250

GR,RTD-250 (1658) AU

20 to 1,121.10  $\Omega$ , 5 decades, accuracy (ppm) 200, resolution 10 m  $\Omega$ .



**NEW ITEMS** are being added to the inventory constantly, so if you don't see what you're looking for, please call us on...

TechRentals Australia: 1800 632 652

TechRentals Calibration: 1300 790 480

TechRentals New Zealand: 0800 832 473

TechRentals Malaysia: +603 5021 0830

TechRentals Singapore: +65 6950 7360



#### Gauss/Tesla Meters



#### FW Bell Gauss/Tesla Meter

BEL,4190 (1969) AU · NZ

Handheld digital ELF gauss meter. Maintains accuracy regardless of orientation. Applications include detecting magnetic field emissions from overhead AC power lines, video display terminals, office equipment and household appliances. Analogue o/p, data logging, auto range 0.1 to 1999 mG, minimum resolution 0.1mG/.01 uT.



#### FW Bell 5180 Gauss/Tesla Meter

BEL.5180 (1960) AU · NZ · MY · SG

Magnetic measuring equipment, portable gaussmeter. Built-in software eliminates the need for complex calibration procedures. Key features include Auto Zero, Min/Max/Peak Hold, Auto Range and Relative Mode. Allows the user to select Gauss, Tesla or Ampere/Meter readings. With Hall effect transverse probe STD18-0404. Frequency bandwidth DC - 20kHz, range from 0 up to 30 kG with a basic accuracy of 1.1% (FS). Analogue output (±3V FS) and USB interface. Battery operated.

#### E & H Field Strength Meters

▶ See also Radiation Monitoring & Protection on page 143.



#### Holaday HI-3604 E & H Survey Meter ELF

HOL,HI-3604 (1945) AU · MY · SG

Low frequency field meter. Designed to evaluate electric and magnetic fields associated with 50Hz power lines. Frequency range 30 to 2,000Hz. Measures magnetic fields from 0.1 milligauss to 20 gauss. Measures electric fields from 1 volt/meter to 200 kilovolts/meter. LCD display. 127 reading data memory.



#### **Holaday HI-3627 Magnetic Field Meter**

HOL,HI-3627 (1980) AU

Three orthogonal field sensors. Dynamic range 0.2mG~20G. True RMS detection. Frequency range 5Hz to 2kHz with an inbuilt 30Hz high pass filter. Meets requirements of the Swedish protocol and the IEEE P-1140 protocol.



#### **Electronic Test Equipment**

## Narda NBM-550 'E' Field Strength Meter and Probe EF1891

#### NAR, NBM-550 (1930) AU

Measures the field strength of non-ionising radiation from various transmission facilities. This includes mobile phone and broadcast towers, to determine radiation exposure to nearby workers and the general public. Can be used to make precise measurements to establish human safety, particularly in workplace environments where high electric field strengths are likely to occur. It also includes a nondirectional isotropic probe for applications in the frequency range 3MHz to 18GHz, with a probe interface that automatically detects probe parameters for simple operation. Features: Large graphical display. GPS interface with automatic storage of position and measurement data. Built-in memory stores up to 5000 measurement results. Audible warning with programmable alarm threshold.



#### EMC & Power Disturbance Simulators

#### Teseq NSG 437 30kV Static Discharge Generator

#### TES.NSG 437 (8374) AU

Ergonomic design and advanced functionality. designed to sit comfortably in the operator's hand, with operating conditions constantly displayed and accessible on a bright, clear colour touch display.

#### Features

- · Air and Contact discharge to 30 kV
- · Easily and quickly interchangeable discharge networks
- · Activity loa







## Rent2Buy

Flexible. Cost Effective. Worry-Free.

TechRentals' **Rent2Buy** lets you buy the rented equipment upon the completion of your agreed minimum rental term. This is the perfect plan that lets you preserve capital, claim tax deductions\*, and have full service and technical support along the way.



## **Radio Frequency**

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#### RF Signal & Sweep Generators

▶ See also Function Generators on page 8.

#### Spectrum Analysers - High Frequency



## **Keysight N9344C 20GHz Spectrum Analyser** with Tracking Generator

#### KEY,N9344C-TG (2537) AU · MY · SG

9kHz to 20GHz with 5MHz to 7GHz tracking generator. -142dBm displayed average noise level (DANL), <0.95s sweep time for 20GHz full span. Average continuous power, +30dBm for 3 minutes maximum. Flexible remote control via USB/LAN. User memory 64MB, able to store approximately 14,000 traces.



## **Keysight N9344C 20GHz Spectrum Analyser** with GPS

#### KEY,N9344C (2538) AU

9kHz to 20GHz with GPS. -142dBm displayed average noise level (DANL), <0.95s sweep time for 20GHz full span. Average continuous power, +30dBm for 3 minutes maximum. Flexible remote control via USB/ LAN. User memory 64MB, able to store approximately 14,000 traces.



## Anritsu MS2712E 4GHz Spectrum Analyser with Tracking Generator & GPS

#### ANR, MS2712E-20-31 (2560) AU

Handheld 4 GHz Spectrum Analyser with Tracking Generator and GPS is ideal for field testing of spectrum monitoring, broadcast proofing, RF& microwave measurements, and Wi-Fi & Description of the second of the



## Anritsu MS2724C 20GHz Spectrum Analyser with GPS

#### ANR, MS2724C (2510) MY · SG

Handheld is ideal for field testing of spectrum monitoring, broadcast proofing, RF & Departments, and Wi-Fi wireless network measurements. Comes with Coverage mapping (RSSI) options, Interference Analyser (Spectrogram) options and Channel Scanner options. Dynamic range 104 dB, DANL -160 dBm, stores up to 13,000 traces and setups on-board or on a USB flash drive.



#### Network Analysers/Antenna & Cable Test

## **Keysight E5071C-260 ENA Series Network Analyser**

#### KEY,E5071C (2744) AU

2 port, 9kHz to 6.5GHz network analyser is a fast, accurate, and versatile solution to RF component testing. Incorporates an integral S-parameter test set and 85032F calibration kit. The E507IC-260 is suitable for RF evaluation tests concerning component manufacturing and is deal for R&D engineers, wireless designers, and aerospace/defence contractors. Features: Wide dynamic range: >123 dB dynamic range at test port (typical). Low trace noise: 0.004 dB rms at 70kHz IFBW. Fast measurement speed, 41ms. High temperature stability, 0.005dB/°C.



## Anritsu MW82119B 2,100MHz PIM Master with Site Master Option

#### ANR, MW82119B-2100 (2198) AU

Passive Intermodulation (PIM) analyser with measurement frequency 2,100 MHz and Site Master (cable and antenna analysis) options. Portable battery-operated, high power for the major wireless standards. Verify PIM performance at difficult to access sites such as Remote Radio Head (RRH) installations or indoor Distributed Antenna Systems (DAS). PIM measurements include PIM vs time, sweep PIM, distance to PIM (DTF), 1-port phase and smith chart.



## Anritsu MW82119B 850MHz PIM Master with Site Master Option

#### ANR.MW82119B-850 (2199) AU

Passive Intermodulation (PIM) analyser with frequency, Cellular 850MHz band and Site Master (cable and antenna analysis) options. Portable battery-operated, high power for the major wireless standards. Verify PIM performance at difficult to access sites such as Remote Radio Head (RRH) installations or indoor Distributed Antenna Systems (DAS). PIM measurements include PIM vs time, sweep PIM, distance to PIM (DTF), 1-port phase and smith chart.









## Anritsu S331E 4GHz Sitemaster Cable & Antenna Tester

#### ANR, S331E (2180) AU

Cable and antenna analyser, frequency range 2Mhz to 4GHz. Measures return loss, VSWR, cable loss, and Distance To Fault. Suitable for legacy networks in addition to the new 3G and 4G networks being installed. Applications include cable & antenna installation and maintenance for wireless service providers.





## Anritsu S331L 4GHz Sitemaster Cable & Antenna Analyser

#### ANR,S331L MY · SG

Cable and antenna analyser, frequency range 2Mhz to 4GHz. Built in power meter 50MHz to 4GHz, -33dBm to +20dBm. Measures return loss, VSWR, cable loss, and Distance To Fault. Suitable for legacy networks in addition to the new 3G and 4G networks being installed. Applications include cable & antenna installation and maintenance for wireless service providers, contractors, military, aerospace, defence, and public safety applications.





## Anritsu S332D Colour Sitemaster incl 4GHz Spectrum Analyser

#### ANR,S332D NZ

Used in commissioning and maintenance of cellphone sites, radio installations and coaxial cables. Standard signal table allows automated setup. Colour display. Frequency range 25MHz~4GHz for cable and antenna test. 9kHz~3GHz for spectrum analysis. Measures return loss (range 0~60dB), SWR (range 1~65), cable loss (range 0~30dB) and distance to fault (range 1197m). Spectrum analyser resolution bandwidth 100Hz~1MHz. Integral synthesized signal generator. Calibration components included for initial set-up. RS-232 interface for printer or PC. Analysis software contains distance to fault and Smith chart tools. Portable.



#### **Radio Frequency**

## **Anritsu S332E Sitemaster including Spectrum Analyser**

#### ANR, S332E (2175) AU

2MHz to 4GHz and spectrum analyser 100KHz to 4GHz. DANL -152dBm. Measures return loss, VSWR, cable loss, and Distance To Fault. N(f) Type port. Analysis software containing DTF and Smith chart tools included. Complete with calibration standard, AC/DC adaptor, and 12VDC car adaptor. Cable & antenna installation and maintenance for wireless service providers, contractors, military, aerospace and defence, and public safety applications.





#### **Anritsu Microwave Site Master Handheld**

#### ANR, S820E (2149) AU

Microwave antenna and cable analyser, frequency range 1MHz to 20Ghz with 110dB dynamic range. Coaxial and waveguide system measurements include 1-port Return Loss, VSWR, Cable Loss, Distance-To-Fault and VSWR, Smith Chart, transmission and phase measurements. Unit comes standard with USB interface, smith chart and software management tools. Supplied with K(m) type port (compatible with 3.5mm and SMA), the S820E Sitemaster also includes "Classic Mode" which allows former users of the S8X0D series to become immediately productive with a minimal additional effort. A range of waveguide calibration components are separately available to rent





#### **Anritsu Sitemaster Waveguide Components**

#### ANR, WAVEGUIDE-ADAP (2190) AU

Calibration components and wave guide to co-ax adaptors for Anritsu S820x Sitemaster. Set includes 1/8 and 3/8 shorts, termination, and waveguide to co-ax adaptor.



#### Communication Test Sets

#### **Anritsu S412E LMR Master**

#### ANR.S412E AU

A compact handheld multi-function mobile radio analyser that has been specifically developed for technicians and engineers who install and maintain public safety, utility and private mobile communications systems.









## **General Dynamics R8000B Communications Analyser**

#### GD,R8000B (2380) AU

A compact communication system analyser which is designed to monitor and service radio communications equipment. It also generates and receives signals and measures modulation and frequency. The R8000B performs a variety of tests on AM, FM, PM, and optional digital standards P25, DMR, NXDN, and TETRA radio transceivers. A full-featured instrument which acts as a spectrum analyser, signal generator, sensitive measurement receiver, oscilloscope, and much more. With high spectral purity, it is a lightweight and truly portable solution to effective communications system analysis. Features: Frequency range 250 kHz to 1 GHz. 50W 5 min, 150W max. Less than 6.4 kg and has an 8.4" colour LCD screen. DANL is -140dBm (50 $\Omega$  input termination).

#### Power Meters - RF



#### **Keysight E4416A EPM P-Series Power Meter**

#### KEY.E4416A MY · SG

Power meter, for peak, average, peak-to-average ratio and time-gated measurements.  $100\mu W$  to 25W (-70dBm to 44dBm), 9 kHz to 110GHz (power sensor dependent ), 4 digit display - watts, dBm, dB (rel). Analyser Software for complete pulse and statistical analysis. 8 predefined wireless configurations (GSM, EDGE, NADC, iDEN, Bluetooth<sup>TM</sup>, IS-95 CDMA, W-CDMA and cdma2000). Comes with E9322A Peak & Average Power Sensor (50MHz to 6GHz, 1.5MHz bandwidth, -45dBm to +20dBm at Normal Mode).



## **Keysight E4418B EPM Series Single Channel Power Meter**

#### KEY.E4418B MY · SG

RF Power meter for average power measurements.  $100\mu W$  to 25W (-70dBm to 44dBm), 9kHz to 110GHz (power dependent), 4 digit display - watts, dBm, dB (rel). Comes with E9300A Average Power Sensor (50MHz to 18GHz, -60dBm to +20dBm at Normal Mode).

#### Antennas



#### **Anritsu Dipole Antenna Kit**

#### ANR, ANTENNA (1834) AU

MP534A dipole antenna 25 to 520MHz and MP651A 470 to 1700MHz





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#### LAN Cable Testers



#### **TESTPRO CV100-K50 Copper Cable Certifier**

#### AEM,CV100-K50 (3277) AU

Supports testing and certification for network deployments up to 40 Gigabit Ethernet for Cat 5e, 6, 6A, 7, 8 or Class I/II cabling system. The electrically centered test plug offers a frequency range of 3000 MHz which exceeds the Cat 8, Class I/II 2000 MHz requirement.



## Fluke DSX-5000 Cable Analyser 1GHz Class FA FLU,DSX-5000 (3278) AU · NZ · MY · SG

IGHz cable analyser copper test solution enables testing and certification of twisted pair cabling for up to 10 GigE deployments and will certify shielded and unshielded structured cabling systems from Cat 3, to 7A and Class C, to FA at Level V accuracy. 9 second Cat 6 autotest. Built in Alien Crosstalk testing capability. PLA004 Cat 6A / Class EA), CHA004 (Cat 6A/Class EA) adapters and LinkWare PC reporting software included.







#### Fluke DSX-8000 Cable Analyser 2GHz Class FA

#### FLU, DSX-8000 (3254) AU · NZ · MY · SG

Cable analyser copper test solution enables testing and certification of twisted pair cabling for up to 40 GigE deployments and will certify shielded and unshielded structured cabling systems for Cat 5E,6,6A, 7A, 8 and Class C I/ II, to FA at Level V accuracy. 8 second Cat 6 autotest. Built in Alien Crosstalk testing capability. PLA004 (Cat 6A / Class EA), CHA004 (Cat 6A / Class EA) adapters and LinkWare PC reporting software included.



#### **Set of DSX-PC6 Patch Cord & MPTL Adapters**

#### FLU,DSX-PC6S (3259) AU

Enables you to use a DSX CableAnalyzer™ to make sure that patch cords comply with ANSI/TIA and ISO/IEC standards. The adapters have RJ45 jacks that Fluke Networks selects specifically for tests on Cat 6 patch cords. Suitable for Cat 6 MPTL testing.



## Kit of Encircled Flux MM Test Reference Leads for the DSX-MM

#### FLU, DSX-MM EF LEADS MY · SG

Kit consists of Encircled Flux (EF) compliant test reference leads for the following fibre networks: ST 62.5um (OM1) and SC, LC 50um (OM3 & 4). Suitable for Fluke CertiFiber Pro Optical Loss Test Set.



#### Fluke CertiFiber Pro MM-SM Optical Loss Test Set B

#### FLU, DSX-MMSM B (3263) AU · MY · SG

Multi and singlemode (CFP-Q-ADD) optical loss test set modules for the Versiv DSX-5000. Provides Tier 1 certification at 850, 1300, 1310 and 1550nm in 3 seconds (for 2 wavelengths). A set reference wizard ensures correct reference setting. Encircled Flux compliant as required by ANSI/TIA and ISO/IEC. Measures fibre optic attenuation, length, and propagation delay. Includes built in VFL and Linkware software. Linkware software



#### Fluke Certifibre Pro Quad OLTS

#### FLU, CERTPROQUAD NZ

Latest generation fibre certification tester designed for testing, trouble shooting and certifying network cabling for both singlemode and multimode. Multimode testing is Encircled Flux compliant. Touch screen user interface for simple set-up and troubleshooting. This unit provides validation of fibre link performance and installation quality, fibre length, measurement of optical loss at multiple wavelengths and polarity confirmation. Multimode bidirectional testing at 850nm & 1300nm at the same time. Singlemode bi-directional testing at 1310nm & 1550nm at the same time. Interchangeable adaptors for SC, LC and ST testing. Pass/fail results based on common fibre standards. Includes in built visual fault locater (VFL).









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## Fluke FI-1000 Fibre Inspection Camera & Cleaning Kit

#### FLU,FI1000 NZ

Provides a visual display of the fibre end-face and pass/fail certification required under IEC61300-3-35. Used with the Fluke Certibre Pro Quad or Pro Multimode above. Results stored and professional reports produced using software supplied. Contamination is the No 1 source of problems in optical networks, use this camera to ensure optimum network performance. Suitable for singlemode and multimode. SC, LC, ST and APC connector tips supplied. Cleaning Kit is supplied for when the fibre end face or port fails certification. Repeat inspection and cleaning until it passes. Cleaning Kit includes: Fibre optic cassette cleaner, pre-saturated wipes, Fibre End face and Port Cleaner (Ferrule) - 1.25mm and 2.5mm.

#### LAN/WAN Analysers



#### **NetAlly LinkRunner 10G Ethernet Tester**

#### NET, LR-10G (3211) AU

Simplifies testing and configuration of copper and fibre ethernet networks, streamlining workflows by combining essential functions of installation, triage, network validation and troubleshooting through layers 1-7. Accelerates deployments, speeds up problem identification, and improves the efficiency and effectiveness of network installers and operations teams. Features: LANBERT, Qualify premise cabling for carrying Multi-Gig and 10Gig Ethernet (requires LR-10G or EXG-300 at end point). Layer 1-7 AutoTest enables any technician to find network problems. Monitor networks for intermittent issues, every minute for up to 24 hours. Validate up to 90W 802.3bt PSE with TruePower loaded PoE test.



#### **NetAlly Etherscope EXG-300 Network Expert**

#### NET,EXG-300 (3212) AU

A multi-technology, all-in-one handheld network analyzer thatenables engineers and technicians to deploy, maintain and document Wi-Fi and Ethernet access networks. Supports MultiGig networks from 10/100/1000Mbps to 2.5/5/10G and 802.11a/b/g/n/ac/ax. Also known as, Wi-Fi versions 1, 2, 3, 4, 5, 6/6E.



#### **NetAlly Etherscope EXG-200 Network Expert**

#### NET, EXG-200 (3213) AU

A multi-technology, all-in-one handheld network analyser that enables engineers and technicians to deploy, maintain and document Wi-Fi and Ethernet access networks. Supports MultiGig networks from 10/100/1000Mbps to 2.5/5/10G and 802.11a/b/g/n/ac. The AirMapper Site Survey application enables you to perform a Wi-Fi survey of an indoor or outdoor location.



## 0

#### **NetAlly AirCheck G2**

#### NET, AIRCHECK G2 (3219) AU

Handheld wireless tester that allows users to quickly verify and troubleshoot 802.11 a/b/g/n/ac networks. Intuitive user interface and management platform provides actionable intelligence to remove the complexity of wireless troubleshooting. Fully controllable over IP. Features: Site Survey (heat maps). Interference detection. Channel scanning. Connectivity tests. Perf performance testing. Identify: Spotty connections, dead zones, slow speeds, unauthorized access, rogue access points and POE.



#### **VeEX Ethernet Services Test Set 1G**

#### VEE,MTX150X-1G (3213) AU

An Ethernet services test solution for Layer 1 to 4. Required by field technicians to install, verify, maintain and troubleshoot Metro Ethernet links, Business services, Internet Access and other packet-base services up to 1Gbps.

- · Loopback device included
- · RFC2544
- · V-Sam test suite compliant with ITU-T Y.1564 standard
- · Throughput, BERT, IPv4/IPv6



#### **VeEX Ethernet Services Test Set 10G**

#### VEE,MTX150X-10G (3214) AU

A self-contained Ethernet services test solution for Layer 1 to 4. Required by field technicians to install, verify, maintain and troubleshoot Metro Ethernet links, Business services, Internet Access and other packet-base services up to 10 Gbps. Ethernet Testing includes BERT, RFC2544, Throughput, Y.1564, Optical Lane BERT, Loopback, PCS Analysis, Multiple Stream (32), IP Connectivity and IPv6. Ethernet Layer-4+ Testing: V-PERF IGE/10GE Line Rate TCP Throughput per RFC6349.







### NEW

## Cable Testing You Trust.

Wi-Fi Analysis You Need.



#### LinkIQ™ Duo Cable + Network + Wi-Fi Tester

The NEW **Fluke LinkIQ™ Duo** combines **cable testing** and **Wi-Fi 6E analysis** into one powerful tool, ensuring every link in your network performs reliably.

- Cable Testing: Verify length, wire mapping, and pinpoint faults effortlessly.
- Wi-Fi Validation: Analyse signal strength, identify SSIDs, and troubleshoot connectivity with ease.
- Intuitive Design: Streamlined interface makes it ideal for technicians of any skill level.

No more guesswork. No more switching tools. Complete network confidence in your hands.





Get the Fluke LinkIQ Duo. Explore more at: fluke.co/liqduo-tr25

#### **VeEX Ethernet Services Test Set 100G**

#### VEE,TX300-100GX (3216) AU

Fast troubleshooting and comprehensive analysis of transmission problems can be performed using its common graphical user interface. Novice users benefit from the easy-to-use GUI, while experienced users will appreciate an array of advanced features. Applications include installation, commissioning, monitoring and maintenance of Ethernet networks.

#### Features

- · 100 Gbps Ethernet testing
- · RFC2544 and V-SAM (Y.1564) testing
- · IPv4 and IPv6 traffic generation
- · Fibre Channel
- ·OTN

#### Light Sources & Power Meters

## Fluke FTK1000 Multimode Fibre Optic Light Source & Meter

#### FLU,FTK1000 (3365) AU

Light source is multimode 850nm and 1300nm. Power meter has 850/1300nm multimode and 1310/1550nm single mode. Manage results and print reports via Power meter memory, PC and supplied software.





## JDSU/Viavi SmartClass OLP-87 PRO Fiber PON Power Meter & VIP

#### JDSU,OLP-87 PRO MY · SG

TFTTx/PON power meter with P5000i inspection probe. Used for qualification, activation, inspection and troubleshooting of B-PON, E-PON, and G-PON networks. The FiberChek software and P5000i probe allow for pass/ fail fibre inspection analysis and reporting. Ideal for end-of-line testing, activation, and maintenance of all FTTx/ PON signals. The through-mode capability can simultaneously measure voice, data, and video signals on fiber at 1490 and 1550nm downstream and 1310nm burst mode upstream. Supplied with various tip adapters please inquire.











#### Kingfisher KI-28010 Single Mode APC **Light Source and KI-2600 Power Meter**

KIN.KI28010-2600 (3361) AU

Singlemode light source KI-28010 and power meter KI-2600. Compatible with APC and PC singlemode networks. Wavelengths 1310, 1550 and 1625nm. Memory with text, timestamp and USB dump, real-time PC reporting software. Autotest provides fast, easy and automatic multi wavelength loss testina.

#### **Fusion Splicers**



#### Fitel S178A V2 Fusion Splicer and Cleaver

FIT,S178A NZ

Precision core alignment fusion splicer and cleaver for many variants of fibre including singlemode and multimode. Fully automatic splicer, splice time typically 7s. In demanding applications will also offer cladding alignment (as opposed to core alignment). Data memory for last 2000 splices with visuals of last 100, 304x and 608x magnification. Illumination lamp lights up the v-grooves for better clarity in low light conditions. Supplied with 10mm tight fibre holder, and 250um and 900um holders interchangeable with the S326 cleaver, alleviating need to precisely realign fibres once cleaved. Automatic post-splice tension test (1.96N). Built-in heater for applying splice protectors. Altitude sensors operate up to 5000m which adjust arc time and intensity as required. Dual battery (up to 200 splices & heatings) or AC power. Fitel S326 precision one-step cleaver: Cleave length fixed at 10mm or adjustable to 3-20mm. Integrated sharps bin.



#### Fitel S179 Core Alignment **Fusion Splicer and Cleaver**

FIT,S179 (3313) AU · NZ

Hand-held, core-alignment fusion splicer for single and multimode fibre, includes S326 cleaver, 6 s splice time, 9 s heating time, and losses of 0.02 dB and 0.01 dB on single and multimode fibre respectively. Features include 4.3-inch LCD touch screen, 3+1 LED lights illuminate entire splicing chamber for improved visibility in low-light and Intentional high attenuation splice function, splice loss of 0.1 dB to 15 dB(0.1dB step) can be made for an inline fixed attenuator.



#### **Fitel Fibre Cleaver**

#### FIT.S326 NZ

For single fibre cleaving. Cutting blade locks in place after scoring, preventing double scoring of fibre and also ensuring quality cleaving angles. Waste fibre deposits automatically into a collection chamber. Single Fibre C Cleave length: fixed length 10 & 16mm or adjustable to 3-20mm.



#### **Fitel Fibre Cleaver**

#### FIT,S327 NZ

For single fibre cleaving. Cutting blade locks in place after scoring, preventing double scoring of fibre and also ensuring quality cleaving angles. Waste fibre deposits automatically into a collection chamber. Single Fibre C Cleave length: fixed length 10 & 16mm or adjustable to 3-20mm.



## Fujikura FSM70R+ Ribbon Fusion Splicer and Cleaver

#### FUJ,FSM70R+ (3309) AU

Typically splice time 11 seconds and sleeve shrink time 29 seconds. Detachable work table and arc-free calibration system. Includes CT-50 cleaver and thermal jacket stripper. length 10 & 16mm or adjustable to 3-20mm.



## Fujikura FSM70S+ Core Alignment Fusion Splicer and Cleaver

#### FUJ,FSM70S+ (3317) AU · NZ

Single fibre core alignment fusion splicer and CT50 cleaver. Typical splice losses of 0.02dB and 0.01dB on single and multimode fibre respectively. Automated tension test, wind and heater cover, 6 second Ultra Fast splice time, 14 second heat time and 20,000 splicer result storage.







## **Fujikura FSM70S Core Alignment Fusion Splicer and Cleaver**

#### FUJ.FSM70S NZ

Single fibre core alignment fusion splicer and CT30A cleaver. Typical splice losses of 0.02dB and 0.01dB on single and multimode fibre respectively. Automated tension test, wind and heater cover, 7 second splice time and 14 second heat time.



## Fujikura FSM90S+ Single Core Alignment Fusion Splicer and Cleaver

#### FUJ.FSM90+ MY · SG

Single fibre core alignment fusion splicer and CT50 Bluetooth cleaver. Typical splice losses of 0.02dB and 0.01dB on single and multimode fibre respectively. Automated tension test, wind and heater cover, 7 second splice time and 10 second heat time. Automated cleaver blade management.second splice time and 14 second heat time.



## Inno View 8X Core Alignment Fusion Splicer and V12 Cleaver

#### INN, VIEW 8X (3310) AU

View 8X single fibre core alignment fusion splicer and V12 cleaver.

- · 0.01dB typical splice loss SM & MM.
- · 4 second average quick mode splice time.
- · 9 second quick heat time.
- · 20,000 splice data and 10,000 splice image results storage.

#### OTDR & Fibre Inspection



## Anritsu MT9085A Access Master SM and MM OTDR

#### ANR.MT9085A SM-MM MY · SG

850/1300 nm (29/28dB) and 1310/1550 (39/37.5dB). Singlemode port is SC/APC. Intelligent analysis software identifies problem splices, connectors and even macrobends. Full 1×64 PON support. Store up to 1,000 traces internally (much more using USB), drop and drag results to PC.



#### JDSU/Viavi MTS-2000 OTDR FibreComplete

#### JDSU,MTS-2000-FCOMP MY · SG

Multi-Test Platform with FiberComplete™ singlemode module is ideal for field technicians looking to perform traditional fibre qualification tests such as bidirectional Insertion Loss (IL), acceptance testing, and general maintenance on metro and PON-based FTTx networks. Comes with a power meter, a fibre inspection probe, and an Optical Time Domain Reflectometer (OTDR) module. Will measure Optical Return Loss (ORL), simplify troubleshooting in FaultFinder mode, and perform on-board, automated NBN test sequences. Features: 1310, 1550, and 1625 nm wavelengths at 37, 35, and 35 dB dynamic range (respectively). Performs IL, ORL, and OTDR from one optical port. Real-time continuity check and automatic product pairing. Fewer connections/disconnections significantly reduces testing time.



#### Viavi MTS-4000 Singlemode OTDR

#### VIA,MTS-4000 SM (3334) AU

Singlemode OTDR 1310/1550/1625nm with dynamic ranges 40, 40 and 38 dB respectively. Includes the MA2 fibre module, housed in the 9" touch screen MTS-4000 mainframe and is capable of point to point and up to 32x splitter FTTx/PON testing. Features the Smart Link Mapper function which offers the user an easy to follow block diagram as well as the OTDR trace, helping novice and expert Fibre Technicians alike. Supplied with a P5000i VIP and launch lead.



#### Fluke Optifiber Pro Quad OTDR

#### FLU, OPTIFIBER-PRO Q (3344) AU · NZ · MY · SG

Multi and singlemode OTDR, wavelengths 850, 1300, 1310 and 1550nm, dynamic range 28, 30, 32 and 30dB respectively. Designed for testing, troubleshooting and certifying multi and singlemode fibre optic networks. Smartphone user interface, shortest event and attenuation deadzones, LinkWare download and reporting software included.











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- THERMAL/DP TYPE
- ROTAMETERS



- LUX METERS
- PORTABLE WORK LAMPS



- THERMOMETERS
- RECORDERS/LOGGERS



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#### Cable & Pipe Tracers and Fault Locators

▶ See also Underground Services Location on page 120.



## C.Scope DXL4 and SGV4 Cable and Pipe Locator

CSC,DXL4-SGV4 (3719) AU · MY · SG

Cable and pipe avoidance and location tool with depth measurement. Simultaneous dual 33+131kHz frequency will assist in the detection of smaller buried pipes and cables such as telecoms, cast iron and street lighting spurs. 4 available power levels up to 1 watt and depth detection approximately 3 meters (depending on soil type and operating mode). Four detection modes; Power, Radio, Generator and Allscan. Features a Dynamic Swing Sensor to aid in cable and pipe location.



## C.Scope MXL4-MXT4 Cable and Pipe Locator CSC,MXL4-MXT4 NZ

Traces path of energised cables, conductive pipe or cable and in "radio mode" searches for re-radiated signals, common in underground services. Four detection modes; Power, Radio, Generator and Allscan. Features a Dynamic Swing Sensor to aid in cable and pipe location. Simultaneous dual 33+131kHz frequency will assist in the detection of smaller buried pipes and cables such as telecoms, cast iron and street lighting spurs. Lower frequencies aid location of correct cable in areas where cables are co-located. Multi-frequency generator with 6 signal outputs: 512Hz, 640Hz, 8kHz, 33kHz, 131kHz, simultaneous 33+131kHz. Transmitter: operates with direct connection, tongs or induction. Can determine depth of cable: up to 2m in radio mode, other modes up to 3m. Radio detection mode: 33kHz sondes. Alarm indicates shallow cables (under 300mm). Direct connection current feature aids in locating correct pipe. Automatic daily self-test to confirm working condition.



## Dynatel 2273 Buried Cable and Fault Locator DYN,2273 NZ

Used to find cables to 2.5 metres deep underground or in walls. Traces path of energised cables and conductive pipe or cable using multi-frequency tone generator. Can also be used to find breaks in cables and "short to earth" problems using an A-frame accessory.



### **Electrical Power**

### Fluke Cable Locator FLU,2042 (3602) AU

Ideal for tracing cables in walls and underground, locating fuses/ breakers on final circuits as well, and many other applications. Kit comprises a transmitter and receiver in a carry case. Voltage measurement range 12 to 400V. Frequency range 0 to 60Hz. Transmitter output signal 125kHz. Transmitter voltage 0 to 400V AC/DC. Depth location 0 to 2.5m. Receiver voltage detection range 0 to 0.4m. The receiver has a torch for working in dimly lit areas.



## Fluke AT 8030 Advanced Wire Tracer FLU,AT-8030-INT NZ

Trace energised and de-energised wires in walls, ceilings, floors and tight spaces. Also identifies breakers and fuses, as well as the location of a break, open or short. Work directly on an energised circuit without the need to take equipment offline. Three Transmitter power modes: "High Signal" mode for normal circuits, "Low Signal" mode for precision tracing in difficult areas and "Loop" mode for closed loop de-energised circuits. Two automatically selected frequency modes for optimal tracing. Displays the location and orientation of energised wires. High resolution 3.5" TFT LCD colour display. CT-400 Signal Clamp included (for inducing signal into wires without access to bare conductors). CAT IV 600V rated.



### Megger EZ-Thump 12kV Thumper & TDR Power Cable Fault Locator

#### MEG,EZ-THUMP12 (3610) AU

A compact and light weight portable cable fault locations system ideally suited either for use in a "satellite" fault locating concept for remote areas that may have less frequent faults, when ease of operation, light weight and economics are important, or for hard to access inner city locations. Incorporates a 12kV Hipot tester, time domain reflectometer (TDR), and surge generator. Can be powered from an AC supply or internal batteries (3h recharge time provides 30m of thumping). Surge generator produces a 500J, 0 to 12kV at 12mA pulse. Kit includes the Digiphone Plus pin-pointer with surge wave receiver to locate faults while thumping.



### Megger TDR2000-3P Advanced Dual Channel TDR

MEG,TDR2000-3P (3606) AU · NZ · MY · SG

Time Domain Reflectometer cable fault locator. User selectable ranges from 0 to 50m up to 20km, minimum resolution 0.1m. Dual cursor measurement. Internal memory for 15 traces. Megger "Tracemaster" software supplied. High resolution LCD display. Battery powered. Dust and shower proof to IP54. This system can operate on live cables.







### **Electrical Testers**

▶ See also Current Clamps, Probes & Accessories on page 50.



## Fluke SMFT-1000 Solar I-V Curve Tracer Pro Kit FLU,SMFT-1000 (8765) AU

For PV installation, commissioning, inspection, and maintenance testing that conforms to IEC 62446-1 standards. 1000V/20A, maximum power 20KW, supplied with Irradiance Meter and TruTest™ Advanced Solar Software



### Fluke 9062 Phase Rotation Indicator

FLU,9062 (3503) AU · MY

Provides rotary field and motor rotation indication with the benefits of contact-less detection indication of 3 phase rotation using test leads supplied or can be used to determine motor rotation on synchronous and asynchronous 3 phase motors.



## Megger DCM1500S Solar PV Clamp Meter MEG,DCM1500S (8764) AU • NZ • MY

Measures up to 2000VDC and 1500VAC (using the PVHV Leads), and 1500AAC or DC. Ideal for use in the installation, maintenance, monitoring and testing of photovoltaic systems and standard AC or DC electrical equipment. Supplied with standard 4mm leads, PVHV1 (4mm) and PVHV2 (MC4PV) HV lead sets.



# NEW!

### Metrel MI3115 PV Analyser

MET.MI3115 (8766) AU

Offers testing in accordance with the IEC 62446 standard and supports all category 1 and category 2 tests and measurements. Tests include insulation resistance measurements of PV strings, I/U characteristic measurements, and the conversion of measured values to STC values and comparison with nominal values given by the PV modules manufacturers. The irradiation and cell temperature are measured in real time with the wireless remote unit.



### Seaward PV200 Solar PV Tester with Irradiance Meter

SEW, PV200+KIT (8761) AU · MY · SG

Comes with PV Tester, irradiance meter and solar cert software. It is a solar commissioning tester, with I-V curve tracing, in accordance with IEC62446 & IEC 61829.Perform earth continuity, insulation resistance (auto short circuit test and point-to-point), AC/DC voltage measurement, Open circuit voltage up to 1000VDC. Short circuit current up to 15ADC. Comes with current clamp up to 40A and Solar Survey 200R to record real-time irradiance, ambient temperature and PV module temperature. Can be paired with Android device via NFC for field data analysis.



### **Seaward Solar Utility Pro Kit**

SEW, SOLAR-PRO (8762) AU · MY · SG

Solar Utility Pro Kit 1500V/30A, 1000V/40A, maximum power 45kW. Test multiple strings in parallel up to 1500V/up to 40A. Tests open circuit voltage (VOC), short circuit current (ISC), irradiance (W/m2), ambient temperature & more. Recording up to 999 full sets of string data.



#### **PVE PVPM1500X I-V Curve Tracer**

PVE,PVPM1500X (8763) AU

Solar IV-curve tracer for PV modules/strings/arrays, up to 1500V and 20ADC. Measuring ranges: Voltage: 25V/100V/500V/1500V, Current: 2A/5A/10A/20A. Temperature: -40°C to ±100°C with Pt1000 and Irradiance: 0 - 1300W/m2 (Standard sensor). Continuous long-termmeasurements of I-V-curves in selectable time intervals. Resolution 0.01V - 0.25V, 0.005A - 0.01A (depending on selected range). Up to 8 hours battery life.



### PAT Testers & RCD Testers

## Megger PAT420 Testing and Tagging System MEG,PAT420 (2600) AU · MY · SG

Portable appliance tester. Tests to AS3760. Stores data on USB memory stick. includes a barcode scanner and label printer.









#### **Megger RCDT330 Residual Current Device Tester**

#### MEG.RCDT330 (2618) AU

Tests standard, DC, selection and programmable RCDs. Ramp testing. Auto (remote) testing. 3ph safe. Enables testing on 110V centre tapped supplies. Performs 1/2I, 1xI & 50xI tests on RCDs rated at 10mA, 30mA, 100mA, 300mA, 500mA & 1000mA on general and selective (time delayed) RCDs. Weatherproof to IP54





### Metrel MI3309BT DeltaGT Portable **Appliance Tester**

#### MET,MI3309(2602) AU

Battery and mains operated. Functional and visual inspection; Earth bond resistance; Insulation resistance; Insulation resistance of isolated accessible conductive parts: Substitute leakage current: Substitute leakage current of isolated accessible conductive parts; Differential leakage current test; Touch leakage test; RCD and portable RCD testing, type (K, S); Power test; IEC cord polarity test; Leakage and load currents with current clamp; TRMS voltage meter; Enhanced TRMS test. light weight and portable.





#### Metrel MI 3360 25A PAT Tester

#### MET.MI3360-25A NZ

Automatic Portable Appliance Tester [PAT] system. Performs all necessary tests via its Autosequence function to ensure AS/ NZS3760 compliance. Can also create and save your own specific test requirements. System includes tester, tag printer and QR barcode scanner. Uses 4.3" Colour TFT Touch Screen or keyboard for easy navigation. Internal memory for storing test results and software to download data (via USB) to produce detailed reports on assets, including next test date. Durable plastic adhesive test tags printed to attach to appliances and leads [logo optional on request]. Mains or battery powered. Tests include: Continuity/Protective earth resistance: 200mA; 10A & 25A Bond Testing; Polarity / Active polarity test; RCD testing (type A, AC, B, B+, F); P-RCD testing (2 pole, 3 pole, K/Di (varistor), S (3-pole)); Insulation Resistance; Leakage current (Substitute/-S. Differential, PE. Touch).



### Micro-Ohm Meters & Earth Testers

#### Fluke 1625 KIT GEO Earth Ground Tester

#### FLU,1625-KIT (2650) AU · MY · SG

Measure total earthing resistance (RA) with 3 or 4-pole Fall of Potential method, selective earth resistance measurement and 4-pole soil resistivity testing ( $0.001\Omega$  to  $19.99k\Omega$ ). Performs stakeless ground loop measurements ( $0.001\Omega$  to  $199.9\Omega$ ). Includes automatic frequency control to minimise interference effects. Battery powered.





### Fluke 1630 Earth Ground Clamp

#### FLU,1630-EARTH CLAMP (2651) AU

Earth ground loop testing and continuity testing without breaking the circuit. Ground loop resistance range  $0.025\Omega$  to  $1.5 \mathrm{K}\Omega$ . Ground leakage current measurement range  $0.2 \mathrm{mA}$  to  $1000 \mathrm{mA}$ . Current measurement range  $0.2 \mathrm{A}$  to  $30 \mathrm{A}$ . Logs and stores measurements for on screen recall. LCD display. Battery powered.





## Kyoritsu 4200 Earth Ground Clamp Meter KYO,4200 NZ

Earth ground loop testing without breaking the circuit. Uses the stakeless method; eliminates the need to disconnect parallel ground rods and find suitable locations for placing auxiliary ground stakes. Performs earth ground loop tests in locations where it is not possible to use other techniques, including inside buildings or on power pylons. Resistance range from  $0.05\Omega$  to  $1200\Omega$ . Ground leakage current from 0.1mA to 1000mA. AC current measurement range from 0.1A to 30A.



### Hukseflux FTN02 Thermal Needle System HUK.FTN02 NZ

Used for on-site measurements of thermal conductivity, resistivity and temperature, from the surface down to 1.5m. After making a small diameter access hole (30mm), the thermal needle is inserted just above the point to be investigated, then pushed into the undisturbed soil below. Ideal solution for route-surveying of high-voltage electric power cables and heated pipelines. Typical measurement: approximately 60sec to get to thermal equilibrium plus 300sec for the actual heating interval. Measurement range: 0.1 to 6W/(m·K) (all common soils). Absolute measurement method per ASTM D5334-14 and IEEE Standard 442-1981(03). Operating range: 0° to +50°C. Data storage: 50 measurements.







# Sonel MRU-200 Earth Resistance Tester SON,MRU-200 NZ SON.MRU200GPS NZ

Earth Resistance and soil resistivity meter, with multiple options for testing: (1) earthing resistance using auxiliary probes - 3-probe and 4-wire method, (2) earthing resistance using auxiliary electrodes and clamp (for measurements of multiple earthing) - 3-wire method with clamps, (3) earthing resistance using double clamps (for measurement when it is impossible to use auxiliary electrodes) - Two-clamp method, (4) measurement with an impulse ramp e.g. lightning protection systems – impulse method, (5) ground resistivity (four spike Wenner method aka Fall of Potential soil resistivity), (6) current e.g. leakage current using the clamp or flexible Rogowski coil (both supplied). Stores 990 test results. GPS model notes GPS co-ordinates of stored test results.



## Megger DET2/3 Earth Tester MEG,DET2/3 (2656) AU • MY • SG

Complete with ETK50C kit. High resolution of  $1\Omega$ , ideal for large earth (ground) systems. High accuracy for earth (ground) electrode grid and soil resistivity tests. Test in accordance with BS 7430 (earthing/rounding), BS-EN-62305 (Lightning Protection), IEEE Standard 81 and Railway Applications.



## Megger DLRO10HDX Micro-Ohm Meter MEG,DLRO10HDX (2668) AU · NZ · MY · SG

Simple rotary switch selection of five test modes, including auto start on connection. The unit is powered from either its rechargeable battery or mains. Capable of delivering 10A into measurements up to  $250 M\Omega$  and 1A into measurements up to  $2.5\Omega$ . The duration of each test may be up to 60s. Memory storage for test results up to 200 records Applications ranging from railways and aircraft to resistance of components in industry.



## Megger DLRO10X Digital Low Resistance Ohm Meter $10A/0.1\mu\Omega$ - $2K\Omega$

MEG, DLRO10X (2663) AU · MY · SG

Self-contained fully automatic (with manual option) micro-ohm meter, selecting the most suitable test current up to 10Adc. Range  $0.1\mu\Omega$  to  $2k\Omega$ , resolution  $0.1\mu\Omega$ . Internal memory for 700 tests. Download software supplied. RS232 communications to PC. LCD display. Rechargeable battery.



## Megger DLRO200 200A Micro-Ohm Meter MEG,DLRO200 (2664) AU · MY · SG

Digital low resistance ohmmeter that measures resistances between  $0.1\mu\Omega$  and  $1\Omega$  m at high currents. Used to test circuit breaker and switch contacts, busbar joints, and other applications where high current is needed. Can operate in three modes: In continuous mode it will monitor a resistance over a period of time. In normal mode it will test a current at the push of a button. In auto mode, once the desired current is selected and leads are connected, it will start testing, which is a handy mode for testing busbar joints. Features: Provides test currents from 10A to 200A DC. Includes 5m lead set with 2 x 50mm² current leads and 2 x potential leads (with clips). On board memory for up to 300 test results and notes. RS232 port to download stored results or for real time output to a printer.



## Megger DLRO100XB 100A Micro-Ohm Meter MEG,DLRO100XB (2669) AU

100A lightweight, mains and battery operated digital low resistance ohmmeter. Unit is supplied with 5m kelvin lead set, DC clamp and Terminal adapters (to connect own lead set by customers). Measurement range from  $0.1\mu\Omega$  to  $1.999\Omega$  with resolution  $0.1\Omega$ . Applications include testing switchgear and circuit breaker contact resistance, busbar and cable joints, wire and cable resistance, bond testing in various industries like utilities, manufacturing, transport and aviation.







## Megger DLRO600 Digital Micro-Ohm Meter –High Current

MEG, DLRO600 (2665) AU · NZ

Test current range 10A to 600Adc. Measurement range  $0.1\mu\Omega$  to  $1\Omega$ , resolution  $0.1\mu\Omega$ . Current cables 2x5m. Internal memory for 300 tests. Download software supplied. RS232 communications to PC. LCD display.



### Megger DLRO Lead Set Current & Voltage Leads MEG,DLRO-LEADSET (2666) AU

For Megger DLRO digital micro-ohm meters. Potential spike lead set x2 and current clip lead set x2. Leads are used to separate the C & P connections. This avoids the erroneously high readings taken due to a high resistance contact. Current clip lead set 2m (242041-7) and potential spike set 2m (242021-7).



### Megger MOM2 Micro-Ohm Meter MEG,MOM2 (2660) AU · NZ

Lightweight (1 kg), handheld micro-ohm meter. Up to 220A test current, autoranging from  $999\mu\Omega$  to  $1000~m\Omega$  FS. Rechargable batteries provide 2200 measurements for Imin = 50A, or 800 for Imin = 100A. Memory for 190 recorded measurements, downloadable via Bluetooth with provided software. Kelvin probes included.



Follow @TechRentals on LinkedIn and stay up-to-date on Test and Measurement news, application notes, and case studies.

### Power Analysers, Loggers & Recorders

### CHK PQ45 Power Quality Analyser

#### CHK,PQ45 NZ

Weatherproof IP66 Cat IV 600V field unit that provides loadlogging and fault finding through event capture. Configure the unit using the CHK Citrus software provided, take it to site and it will log for as long as required. Powered from the monitored voltage. The tablet supplied enables the unit to be configured on site and data reviewed real-time. Can be configured to start on power up or at a predetermined time. Includes 4G comms for interrogation while in-situ, data downloaded and instrument reprogrammed with no interruption to logging. Graphical display of logged data with ability to drill down. Export data to Excel or generate pdf reports. Memory: 8GB; Built-in GPS; 2 probes supplied to monitor temperature: -50°C to 150°C; Monitors mains signalling (Ripple amplitude) and IEC events (sags, swells, dips. interruptions. RVC). Records DC voltages and also DC currents with DC clamps (separately available).





### CHK AC/DC 1000A Clamps

#### CHK, DC1000A NZ

Used in conjunction with the CHK PQ45 Power Quality Analyser to measure DC Current. CAT III, 600V,  $\pm$ 10A to  $\pm$ 1000A clamps with a 50mm jaw. DC frequency range to 10 kHz, bare conductor limited to 1 kHz. Can also measure AC and DC concurrently. Set of 4 clamps supplied.



### CHK AC/DC 250A Clamps

#### CHK,ACDC250A NZ

Used in conjunction with the CHK PQ45 Power Quality Analyser to measure DC Current. AC and DC can also be measured concurrently. CAT III, 600V, ±10A to ±250A. Clamps with a 50mm jaw. DC frequency range to 10 kHz, bare conductor limited to 1 kHz. Set of 4 clamps supplied.







## Elspec G4500 Portable Quality Analyser with GPS Receiver

ELS,G4500 (8750) AU

Measure, store and analyse (continuously) waveform signals. Includes G4500 with 4 x 3000A Flexible Current Clamps and GPS Receivers. Suitable for applications like Utilities (transmission, distribution, generation) and Energy Consumer (critical power, industrial, commercial, etc.).



## Fluke MDA-550 Motor Drive Analyser 4 Channel FLU,MDA-550 (8745) AU

A Motor Drive analyzer designed to monitor and troubleshoot VFD (or VSD) motor systems. Features 4 channels, measurement to the 51st harmonic, 3x voltage probes with 1000V input range, 3xcurrent clamps 40~400A switchable and 3 x 6000A flex CT's, SVS-500 shaft voltage set with brushes, extension rod and magnetic base including high frequency probe. All CAT IV 600 V / CAT III 1000 V safety rated.



## Fluke 345 Power Quality Clamp Meter FLU,345 (8739) AU · NZ

Ideal for measurements on switching loads such as variable frequency drives, electronic lighting and UPS systems. Lowpass filter and high EMC immunity design make unit ideal for noisy environments. 600V CAT IV rated, 1400A AC, 2000A DC. Measure and log harmonics, inrush current, ripple current on battery systems. Analyse data and generate reports with included Power Log software.



## Fluke 438 Power Quality & Energy Analyser FLU,438 MY • SG

Suit a broad range of ac mains studies. Includes 4 x 600/6000A ac CTs. A unique energy loss calculator provides the ability to monetarily quantify energy losses. Motor Analyser function provides analysis of speed, torque, mechanical power and calculate motor efficiency without mechanical sensors. Supplied with Fluke Power Log Software for detailed data analysis and report generation. Optional accessory: FLU,ISSPQ3 (3 x i5s 5A AC current clamps).



#### Fluke 1738 Power and Energy Logger

FLU,1738 (8736) AU • MY • SG FLU,1738-1500 MY • SG

3 phase power logger with Fluke Connect® mobile app. Includes 4 x 1500 A flex probes (1 A to 150 A 100 mA resolution, 30mA accuracy) and 4 x 6000A 1m flex probes. Copy logged files to a USB memory stick. Measures to 50th harmonic. Capture transients. Can be powered off phase one if required. 4 h backup battery operation. 1000 V CAT III/600 V CAT IV. Colour Touch Screen. Displays real-time waveforms and FFT.





### Fluke 1773 3-Phase Power Logger

#### FLU,1773 NZ

Ideal unit to record your power usage, to understand what power you need and to manage energy saving activities. Also has advanced harmonics study up to 50th, inrush, flicker, voltage dips and swells. 4 Voltage inputs: 3 phases and neutral (600 V CAT IV). 4 Current inputs: 3 phases and neutral (1500A flexible clamps, Ø up to 220mm). Trend intervals: 1 sec to 30 mins. Data storage: Up to 3 years at 1 min intervals for one log. Software provided to analyse and view data and create customized reports.



## Fluke 1775 3-Phase Power Quality Analyser FLU.1775 NZ

Ideal unit for measuring power quality and fault finding. Also logs power usage. Has advanced harmonics study up to 50th, inrush, flicker, transients and both oscilloscope function with voltage dips and swells for industrial PQ troubleshooting. Useful for applications such as nuisance circuit breaker tripping, power utility quality surveys, discovery of equipment failures caused by transients (range ±8 kV at 1MHz sampling). View real-time voltage transitory events while logging. Event waveform capture. 4 Voltage inputs: 3 phases and neutral (600V CAT IV). 4 Current inputs: 3 phases and neutral (6000 CAT IV). 4 Current inputs: 3 phases and neutral section 1 section 2 min. Data storage: Up to 3 years at 1 min intervals for one log. Software provided to analyse and view data and create customized reports.







### Fluke 1777 Power Quality Analyser FLU.1777 (8732) AU • MY • SG

Automatically measures power and power quality parameters. At a glance power quality and power health parameters. Capture high-speed transients at up to 8kV. Powers directly from the measurement circuit without a line chord. Many communications options. USB, WiFi ,Ethernet 7 cellular interface options. Includes internal GPS module for timing.



## Fluke i40s-EL 3x40A CTs for secondary msmt 1777 or 1738

FLU,140S-EL (8736) AU · MY · SG

The current lamp-on transformer is used for low current measurement as an accessory to the Fluke 1738 or 1777; suitable for making measurements up to 40A, and also measures accurately on 1A and 5A secondary current transformers. The i40s-EL jaw is capable of being clamped on current conductors up to 15mm in diameter.



## Fluke VR1710 Single-Phase Voltage Quality Recorder

FLU, VR1710 (8720) AU · NZ

Single phase power quality analyser. Records RMS, transients, flicker & harmonics up to the 32nd. Selectable logging periods from 1s to 20min. Provides continuous recording with no gaps. Includes software for download, analysis and automatic reporting.



### Hioki PW3360-21 Clamp On Power Logger with Harmonic Measurement

HIO.3360-21 MY • SG

Power logger, supports single to three phase 4 wire circuits. Supplied with 3x500A CTs 5/10/50/100/500A ranges 0.3% rdg+0.01%fs and 3x5000A Flexible CTs 50/500/5000A ranges 2%rdg+0.3%fs. Has a built in battery and can also be powered by the line voltage. Provides harmonic measurement upto the 40th harmonic. Has plug in SD card. Is recongnized and a diskdrive when connected to a computer. Includes analysis software.



### Hioki 3169-20 Clamp-on Power Analyser HIO.3169-20 NZ

Measurement of single-phase to three-phase 4-wire circuits using this compact and light weight meter. Ideal for achieving close control over energy-saving management activities and measures e.g. it can measure the power of just a few cycles. Wiring configurations include: singlephase, multiple single-phase, three-phase 3-wire and three-phase 4-wire. 0.5A to 5000A range. Measures voltage, current, power, power factor and integrated values and can simultaneously perform demand measurements required for carrying out power management and energy-saving measures, as well as harmonic measurements. Supplied with four 500A clamp-on CTs, other CT options available. Flashcard memory. Hioki 9625 Power Measurement Support Software for data analysis and reporting.



### **Hioki Clamp-on Sensors**

HIO,9667 NZ HIO,9667-02 NZ HIO,9669 NZ HIO,9694 NZ

Set of CT's suitable for use with Hioki 3169 power quality analysers for measurements of currents.

- HIO.9667: up to 5000A per phase. Output voltage: 500mV AC f.s. Core Jaw Diameter: 55mm. Four CTs in a kit.
- HIO.9669: up to 1000A AC per phase. Output voltage: 500mV AC f.s. Core Jaw Diameter: 55mm. Four CTs in a kit.
- HIO.9694: Up to 5A AC per phase.
   Output voltage 10 mV AC/A. Measurable conductor diameter up to 15 mm. Four CTs in kit.



### Hioki PW3365-20 Power Logger

#### HIO,PW3365-20 AU

Clamp on Power logger comes with Hioki's newly developed no-metal-contact voltage sensor. It measures voltage simply by clamping the sensor around an insulated wire. Measures single phase 2 wires, Single phase 3 wires, Three phases 3 wires, Three phases 4 wires - Current 3 channel only. Supplied with 3 x 1000A AC 9669 CTs and Power Logger Viewer software.









## Hioki PQ3198-94 Power Quality Analyser HIO,PQ3198-94 (8733) AU · MY · SG

Premium Power Quality Analyzer in accordance with the IEC61000-4-30 Class A standard for demanding applications. Includes 4 x CT7045 6000A AC flexible CTs and 4 x CT7742 2000A AC/DC CTs. Ideal for AC mains studies as well as solar inverter evaluations. Supplied with PQ ONE power quality analysis software for detailed data analysis and report generation.



### Hioki CT7116 6A AC Current Sensor HIO,CT7116 (8788) AU

6A AC Current Sensor suitable with Hioki PQ3198-94.



## Hioki 9694 Clamp-on CT 5A (Set of 4) HIO,9694CT5A (8789) AU · MY · SG

Rated primary current 5A AC. Amplitude accuracy  $\pm 0.5\%$  rdg.  $\pm 0.2\%$  FS (at 45 to 66Hz), 66Hz to 5kHz  $\pm 1\%$  or less. Max circuit voltage 300V RMS/insulated wire. Core jaw 15mmØ. Size mm:  $46\text{W} \times 21\text{d} \times 135\text{h}$ , cord length 3m.



## Metrix MX2040 AC/DC Clamp-On Meter MET.MX2040 NZ

Measures: Watts, AC/DC voltage, AC/DC current, active power, apparent power, reactive power, kWh, power factor, resistance and frequency. AC ranges: 200 and 2000 amps. Bandwidth: (True RMS) 10 Hz - 3 kHz. Analogue output of RMS and instantaneous values.



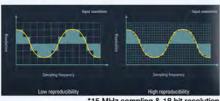
## HIOKI



### **POWER ANALYZER** PW8001

### **Applications**

- -Solar Inverter System Analysis
- -EV Motor Dual-Inverter **Drive System Analysis**



\*15 MHz sampling & 18 bit resolution





### **POWER QUALITY ANALYZER** PQ3198

### **Key Features**

- -IEC 61000-4-30 Class A Ed. 3 Compliant
- -All Channel AC/DC
- -Remote Monitoring & FTP
- -Two systems of power measurement
- -Efficiency calculation for DC/3-phase inverters

### **INSULATION TESTER** IR5050 / IR5051

### **Key Features**

- -Measure the insulation resistance of solar PV systems safely and accurately while they are operating
- -PV voltage measurement up to 2kV (IR5051 Only)
- -Maximum test voltage of 5kV
- -Insulation resistance of up to 10TΩ



### Current Clamps, Probes, & Accessories

- ▶ See also Electrical Testers on pages 36-37.
- ▶ See also Power, Analysers, Loggers & Recorders on pages 43-48.



### Elspec Current Clamps (4 x 1-6A Mini Clamps) ELS,MINICLAMPS (8752) AU

Set of 4 x a-6A Mini Clamps suitable for Elspec G4500 unit.



### Fluke 376 True-rms AC/DC Clamp Meter with iFlex

FLU,376 (8770) AU · MY · SG

1,000A AC and DC current measurement with fixed jaw. 2500A AC current measurement with the 45cm iFlex flexible current probe. 1000V AC and DC voltage measurement. Voltage and current measurements are true rms. Includes ability to measure frequency, resistance and capacitance. Rated CAT IV 600V and CAT III 1000V.



### Fluke 90I-610S 1A to 600A AC/DC Current Probe FLU.90I-610S MY • SG

Compatible with any Fluke scopemeter test tool, power harmonics analyser, oscilloscope, multimeter or other voltage measurement device that has the following feactures: BNC input connectors or if using a meter a BNC to banana plug adapter PM9081/001 (included) lets you use this probe with your DMM.



## Fluke i5sPQ3 AC Current Clamps, 5A (3 x i5S per set)

FLU,15SPQ3 (8790) AU · MY · SG

A pack of 3 pieces of the i5s 5A AC current clamps, specially configured to provide low current accuracy while taking measurements on secondary current transformers. CAT III 600 V (For insulated conductors only). Suits the Fluke 435 and other instruments with BNC inputs.



## Hioki CT7731 100A AC/DC with CM7291 Display Unit

HIO.CT7731 (8791) AU

Suitable with MR8847-53 and MR6000-01 loggers. Can also be used with HIO,PQ3198-94 without display unit.



## Hioki CT7742 2000A AC/DC with CM7291 Display Unit

HIO,CT7742 (8792) AU

Suitable with MR8847-53 and MR6000-01 loggers. Can also be used with HIO,PQ3198-94 without display unit.



### Insulation Testers & Meggers to 20kV

## **EA Technologies UltraTev Plus Partial Discharge Detector**

#### EAT.ULTRATEVPLUS (8410) AU · MY · SG

Multi-function Partial Discharge (PD) Instrument. It measures accurate PD activity using the UltraTEV detector and an ultrasonic detector. It gives you an objective measure of the level of activity. Will display PD severity level. The kit includes the Ultradish for measurement of overhead assets.



#### Fluke 1587 Insulation Multimeter

#### FLU,1587 MY • SG

Insulation: measurement range: 0.01M to  $2G\Omega$ . Test Voltages: 50V, 100V, 250V, 500V, 1,000V Multimeter: Voltage 1mV to 1,000VAC/DC, current 0.01mA to 400mA AC/DC, resistance 0.1 $\Omega$  to 50.0M $\Omega$ , capacitance 1nF to 9999 $\mu$ F, frequency 0.01Hz to 99.99kHz.



## Fluke 1587FC Insulation Multimeter FLU,1587FC (8422) AU

Will test to  $2GO\Omega$ . Includes Fluke Connect capability.50V, 100V, 250V, 500V & 1000V Insulation test capability. Using Fluke Connect can do PI/DAR, store, Temperature Compensation & VFD low-pass filter.



### Fluke 1663 FVF Installation Tester

#### FLU.1663FVF (2615) AU · MY · SG

Provides the following tests: Continuity test under 200mA, Loop Impedance without triggering an RCD can be set for 10, 30,100, 300, 500, 650mA & 1A. Insulation resistance measurement under 500V. Measure earth plug resistance by earth rods (Rods not in kit). Voltage measurements.



### Kikusui TOS-5101 10kV AC/DC Hipot Tester

KIK,TOS-5101 (8430) AU · MY · SG

Hipot testing up to 10kV in either DC or AC. Digital voltmeter and ammeter, digital timer. Window comparator for more reliable pass/fail judgement. Automatic discharge of device under test in DC test mode. Equipped with Key Lock and Interlock functions for greater safety.









An on-line partial discharge (PD) handheld scanner for detecting defects in medium and high voltage systems. Used for fast verification of partial discharge activity in MV and HV plants. Besides the partial discharge sensors, also a temperature and humidity sensor will be supplied. The device has two internal sensors (TEV, airborne acoustic) and can also be operated with various types of external sensors (TEV, HFCT, airborne acoustic, contact probes). Three PD measurement methods in one device. Comes with Set 4 accessories - full accessories



### Megger MIT525 5KV DC Insulation Resistance Tester

MEG.MIT525 (8426) AU · MY · SG

Measures to  $20T\Omega$  at 5kV. Tests include PI, DAR, DD, SV and ramp test. Li-ion battery with rapid charge, mains operation possible while battery is charging. Advanced memory with date/time stamp. Noise filter rejects up to 3mA noise. PowerDB Lite asset management software supplied with unit for download of test data to a PC.



## Megger MIT1025 10kV DC Insulation Resistance Tester

MEG,MIT1025 (8427) AU · NZ · MY · SG

10kV Insulation Resistance Tester (IRT) capable of resistance measurements up to  $20T\Omega$ . Testing options include Polarisation Index (PI), Dielectric Absorption Ratio (DAR), Dielectric Discharge (DD), Stepped Voltage (SV) and ramp test. Has a CATIV 600 safety rating and dedicated voltmeter function (30V to 660V). Also features a rapid charge Li-ion battery with the ability to take measurements on a flat battery when connected to mains power. Features: Noise filter - rejects up to 3mA noise. Advanced memory includes time/date stamping of results. High altitude operation up to 3000m. PowerDB Lite software for download of test data to PC.



## Metrel Instaltest-XD Multifunction Tester & EVSE Adapter

MET, INSTALTEST-XD-EV (2610) AU

Instaltest-XD multifunction installation tester and 1532 XA EVSA adapter provide electrical safety and functional testing of electrical installations and EV charging stations. It tests Mode 3 with type 2 connectors Testing a 3 phase load up to 13A. This pair of instruments can test state by state electrical and functionality testing of EVSE charging stations with the push of a button. Using the supplied MESM software.



### **Electrical Power**

## Metrel A 1532 Electric Charging Station Test Adapter

#### MET.A1532EVSE NZ

Testing live EV Charge Point and connection cables with this new EVSE (Electric Vehicle Supply Equipment) adapter from Metrel made easy by simulating a vehicle connected to the charging station. Performs Voltage, Loop Impedance, PFC & RCD Tests externally. The A1532 is an extender for interfacing EVSE to test socket of installation tester for verification of electrical safety and functional testing. It is intended for testing Mode 3 EV supply equipment with type 2 (default) and type 1 (adapter) connectors. A1532 ESVE adapter is special accessory intended for using with METREL installation testers.



### Metrel A1632 eMobility Analyser

#### **MET,A1632 NZ**

A special accessory designed for diagnostic testing of Electric Vehicle Charging Stations in combination with supported METREL installation testers (also available for hire). It supports verification of electrical safety and functional testing of Type 1 and/or Type 2 charging stations as well as testing of Mode 2 and Mode 3 electrical vehicle (EV) charging cables and communication monitoring between the charging station and the EV during charging. Fully supported professional station-based



## Metrel MI3102BT Multifunction Installation Tester

#### MET.MI3102BT NZ

Measures and tests with fixed parameters set to international standards including AS/NZS3017, then provides a pass/fail indication. Also offers a range of auto-sequencing tests for fast testing and certifying. Application includes: Initial and periodic testing of domestic and industrial installations, testing of single and multiphase systems, testing of TT, TN and IT earthing systems and medical installation testing.

Voltage: TRMS 0-550V, Frequency 0-500Hz. Insulation resistance with DC voltage (50-1000V): 0-999M $\Omega$ . Automated RCD testing (general and selective, type AC, A, F, B, B+, MI RCD, EV RCD, PRCD/-K/-S). Line/ Loop impedance (Trip Lock RCD): 0-10K $\Omega$ . Continuity (Automatic Polarity reversal): 0-2K $\Omega$ . Earth resistance (3-wire and 2-clamps method): 0-10K $\Omega$ . Phase Sequence. First Fault Leakage Current (ISFL): 0-20mA. Insulation Monitoring Devices (IMD) Test: 5-640K $\Omega$ . Predefined mini AUTOSEQUENCEs for earthing systems: TT, TN/RCD, TN, IT. PC Software EuroLink PRO for report generation for saved results supplied.









### Metrel MI3108PV Electrical & Photovoltaic Installations Test Set

#### MET.MI3108PV NZ

**Standard Electrical** installation tester to measure and test installations with fixed parameters set to AS/NZS3017, then provides a pass/fail indication. Also offers a range of autosequencing tests for fast testing and certifying. AS/NZS3000 mandatory tests can be completed including: Voltage, Visual Inspections, Earth Continuity & Resistance, Insulation resistance, Phase rotation, AC Current (load and leakage), Fault Loop Impedance and RCD Verification tests. Displays power usage, power factor, harmonics (up to 11th) and THD. Stores up to 1800 test results or 500 graphical results. Software supplied for downloading, uploading, review, analysis and printing of test results.

**Photovoltaic:** Tests, evaluates and troubleshoots photovoltaic installations including: insulation, voltage, current and efficiency of inverter. STC characteristics of individual panels can be tested. Supplied with a photovoltaic reference cell, temperature probe and a remote unit (for use where the inverter is separated from the panels). Voltage: 0 – 999DC and AC; I-V m: 0 – 999DC. Current: 0mA – 300DC and AC; I-V m: 0 – 15 ADC. Power: 0 – 999kW; I-V m: 0 – 14.99kW. U / I curve: 1000V/ 5A/5kW. Irradiation: 0 – 1.75 kW/m2. Temperature: -10°C to +85°C.





## Sonel MIC-10K1 Insulation Resistance Tester SON,MIC-10K1 NZ

10kV Insulation Resistance Meter designed for the testing and maintenance of high voltage equipment including single- and multi-core cables, transformers, motors and generators, capacitors, switches etc. Meets EN 61010-1 and IEC 61557 standards. Also offers a cable "thumper" like feature to intensify the damage for fault finding. Pre-set standard test voltages: 50, 100, 250, 500 V, 1, 2.5, 5 and 10 kV. User defined test voltage: 50 to 1kV - 10V steps; 1 kV to 10 kV in 25 V steps. Maximum measuring range: 40 TΩ. Test current: 1.2 mA. 3 mA or 6 mA. Continuous indication of measured insulation resistance or leakage current. Displays capacitance during the measurement of RISO. Pre-configured diagnostic tests include: Polarization index (PI), absorption coefficients Ab1, Ab2 and dielectric absorption ratio (DAR) measurement, Step voltage insulation resistance (SV), Dielectric Discharge calculation (DD). Temperature measurement: -40 to 100°C with ST-1 probe included. Safety rated up to Cat IV 600 V (III 1000 V). Graphical LCD 5.6" display with data transmission via USB and Bluetooth. Memory: 8 MB equivalent (10,000 records). Operates from battery (1,000 measurements) or mains supply.



### Sonel MMR650 Winding and Low Resistance Ohmmeter

#### SON.MMR-650 NZ

Accurately measures small resistances of resistive and inductive objects as well as transformer windings including amorphous-core transformers. Applications include windings of power transformers and motors, breakers, contacts, earthing conductors, equipotential bondings, welded and soldered connections and bolted connections. Resistance range:  $0.1\mu\Omega$  (10A Test current) to  $2000\Omega$  (1 mA Test current) in 9 test ranges. Accuracy:  $\pm 0.25\%$ . Stores 800 test results. 3m test leads with Kelvin clamp and probes. CATIII 600V. Battery powered.



### Oil, Hipot, and VLF Testers above 20kV

## **b2** electronics HVA45TD VLF and TD Test Set B2E,HVA45TD (8465) AU

VLF, DC, and TD test capabilities combined in one unit. Meets international test guides (e.g., IEEE 400.2-2013). VLF Sine wave -0.01Hz to 0.1Hz frequency range, 45KV peak and 32.3KV RMS voltage range. DC - +/-45KV, VLF square wave -0-45KV and Sheath test -0-15KV. Manual and automatic test modes available. Supplied with b2 control center software for reporting. Built-in memory: up to 50 reports, 50 test sequences.



## High Voltage Inc PFT301 30kV AC HiPot Tester HIV,PFT301CM (8452) AU

Portable HiPot 0~30kVac 1kVA resistive/capacitive load: 33mA. Duty cycle at 1kVA 1h on 1h off 700VA continuous. Tests the integrity of items including insulating materials, isophase bus duct, switchgear, transformers, vacuum bottles & interrupters, vacuum switches, automatic circuit reclosers, bushings, fuses, arrestors, circuit breakers, transformers, capacitors, motor and generator windings.



### High Voltage Inc PFT-503CM 50kV AC Hipot Test Set

HIV,PFT503 (8453) AU · MY · SG

Single, portable (34kg) unit suited for testing overhead apparatus, vacuum bottles and interrupters, switch gear, bus duct, motorized vacuum switches, reclosers, bushings, fuses and arrestors, linemans safety products, small transformers, electrical components and motors. This 3kVA model features capacitive load compensation enabling full load testing with a power draw of 1.5kVA while operating from a conventional line input. 60mA output current capability.







## High Voltage Inc PFT-1003CMF 100kV AC Hipot Test Set

HIV,PFT1003 (8456) AU

Portable (16kg control unit, 39kg HV tank) hipot tester, 100kV, 50Hz, rated 3kVA into capacitive loads. Features continuously adjustable output voltage, external safety interlock, zero start safety interlock, self resetting over current protection, guard/ground return mode, HV on/off and main power push button ruggedized meters and with glass windows that eliminate static buildup.



### HV Diagnostics HVA TD60-MC Portable Tan Delta Management System HVD,HVA TD60-MC (8464) AU

Optional Accessory for HVD,HVA60-DC/VLF and HVD,HVA90-DCVLF. Tan Delta or Power Factor tester used to determine the power factor of cables, transformers, capacitors, rotating machines and other switchgear. This test allows the detection of insulation defects before they fail inservice.



## HV Diagnostics HVA30 30kV-15mA DC/VLF High Voltage Insulation Dielectrics Test Set

HVD,HVA30-DC/VLF (8461) AU

VLF and DC test capabilities combined in one unit (20kg). Suitable for testing cables (XLPE, PE, EPR, PILC etc), capacitors, switchgear, transformers, machines (IEEE 433), insulators and bushings. VLF (0.1Hz to 0.02Hz), DC (±), cable fault conditioning (burning) and sheath/jacket testing modes all included. Fully automatic or manual cable test sequences complying with International Standards/Guides such as IEEE 400.2, VDE 0276 and CENELEC. True symmetrical sinusoidal, load independent, output waveform across the full load range. Real-time display of actual output wave form. Easy to use, ergonomic, menu guided, large backlit user interface. Large output load capability (up to 5uF). Automatic and integrated load capacitance measurement with optimum frequency selection. Storage of test results for later retrieval or download to a PC/Laptop.



## HV Diagnostics HVA60 60kV VLF/DC Test Set HVD,HVA60-DC/VLF (8462) AU · NZ · MY · SG

VLF and DC test capabilities combined in one unit (60kg). Suitable for testing cables, capacitors, switchgear, transformers, machines, insulators and bushings. VLF (0.1Hz to 0.02Hz), DC (±), cable fault conditioning (burning) and sheath/jacket testing modes all included. Fully automatic or manual cable test sequences. True symmetrical sinusoidal, load independent, output waveform across the full load range. Real-time display of actual output wave form. Large output load capability (up to 5uF). Automatic and integrated load capacitance measurement with optimum frequency selection. Storage of test results for later retrieval or download to a PC/Laptop. For a more comprehensive understanding of insulation condition perform tan delta testing at the same time with optional accessory HVD,HVA TD60.





## HV Diagnostics/B2HV HVA94 94kV VLF Test Set HVD.HVA94 (8463) AU

VLF, DC and Jacket/Sheath testing. Sinusoidal: 0-94kV peak, 0-66kV rms. DC:  $\pm$  0-90kV and Squarewave: 90kV. Capable of testing cables up to 3,300m - 1 $\mu F$  at 0.1Hz and 61kV rms, 0.85 $\mu F$  at 0.1Hz and 66kV rms. The variable output frequency allows the testing of even much longer cables. 0.01 ... 0.1Hz in steps of 0.01Hz (default 0.1Hz) - auto frequency selection. Stores 50 test records.



### Megger OTS80PB Transformer Oil Tester

MEG, OTS80PB (8450) AU

Test voltage 80kV max at 61.8Hz. Fully automatic operation. Rechargeable batteries. RS232C interface.



## Megger VIDAR Vacuum Circuit Breaker/Interrupter Tester

MEG, VIDAR AU · MY · SG

Checks the integrity of vacuum interrupter/ circuit breaker. User-defined voltage selection, with extensive voltage range. Follows ANSI/IEEE standardized DC test methods. A suitable test voltage (DC) is applied to breaker, for PASS/FAIL results.





### Transformer Testers





### Megger MWA330A 3Ph TTR & Winding Resistance Tester

MEG.MWA330A NZ

Capable of performing 3-phase turns ratio, 3-phase winding resistance, OLTC Continuity (make-before-break), 3-phase core demagnetisation, magnetic balance/flux distribution, excitation current, polarity and phase angle deviation, auto vector detection, and heat-run tests. The kit includes 18 m. test leads, and when connected, the instrument performs the full range of transformer tests without the need for test lead reconnection or a separate switch box. The unit effectively tests: Power transformers, distribution transformers, CTs and UTs (PTs) and motors/generators. Built-in touch-screen PC which will produce PDF reports via USB memory stick. Built-in printer.



### **Megger TTR100-1 Handheld Transformer Tester**

MEG,TTR100-1 MY · SG

A handheld, robust, lightweight and battery operated instrument. Suitable for turns ratio, phase displacement. excitation current, vector group, winding resistance and polarity.



#### **OMICRON Testrano 600 Three Phase Transformer Tester**

OMI.TESTRANO600 (8551) AU

Enhanced package, portable, three-phase test system which supports all common electrical tests on single- and threephase power and distribution transformers. Tests include Transformer turns ratio (TTR) / exciting current, DC winding resistance, Demagnetisation, OLTC scan / dynamic resistance measurement (DRM). Supplied with laptop and PTM advanced software.



### **OMICRON Franco 800 Sweep Frequency Response Analyser**

OMI,FRANEO 800 (8554) AU

Standard package with PTM software. Fully compliant with the IEC 60076-18 and IEEE C57.149 standards. Suitable for power transformer testing and rotating machines testing & monitorina.



## OMICRON CT Analyser Current Transformer OMI,CTANALYZER (8555) AU·MY·SG

Tests protection and metering CTs according to IEEE and IEC standards. Measures phase-angle, ratio, winding resistance, excitation/saturation, residual magnetism, and burden impedance. Results of the assessment are received as a "pass or fail" decision within seconds due to the automated testing process. Features: Field verification up to the 0.1 accuracy class. Compact and lightweight (< 8 kg). High noise immunity for on-site testing.



### OMICRON Dirana Transformer Insulation Moisture Analyser

#### OMI, DIRANA (8557) AU

Provides accurate and reliable condition assessment of insulation in power transformers, paper-mass insulated cables, bushings, and instrument transformers (CTs/PTs). The DIRANA utilises Dielectric Frequency Response (DFR) to determine the moisture content of oil-paper insulated power and instrument transformers. Features: Non-invasive measurement process. FDS and PDC+ algorithm for fast testing. Results defined by IEC 60422. Comes with laptop featuring pre-loaded software.



## OMICRON SB2 Switch Box for CT Analyser OMI,CTSB2 (8556) AU

An accessory for the CT Analyser which allows automatic testing of multi-ratio current transformers. Up to six connections for the secondary side of the current transformer.



#### Wika GIR-10 SF6 Gas Detector

#### WIK,GIR-10 (5909) AU

Gas detector based on infrared technology. Responds only to SF6 gas, therefore not sensitive to humidity and common VOC. Fast response time. Smallest concentrations of up to 0.6 ppmv can be detected. Applications include Locating and quantifying leakages at SF6 gas-filled equipment, Determination of leak rate for final inspection of SF6 gas-filled equipment.





### Circuit Breaker Testers



## OMICRON Cibano 500 Circuit Breaker Test System

#### OMI,CIBANO 500 (4676) AU

Complete with advanced package circuit breaker tester for medium and high voltage circuit breakers. Suitable for Timing tests, Static contact resistance test and Dynamic contact resistance test. Supplied with Primary Test Manager Software ideal tool for the diagnostic testing and condition assessment of circuit breakers.

### **Current Injectors**



## Megger INGVAR Primary Current Injection Test System

#### MEG,INGVAR (4603) AU · MY · SG

Primary injection testing system consists of a Control Unit and a Current Unit. Up to 1600A output current with cables supplied. Unit is capable of up to 5000A output current with special cables (not supplied). Suitable for switchgear and CT commissioning, ground grid, circuit breaker testing and more.



## Multi-Amp MS-2 High Current Test Set MUL,MS-2 (4600) NZ

Designed to test overload relays, circuit breakers and earth fault trip devices. Input 240V 50/60Hz. Output continuously adjustable in 4 ranges 120V/5A, 24V/25A, 6V/120A & 3V/240A. Short term over current of several times the rated current ranges is possible. Digital current meter has read and hold facilities for short duration currents. Digital timer measures elapsed time between energisation and the test device operating.



#### **OMICRON COMPANO 100**

#### OMI,COMPANO100 (4604) AU

Battery Powered Primary injection, secondary injection, and basic protection test set. Applications include Wiring and polarity checks, Burden measurements, Single-phase protection relay testing, CT/VT ratio checks, Micro-ohm resistance testing. 150VAC/220VDC output (30 VA), 110 A AC/ 100A DC output (600VA) and Inputs binary wet/dry, AC/DC voltage 300V or current with shunt. Supplied with Wiring check add-on and Grounding system. Optional HGT1 and HGT1 with PTM software available for step and touch voltages measurement.



### **Electrical Power**

## OMICRON CPC 100 Multi-functional Primary Test System

OMI,CPC100PTS (4620) AU · NZ · MY · SG

Portable (29 kg) primary test system suited for testing of current transformers, voltage transformers, power transformers, power lines, HV cables, grounding systems, switchgear and circuit breakers, protection relays and more. Tests to 800A over frequency range 15Hz to 400Hz, or to 400A DC. Laptop included, preloaded with CPC 100 Toolset and PTM software. Optional accessories: OMI,CPCU1 (with or without OMI,HGT1) OMI,CPSB1 OMI,CP-TD12/TD15, OMI,CP-CR600.



#### **OMICRON CP CB2 Current Booster**

OMI.CPCB2 NZ

Combined with the CPC 100, the CP CB2 boosts the output current of a CPC 100 from 800A to 2000A.



## OMICRON CP CUI Multi-Purpose Coupling Unit for PC 100

OMI,CPCU1 (4623) AU

Combined with the CPC 100, the CP CU1 is a measurement system for line impedances & k-factors of overhead lines or power cables, mutual coupling of parallel lines, ground impedances of large substations and coupling of power lines into signal cables. This test system overcomes the problem of power system frequency interference that has previously made it necessary to use extremely large, high-power equipment to carry out these measurements.



## OMICRON HGT1 Handheld Grounding Tester OMI,HGT1 (4627) AU

Handheld meter to measure ground impedance, step and touch voltages. Applications include measuring Fall of Potential at locations outside the substation to determine the ground impedance and measuring step and touch voltages at multiple locations using either Compano 100 or the CPC 100 and CP CUI.



#### **OMICRON CPSB1 Switch Box**

OMI.CPSB1 (4621) AU

Switch Box to allow fully automated 3 phase transformer testing, accessory for the CPC100.









### OMICRON CP TD12 Capacitance and Tan Delta Add-on

#### OMI,CP-TD12 (4624) AU

An accessory for CPC 100 for performing power/dissipation factor and capacitance measurements. Suitable to determine a wide range of electric and dielectric parameters: Power factor, dissipation factor (tan d), Capacitance, Exciting current, Watts / power (P, Q, S), Inductance, Impedance, Current, Phase angle, Quality factor.



## OMICRON CP TD15 Capacitance and Tan Delta Add-on

#### OMI,CP-TD15 (4625) AU

An accessory for CPC 100 for performing power/dissipation factor and capacitance measurements 15KV. Suitable to determine a wide range of electric and dielectric parameters: Power factor, dissipation factor (tan d), Capacitance, Exciting current, Watts / power (P, Q, S), Inductance, Impedance, Current, Phase angle, Quality factor.



### **OMICRON CP CR600 Compensating Reactor**

#### OMI,CP-CR600 (4626) AU

A compensating reactor for the CP TD12 and TD15. Allows testing of the insulation quality of generators, motors and other systems with high capacitances up to 1°F at rated frequency. Used with CPC 100 + CP TD12/15 for dissipation factor (tan delta) and power factor measurements.



## OMICRON HGT1 Handheld grounding tester with PTM

#### OMI.HGT1 PTM (4628) AU

HGTI with PTM software is a handheld meter to measure ground impedance, step and touch voltages. Applications include measuring Fall of Potential at locations outside the substation to determine the ground impedance and measuring step and touch voltages at multiple locations using either Compano 100 or the CPC 100 and CP CUI.



### Electrical Circuit Mapper

## Tasco 24 Channel Circuit Mapper System TAS,CIRCUITMAP NZ

Maps up to 24 wiring circuits concurrently. Connect the transmitter cables to each circuit at the switchboard and the receiver displays the corresponding circuit number, to determine which breaker is connected to each transmitter lead. Can be used on live or de-energised cables up to 300 V. Transmitter, receiver, 24 clamps and manual supplied. Battery powered.



### Protection Relay Testing System

## OMICRON CMC 356 Advanced Protection Relay Test Set

OMI,CMC356 (4656) AU · NZ · MY · SG

Protection relay test set with 6 current sources (6 x 32A/430VA, 3 x 64A/860VA or 1 x 128A/1000VA), 4 voltage outputs (4 x 300V or 1 x 600V), 4 x binary outputs, 10 x multifunctional binary inputs (dry/wet) and Generator Combination Cable for wiring convenience. The voltage and output channels are adjustable in amplitude, phase and frequency. All outputs overload and short-circuit proof. Laptop included, preloaded with Test Universe software (Advanced Protection + Transducer).





## OMICRON CMC 356 Enhanced Protection Relay Test Set

OMI,CMC356\_ENHANCED (4659) AU · MY · SG

Protection relay test set with six current sources ( $6 \times 32A/430VA$ ,  $3 \times 64A/860VA$  or  $1 \times 128A/1000VA$ ), four voltage outputs ( $4 \times 300V$  or  $1 \times 600V$ ),  $4 \times 600V$ ,  $4 \times 60V$ ,  $4 \times 600V$ ,  $4 \times$ 



### OMICRON Arc 256X Arc Flash Initiator

OMI,ARC256X (4658) AU

CMC accessory designed to simulate an arc using a xenon tube. It has a 6m (19.7 ft) long connection cable it is connected to the external interface socket of the CMC test set, which provides both the supply voltage as well as the signal that will trigger the flash.









## OMICRON CMC 356 Advanced Protection Relay Test Set +61850

OMI,CMC356\_61850 (4657) AU

Protection relay test set with 6 current sources (6 x 32A/430VA, 3 x 64A/860VA or 1 x 128A/1000VA), 4 voltage outputs (4 x 300V or 1 x 600V), 4 x binary outputs, 10 x multifunctional binary inputs (dry/wet) and Generator Combination Cable for wiring convenience. The 6 current and 4 voltage output channels are continuously and independently adjustable in amplitude, phase and frequency. All outputs overload and short-circuit proof. Includes IEC61850 software package (GOOSE, Sampled Values, IEDScout, SVScout). ELT-1 and LLO-2 options not included. Laptop included, preloaded with Test Universe software (Advanced Protection + Transducer) and IEC61850 package. Optional accessories: OMI,CMA156-6PCA OMI,C-PROBE1 OMI.CMGPS.



#### **OMICRON GPS time reference**

OMI,CMGPS588 (4663) AU

Synchronisation unit is an antenna-integrated GPS controlled time reference. Optimised for outdoor usage and works as a grandmaster clock according to IEEE 1588-2008/ IEEE C37.238-2011 Power Profile



## OMICRON VBO3 Three-phase Voltage Transformer

OMI, VBO3 (4662) AU

Three-phase volage transformer with a transformation ratio of 1:2 and extends the range of application of a CMC up to 600 V (L-N). Main fields of application are tests in renewable energy plants and industrial networks with 400V (L-N) [690 L-L]. Designed for a nominal frequency of 50/60Hz, the secondary voltage is load dependent.



### Megger (Programma) Sverker780 Relay Test Set

MEG,SVERKER780 MY · SG

Relay test set for 1ph protective relay equipment. Three phase relays can be tested 1 phase at a time or by synchronising more than one unit. Current ranges to 100A with full load current to 250A. AC outputs to 250V & DC outputs to 300V. In-built capacitor and resistors for current output phase shifting. In-built timer, ammeter, and voltmeter. Measures phase angle, PF, and impedance. USB communications and control interface.







With our experienced sales engineers, we can help identify long-term solutions to control and understand where power wastage problems and associated risks lie.

METER



### Battery Management Systems



### Hioki 3554 Battery HiTester HIO.3554 NZ

Takes on-the-spot measurements of the internal resistance, voltage and temperature of lead-acid batteries, principally for UPS and similar applications, without needing to shut off the battery. Instantaneous results, on a three-rank scale of Pass, Warning, or Fail, using a composite decision based on the internal resistance and the voltage. Resolution of  $1\mu\Omega$ , necessary for high capacity batteries (of at least 500Ah). Includes Hioki 9460 clip type temperature leads.



### Hioki BT3554-52 Battery Tester

HIO,BT3554-52 (8271) AU • SG HIO.BT3554 MY

Takes on-the-spot measurements of the internal resistance, and voltage of lead-acid batteries, for UPS and similar applications, without taking it offline. Instantaneous results and easy data management with mobile app (GENNECT Cross) or PC (GENNECT One). Up to 6,000 data sets can be saved. Pass, Warning, or Fail results using comparator function. Comes with Z3210 wireless adapter to communicate with smartphones or tablets via GENNECT Cross App.



## Megger Torkel 950 Battery Discharge Tester MEG.TOR950 (8279) AU • NZ • MY • SG

Works with 7.5V to 500V battery systems and can discharge at up to 220A (15kW maximum power). It can be programmed for constant current, constant power, constant resistance or user defined load profiles. The kit includes a 200ADC current clamp allows on-load testing. Tests are controlled by a built in PC and results can be copied to a USB memory stick.



### **Megger TXL870 Extra Load Unit**

MEG,TXL870 (8277) AU · MY · SG

Optional accessory for the Megger Torkel 950 battery discharger tester. Adds up to an extra 112A load capacity to a discharge test (15.8kW maximum). Operates as a slave in combination with a the Megger Torkel 850 battery charger tester.



### Megger BVM300 Battery Voltage Monitor

MEG,BVM300 (8275) AU · NZ

0~5VDC and 0~20VDC 1mv resolution. 1% accuracy daisy chained 31 channel voltage datalogger. Integrates with the Torkel controller to give cell by cell voltage measurement. If the battery string fails a load test the individual battery that is the culprit can be easily identified. These two instruments combineed together meet the test standards IEEE450, IEC896-1, IEEE 1188-1996 & IEC896-2.



### Megger (Programma) TORKEL 860 Battery Load Unit

PRO,TORKEL-860 MY · SG

Portable (22kg, 38kg with accessories and transport case) battery discharge load unit. Works with 12V to 480V battery systems and can discharge at up to 110A (15kW maximum power). Can be programmed for constant current, constant power, constant resistance or user defined load profiles. The included DC current clamp allows on-load testing. Tests can be PC controlled and results reviewed using the included TORKEL Win software. The load current can be extended with the optional accessory MEG,TXL870.





Watch how-to/information videos on any piece of equipment displaying this symbol. Visit the TechRentals YouTube page at:

www.voutube.com/TechRentals

## SETUP AND DOWNLOAD

Save time and reduce your costs by using our data management services



Learning to operate unfamiliar equipment costs you time and can lead to fundamental errors in the data capturing processing. Use a better solution—our Setup and Download service.





# Fluke DSX-5000 Cable Analyser

#### **SETUP:**

- · Company name
- · Site
- Tester
- Setup of certification test limit
- · Cable type/fibre type

### RESULTS DOWNLOADED:

- · Raw Fluke Linkware files
- · Linkware software
- PDF report results

SCAN FOR MORE INFORMATION!



Our experienced technicians can provide you with downloaded data on a USB drive to help you with unfamiliar equipment. This includes everything you need for a quick setup such as PDF files, raw data files, and the appropriate software.

Once you nominate the appropriate technical information, we take care of the rest. The downloaded files can be promptly forwarded to you, or collected at an arranged time that's more convenient.

Equipment marked with the symbol is available to rent with this service. Fees vary depending on the complexity of operation and the level of detail involved.

Data management services are available for many products. Above is an example of what you can expect.





# **General Industrial**

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### Temperature Meters/IR Thermometers



#### Fluke 52 Digital Thermometer FLU,52 NZ SER.OTI6G-K NZ

Type K, two channel thermometer with 2 probes supplied. Standard insertion 150 x 3mm probe, calibration range: -20°C to 200°C and surface contact probe, calibration range: -20°C to 600°C. High temperature insertion 450 x 6mm probe also available, IANZ calibration range: 200°C to 1000°C. Accuracy: ±1%.



## Fluke 54-2B 2 Channel Data Logging Temperature Meter with FlukeView

FLU,54-2B-FVF (4507) AU · MY · SG

Dual input digital thermometer with data logging. Will take most TC inputs. Accuracy  $\pm 0.05\%$  of reading  $\pm 0.3\%$  C. 500 point logging with date & time stamp. Also records min, max or avg. Logged data can be reviewed on meter or downloaded to PC using software included.



#### Fluke 62 Max Plus

FLU,62 MAX PLUS (4510) AU

Handheld Infrared Laser Thermometer delivers the accuracy you need. Just point, shoot, and read the temperature of many types of equipment. Get accurate readings form transformers, motors, pumps, panels, breakers, compressors, duct, steam lines, valves, and vents.



#### Fluke 63 Infrared Thermometer to 535°C

FLU.63 MY · SG

Non-contact infrared thermometer range -32 to 535°C.



### Fluke 1523 IANZ Precision Handheld Thermometer

#### FLU.1523 NZ

Single channel Reference Thermometer with 5627A PRT (Platinum Resistance Thermometer) probe Ø1/4" x 12" (Ø6.35mm x 305mm long). Temperature Range: -30°C to +420°C. PRT resolution: 0.001°C. Trending function to determine when temperature is stable. 25 memory locations. IANZ Calibrated



### Fluke 1524 Precision Handheld Thermometer FLU,1524-15 EC (4512) AU

Precision portable, electronic thermometer with trending, memory for logging 15,000 data and time stamped measurements and 25 readings with statistics. Includes 5615-12 PRT probe, maximum immersion length 305mm, diameter 6.35mm. Temperature range -200 to 420°C. Certified ISO/IEC 17025 (AU only).



### Fluke 572-2 High Temperature Infrared Thermometer

FLU.572-2 NZ·MY·SG

Temperature measurement range from -30 to 900°C with USB interface. 60:1 distance to spot ratio with dual laser sighting for fast, accurate targeting. Adjustable emissivity and predefined emissivity table. Accuracy of  $\pm 1^{\circ}$  for reading from 0 to 950°C, display resolution 0.1°C. Stores 99 data points, data output via USB cable, comes with software for viewing and reporting.



#### Infrared Thermal Imaging Cameras



### Flir T640 Infrared Thermal Imaging Camera FLI,T640 (4565) AU

High performance thermal imaging camera with on-board 5MP visual camera, 640 x 480 thermal resolution, IFOV 0.68, 8X continuous zoom, time lapse and GPS are just a few of its many features. Temperature range -40 to 2,000°C.



### Flir E54Thermal Imaging Camera FLI.E54 (4572) AU

Temperature range -20 to 650°, IR resolution 320 x 240, 30Hz. Display 10cm 640 x 480 touchscreen, 1-4 continuous digital zoom, video recording, Wi-Fi, USB and Bluetooth enabled. IFOV 1.31 mrad. Image modes include infrared, visual, MSX and picture-in-picture. Features manual focus, moisture, insulation, above, below, interval measurement alarms and GPS image tagging. Applications include electrical distribution, mechanical (belts, rollers, couplings, gaskets/ seals, compressors etc), product development, HVAC/R, automotive.



### FLIR E76 Infrared Thermal Imaging Camera FLI,E76 (4573) AU

Temperature range 20 to 650° C, IR resolution 320 x 240, 30Hz. Display 10cm 640 x 480 touchscreen, 1-4 continuous digital zoom, video recording, Wi-Fi, USB and Bluetooth enabled. IFOV 1.31 mrad. Image modes include infrared, visual, MSX and picture-in-picture. Features Laser-assisted auto or manual focus, laser distance measurement, moisture, insulation, measurement alarms and GPS image tagging. Applications include electrical distribution, mechanical (belts, rollers, couplings, gaskets/seals, compressors etc), product development, HVAC/R, automotive.



### Flir E75 Infrared Thermal Image Camera FLI.E75 (4574) MY • SG

Temperature range -20 to 650 °C, IR resolution 320 x 240, 30Hz. Display 10cm 640 x 480 touchscreen, 1-4 continuous digital zoom, video recording, Wi-Fi, USB and Bluetooth enabled. Image modes include infrared, visual, MSX and picture-in-picture. Features Laserassisted auto or manual focus, laser distance measurement, moisture, insulation, measurement alarms and GPS image tagging. Applications include electrical distribution, mechanical (belts, rollers, couplings, gaskets/seals, compressors etc), product development, HVAC/R, automotive.



#### Flir Thermal Imaging Camera

#### FLI,E86 NZ FLI,E95 NZ

-20°C to 1.500°C. 464 x 348 (928 x 696 with UltraMax®) for displaying and capturing surface temperature of objects. 30 Hz sampling rate suitable for video recording and live streaming. Applications include: energy audits and building inspection, electrical surveys, mechanical applications, R&D etc. Touch screen LCD with auto-rotation. Minimum span: 2.0°C. Focus Options: Continuous, one-shot laser distance meter (LDM), one-shot contrast, manual. Time-lapse (Infrared): 10 sec to 24 hours. Digital Zoom: 1-4x continuous. Digital Camera: 5 megapixel. Thermal sensitivity FLI.E95: ≤0.03°C (30mK) [FLI.E86: ≤0.04°C]. Quantify problems through on-screen area measurement (m2 or ft2). Image Modes: visual, Infrared, MSX® (FLIR's high level thermal image option), Picture-in-Picture. SD card (8 GB). 2x Li-ion batteries, approx. 2.5 hours each. Communication Interfaces: USB 2.0, Bluetooth & WiFi for live streaming and capture to tablets and smartphones. Software supplied for importing and analysing images, creating inspection reports and viewing live IR camera video.





#### Fluke Ti480 PRO Infrared Camera

#### FLU,TI480 PRO (4564) AU · MY · SG

Temperature range -10 to 1,000°C, 640 x 480 thermal resolution (1280 x 960 with SuperResolution mode) and 0.93 mRad. Wireless connectivity to PC, Apple or Android. Image capture still or video with live streaming capabilities. MultiSharp focus provides image focus throughout the field of view and a built-in laser distance meter displays the distance from your target.







New sensor and optical system

Producing a sharper image, with improved spatial resolution and optical zoom to show more details and improved picture quality.

UltraFocus focusing technology Focus in 1 second, quiet & smart.

Classic industrial design Single-handed operation, easy and comfortable.



Ti480U | Ti401U | Ti300U

## Ultra Series Sharper and Smarter





### Fluke TiS60+ Thermal Imaging Camera FLU.TIS60+ MY+SG

Temperature range -20 to  $400^{\circ}$ C, IR resolution  $320 \times 240$ , 9Hz, IFOV 1.86mrad, 3.5 inch LCD screen, fixed focus. IR-Fusion, captures a digital visible light image at the same time as an infrared image. The camera blends the two images together, pixel for pixel, in a single display.



### Fluke TiS75+ Thermal Imaging Camera FLU,TIS75+ (4563) AU

384 x 288 thermal resolution, features voice annotation, IRPhotoNotes, and asset tagging. Additionally, it stores inspection notes and location information directly with the captured images for a proactive maintenance (PM) program.

Temperature range -20 to 550°C. Manual focus. IR-Fusion.



#### Endoscopes, Borescopes & Visual Inspection

▶ See also Pipeline & Cavity Inspection on pages 124-125.

### Olympus IPLEX GL 2m x 4mm Handheld Video OLY,IPLEX-GL 2.4 (5175) AU

2m, 4mm diameter hand handheld videoscope has the following features: Daylight viewing monitor. 60fps for smooth video and still imagers. Dynamic image optimisation, reduces halation, balances exposure and optimises gain quality. Noise reduction, minimises noise and ensures accurate colour reproduction. Constant video recording and video bookmarking. Wireless image sharing (with iOS app "IPLEX IShare" only).



### Olympus IPLEX GL 3.5m X 6mm Handheld Videoscope

OLY, IPLEX-GL 3.5-6 (5176) AU · NZ · MY · SG

3.5m x 6mm diameter handheld videoscope has the following features: Daylight viewing monitor. 60fps for smooth video and still imagers. Dynamic image optimisation, reduces halation, balances exposure and optimises gain quality. Noise reduction, minimises noise and ensures accurate colour reproduction. Constant video recording and video bookmarking. Wireless image sharing (with iOS app "IPLEX IShare" only). Optional UV and IR light sources.









### Olympus IPLEX RX 3.5m x 4mm Videoscope with Measurement

#### OLY, IPLEX-RX (5184) AU

Battery powered videoscope. 3.5m x 4mm insertion tube, 4-way, 130° articulation and 120° FOV. Stereo Measurement functions, Distance, Point-to-line, Depth and Area. Applications include inspection of heat exchangers, turbines, gearboxes, automotive parts and aircraft. Still and video recording to USB flash, approx 3.400 images and 30 mins per 1GB.



### Olympus IPLEX RT 7.5m Portable Industrial Videoscope

#### **OLY, IPLEX-RT 7.5 (5186) AU**

Battery powered videoscope. 7.5m insertion tube, 6mm diameter, 4-way, 100° articulation and 120° FOV. Applications include inspection of heat exchangers, turbines, gearboxes, automotive parts and aircraft. Still and video recording to USB flash, approx 3,400 images and 30 mins per 1GB.



#### Olympus IPLEX GT 7.5m x 6mm Portable Industrial Videoscope

#### **OLY, IPLEX-GT 7.5 (5185) AU · MY · SG**

Designed for the visual inspection of heat exchangers, turbines, gearboxes, automotive parts, aircraft, and other industrial machinery. This lightweight videoscope comes with a 7.5m long, 6mm diameter tungsten braided insertion tube. Record still images and video simultaneously with Smart Video. Features: 8" LCD monitor. Easy-to-use touch screen and hot key controls. Smart Video. TrueFeel articulation. Compliant to MIL-STD-810G.



### Olympus IPLEX-GT 10 Portable Industrial Videoscope OLY.IPLEX-GT 10 MY • SG

Battery powered videoscope. 10 meter insertion tube, 6mm diameter, 4 way, 90° articulation and 120° FOV. Applications include inspection of heat exchangers, turbines, gearboxes, automotive parts and aircraft. Still and video recording to USB flash, approx 3,400 images and 30 mins per 1 GB.



#### **Olympus IVO620C Endoscope**

#### OLY.IVO620C NZ

4-way articulating industrial endoscope with 2 metre probe. The probe has highintensity LED lights, and 8 brightness settings. Images are stored to an SD card, for later download. Lightweight and portable this touch screen endoscope provides quick and easy inspections of difficult to reach areas. Insertion probe can be used underwater. Insertion tube length: 2m. Tube Diameter: 6.2mm. Articulation: 4 Way, each 120°. Field of View: 90°. Depth of view: 12 ~ 150mm. Operating Temperature In Air: -25° to 80°C. Operating Temperature In Water: 10° to 30°C. Battery powered, 120 min life. Spare battery included.





# The Portable Powerful Videoscope



#### IPLEX G Lite industrial videoscope

- · Lightweight, rugged, and goes almost anywhere
- · Clear, bright images aid in your decision-making
- Make your inspections fast and efficient



## **Extensive Fleet of Test Equipment**

TechRentals has a diverse fleet of test equipment spanning many categories including General Industrial equipment. This category includes instruments such as:

- Industrial Process Calibrators
- Infrared Thermal Imaging Cameras
- Wet and Dry Block Calibrators



#### Tachometers/Stroboscopes

### Hioki FT3406 Contact/Non Contact Tachometer HIO,FT3406 NZ

Speed range for non-contact measurement is 30 rpm to 99,990 rpm, and contact base measurement is 15 rpm to 19,999 rpm. Contact adaptor included for mechanical connection to rotating shaft, and rim wheel adaptor included for linear speed measurement. Analogue output: 0-1 V DC FS with 2% accuracy. Internal battery or external AC operation.



### Monarch PLT200-KIT Digital Contact/Non Contact Tacho

MON,PLT200-KIT (5214) AU · MY · SG

Hand held digital contact/non-contact tacho kit. Ranges optical/ non-contact 5 to 200,000 RPM, contact 0.5 to 20,000 RPM. Display 5 digits, 5 alpha numeric LCD. Non contact operating range 90cm, tripod mounting. Direct contact tips and contact wheel supplied. Programmable for IPM, FT/M, YPM, cm/M, m/M, RPM, RPS, RPH and Totaliser up to 200,000. Output TTL pulse.



#### High Speed Cameras

### Olympus i-Speed3 High Speed Camera OLY.ISPEED3 NZ

Complete kit supplied including Olympus i-Speed3 video camera, 8.4" LCD display/control unit, lenses, lighting array, tripod & head. Maximum resolution: 2000 frames/sec at 1280x1024, up to 150,000 fps at lower resolutions. Display unit controls the camera & reviews footage, analyse distance, speed, acceleration etc. Manfrotto tripod & head for stability & control. Comer LED lighting array & stand. Godox 200W / 20,000 lux light also available. 10bit colour or monochrome. Maximum shutter speed: 1µs. Storage: 8GB. CF Card or Gigabit Ethernet file transfer. Cyclic memory & triggering methods including pickle switch & sensed movement. Four F-mount lenses: 24, 50, 105 & 75 to 240mm. Tripod counterbalance control & variable drag control of pan (-60° to 90°) & tilt (360°). Light output up to 5500 lux adjustable colour temperature. All battery or mains powered.







#### Intrinsically Safe Cameras



### Cordex TP3EX Intrinsically Safe Digital Camera COR, TP3EX NZ

Safely captures high-quality digital images and movies. IECEx Certificate of Conformity available on request. Operates in daylight, low light, or even total darkness, via an auto-adjusting CMOS sensor and LED flash.

#### Laser Rotational Shaft Alignment



#### Fixturlaser ECO Laser Base Shaft Alignment System

FIX,ECO MY · SG

Measurement resolution to 0.01mm. Shaft diameter range 25 to 175mm using an extension chain 25 to 450mm. Maximum distance between measurement units 3m. Horizontal Shaft Alignment, Vertizontal Moves for fast alignment process, additional features include Soft Foot Check, Target Values and Tolerance Table. Wireless configuration. 1,000 measurement can stored in JPEG and notes format. Alignment can be monitored in real time. 8h of continuous operation from Li-lon bat.



### Pruftechnik Optalign Touch Standard Optical Alignment System

PRU,OPT-TOUCH-STD (4940) AU · MY · SG

Complete with 5 axis precision sensors. Includes target, thermal growth and dial gauge input. Multipoint measurement. Spacer and cardan shaft measurement. Compact magnetic brackets. Reliability centre software included.



### Easy-Laser System® XT660 Shaft with Display Unit

EAS.XT660 MY

Dot laser technology with single axis TruePSD 20x20mm detectors. Measurement resolution of 0.001mm with max measurement distance up to 20m. Shaft diameter range 20 to 150mm, using extension chain up to 450mm. Alignment for Horizontal & Vertical Mounted Machines 3 Machine Train Alignment, Check base twist, Check bearing play, Check soft foot and Documentation. 16 hours operating time. Includes Easy-Laser XTII and 8" touch screen display unit (has built-in 13 MP camera for documentation), extension chain, Hexagon wrench and measuring tape.



#### **Industrial Process Calibrators**

▶ See also Pressure Vacuum Gauges/Recorders on pages 95-98.

#### **Beamex MC6 Multifunction Calibrator**

#### BEA,MC6 (4727) AU · MY

Provides calibration capability for pressure, temperature, electrical and frequency signals with HART communication and Document Calibrator option included. Performs as a field-entry device (FED) allowing for the recording of non-calibration related maintenance results. Pressure modules included, -1 to 20 bar and 600 bar. DC voltage & current, frequency, and pulse measurement. RTD, thermocouple, and resistance simulation & measurement. Pressure accuracy EXT-600 bar 0.007% FS + 0.01% Rdg, INT-20 bar 0.005% FS + 0.01% Rdg, temperature coefficient ±0.001% Rdg/degC outside 15 to 35°C. Please enquire about our other MC6 configurations and pressure rangers. Certified ISO/IEC 17025 (AU only).





#### **Beamex External Pressure Module**

#### BEA,MC6-PM (4731) AU

External pressure modules compatible with MC6, MC5, MC4, MC2 MC5-IS, MC2-IS and MC5P calibrators. Various rangers available, please inquire.



### Crystal Engineering Hydraulic Comparator CEC,GAUGECAL NZ

Allows your pressure gauge to be compared against a standard. Choose a Reference Gauge: 30Bar, 140Bar or 700BAR Hydraulic test gauge. All of which have IANZ endorsed calibration. Attach the Unit Under Test and the Reference Gauge, apply hydraulic fluid (water, oil, isopropyl alcohol) and then simply and easily apply pressure to chosen setpoints. Features main screw plus fine-adjust screw. Can be used with flexible hose and Ralston fittings when testing less than 350Bar.







### **Druck DPI104 Digital Pressure Gauge 70 Bar DRU.DPI104-70BAR MY • SG**

Range 70 bar. Accuracy 0.05% full scale (FS). Large, easy-to-read display with five-digit resolution. Temperature compensated accuracy from -10°C to 50°C. Pressure switch test function. 0 to 5V analog output. IDOS compatible and RS232 serial interface. Selectable pressure units: kPa, MPa, kg/cm2, psi, mbar, bar, in Hg, in H2O, m H2O, mm H2O and mm Hg. % pressure indication and additional bar graph for quick visual reference. Pressure connection G1/4 Male.



### Druck DPI104 Digital Pressure Gauge 700 Bar DRU.DPI104-700BAR MY • SG

Range 700 bar. Accuracy 0.05% full scale (FS). Large, easy-to-read display with five-digit resolution. Temperature compensated accuracy from -10°C to 50°C. Pressure switch test function. 0 to 5V analog output. IDOS compatible and RS232 serial interface. Selectable pressure units: kPa, MPa, kg/cm2, psi, mbar, bar, in Hg, in H2O, m H2O, mm H2O and mm Hg. % pressure indication and additional bar graph for quick visual reference. Pressure connection G1/4 Male.



#### Druck DPI 611-2 2 Bar Pressure Calibrator

DRU,DPI611-2 (4736) AU · MY · SG DRU,DPI611-07G NZ

Fully self-contained pressure test and calibration system combines pressure generation, signal measurement and loop power. Generates from 95% vacuum to 2 bar/30 psi pneumatic pressure with 0.0185% FS accuracy. Calculates PASS/FAIL errors and documents results. User Guide stored in the memory of the instrument, 3-touch set-up for any application. Certified ISO/IEC 17025 (AU only).



### Druck DPI 611-20 20 Bar Pressure Calibrator DRU,DPI611-20 (4748) AU·MY·SG DRU.DPI611-13G NZ

Fully self-contained pressure test and calibration system combines pressure generation, signal measurement and loop power. Generates from 95% vacuum to 20 bar/300 psi pneumatic pressure with 0.0185% FS accuracy. Calculates PASS/FAIL errors and documents results. User Guide stored in the memory of the instrument, 3-touch setup for any application. Certified ISO/IEC 17025 (AU only).



#### **Druck DPI612 70 Bar Pressure Calibrator**

#### **DRU, DPI612-70 MY • SG**

Fully self-contained pressure test and calibration system combines pressure generation, signal measurement and loop power. 0 to 70 bar, accuracy 0.005%FS. Calculates Pass/Fail errors and documents results. User Guide stored in the memory of the instrument. 3-touch set-up for any application.



#### **Druck DPI612 100 Bar Pressure Calibrator**

#### DRU, DPI612-100 MY • SG

Fully self-contained pressure test and calibration system combines pressure generation, signal measurement and loop power. 0 to 100 bar, accuracy 0.005%FS. Calculates Pass/Fail errors and documents results. User Guide stored in the memory of the instrument, 3-touch set-up for any application.



### Druck DPI612 200 bar Pressure Calibrator DRU,DPI612-200 (4766) AU

Fully self-contained pressure test and calibration system Fully self-contained pressure test and calibration system combines pressure generation, signal measurement and loop power. 0 to 200 bar, accuracy 0.005 %FS. Calculates Pass/Fail errors and documents results. User Guide stored in the memory of the instrument, 3-touch set-up for any application. Certified ISO/IEC 17025 (AU only).



### Druck DPI612 350 Bar Pressure Calibrator DRU.DPI612-350 MY · SG

Hydraulic pressure calibrator including pump and current voltage standard. Pressure range 0-350bar (5000psi) +/- 0.005% FS. Voltage input +/- 30VDC +/-0.018% rdg +/- 0.005% FS. Current input +/-55mA +/-0.018% rdg +/- 0.005% FS. Temperature -10~30°C +/-1°C (ambient) switch open/ closed. Voltage output 10VDC +/-0.1% or 24 V +/-1%. Current output 0~24mA +/-0.018% rdg +/- 0.006% FS. Data logger -8Gb. mA step & ramp configurable. Pressure port G 1/8 female (Quickto-fit connection) and 1/8 NPT female adaptors, includes flexible hose kit. Pressure relief valve attached. Comes with rechargeable battery and charger.







### Druck DPI620 GENII 350 Bar Pressure Calibrator

DRU.DPI620-350 MY · SG

Advanced modular pressure calibrator with HART. Includes hydraulic pressure station with 1/8 BSP(G) or 1/4 NPT test port and 350 bar gauge and absolute pressure module, accuracy 0.005 and 0.015 %FS respectively. Provides simultaneous measurement and source capabilities for the setup, testing and calibration of process instruments including transmitters, transducers, gauges/Indicators, switches, proximity detectors, counters, RTDs, thermocouples and valve positioners.



### Druck PV211 Pneumatic Hand Pump DRU.PV211 MY · SG

Pneumatic Hand Pump. 40bar pneumatic pressures and vacuum to --0.95bar. Comes with Precision Vernier for fine pressure adjustment.



Druck PV212 Hydraulic Hand Pump Kit DRU.PV212 MY • SG

Provides up to 700bar hydraulic pressure.



### Druck PV411A Multifunction Hand Pump Kit DRU.PV411A (4789) AU

Provides up to 700 bar hydraulic, 40 bar pneumatic pressures and vacuum to -950mbar. Built-in stroke adjuster, lower pressure fine control and tamper proof overpressure protection.



#### **Endress & Hauser Pressure Transducers**

E&H,PMP-1BAR NZ E&H,PMP-10BAR NZ E&H,PMP-100BAR NZ JUM,1030-0-10BAR NZ

Pressure transducer with flushable diaphragm. Accuracy: 0.5% of FS. Operating temp: E&H -25~70°C; JUM -40° to 85°C. Response time is 90% of FS: E&H 20ms; JUM 30ms. Output: 4~20mA. Pressure connection: E&H1/2"NPT; JUM 1/4"NPT.



### Emerson AMS Trex Device Communicator with HART

#### EME, AMS TREX-LH (4792) AU · MY · SG

Intrinsically safe HART device communicator. Allows technicians to configure, isolate, diagnose and repair problems while devices continue to run using the Loop power function and on board ammeter. Segment and loop diagnostic tools quickly validate loop and segment characteristics for easy troubleshooting. L "Device Communicator Plus Communication Module" and H-"HART".



### **Emerson AMS Trex Device Communicator** with HART & FFbus

#### EME, AMS TREX-LF (4793) AU · MY · SG

Intrinsically safe HART and Foundation fieldbus device communicator. Technicians can configure, isolate, diagnose, and repair problems while devices continue to run using the Loop power function and on board ammeter. Segment and loop diagnostic tools quickly validate loop and fieldbus segment characteristics for easy troubleshooting. This model has options L-"Device Communicator Plus Communication Module" and F-"HART + Foundation Fieldbus".









#### Fitting Set with 700 Bar Hose

FIT,HP MY · SG

Fitting set (max pressure = 10,000 psi) for pressure calibrators. Comes with 700 Bar Hose, 20 bar Hose and varous connectors. Female connector sizes: 1/4 inch BSP & NPT; 1/8 inch BSP & NPT; 3/8 inch BSP & NPT; 1/2 inch BSP & NPT.



#### Fitting Set With 20 Bar Hose

FIT.LP MY · SG

Fitting set for pressure calibrators. Comes with 20 bar Hose and varous connectors. Female connector sizes: 1/4 inch BSP & NPT; 1/8 inch BSP & NPT; 3/8 inch BSP & NPT; 1/2 inch BSP & NPT.



#### Fluke 725 Process Calibrator

FLU,725 (4784) AU · MY · SG

Fluke 725 dual measure/source multifunction process calibrator. Measure DC 30 V, resistance 3200 ohm, 24mA and more. Source/simulate DC 10 V, 24 mA, 3200 ohm, 12 types of TCs and 7 types of RTDs. Power transmitters with internal loop supply. Split display allows view of input and output values. Certified ISO/IEC 17025 (AU only).



#### Fluke 726 Process Calibrator

FLU,726 MY · SG

Precision multifunction process calibrator designed specifically for the process industry with broad workload coverage, calibration power, and accuracy in mind. Measures and sources almost all process parameters and can calibrate almost anything. Will also interpret results without the help of a calculator and store measurement data for later analysis.



### Fluke 753 Documenting Process Calibrator FLU.753 MY • SG

Provides simultaneous source and measure volts, mA, thermocouples, RTDs, frequency, ohms and pressure to calibrate transmitters. It can power transmitters during test, using loop supply with simultaneous mA measurement; measure/source pressure; create and run automated as-found/ as-left procedures to satisfy quality programs or regulations; record and document results. Holds up to a full week of downloaded procedures and calibration results. Features include autostep, custom units, user entered values during test, one-point and two-point switch testing, square root DP flow testing, programmable measurement delay etc.



### Fluke 754 Documenting Process Calibrator with HART

#### FLU,754 (4781) AU · NZ · MY · SG

Handheld, multi-function documenting process calibrator with HART communication. Designed for the calibration, maintenance, and troubleshooting of test sensors, transmitters, and other instruments. Allows for the testing of all common process parameters including volts, mA, Resistance Temperature Detectors, thermocouples, frequency and ohms. Compatible with all Fluke 700Pxx pressure modules, this device also allows for custom units, user-entered values during test, one and two-point switch testing, square root DP flow testing, and programmable measurement delays. Features: Simultaneous source and measure capabilities. Create and run automated as found/as-left procedures. AutoStep - set an automated sequence of steps (with a delayed start if required). Records and documents results.



### Fluke 773 Milliamp Process Clamp Meter FLU,773 (4779 AU

Measure 4 to 20mA control lines, PLC loops, transmitters or any 4 to 20mA line without breaking the loop. Capable of 0 to 20.99mA and 24 to 100mA with clamp. Source and simulate mA and voltage signals in circuit. 4 to 20mA scaled o/p.









FLU,789 (4786) AU · MY · SG

A compact digital multimeter and mA loop calibrator solution. Features include standard multimeter functions with 2 to 20mA sink and source capability, with a 24V supply, HART 250 resistor and 20mA drive into 1200 $\Omega$ . Simultaneous mA and % of scale readout on mA output. 25% manual step plus auto step and auto ramp on mA output. Min/max/average/hold/ relative modes. Double size dual display. Accuracy, VDC 0.1% +1, VAC 0.7% +2, mA DC 0.05% +2, frequency 0.005% +1. Certified ISO/IEC 17025 (AU only).



#### **Softing BC-700-PB Profibus Tester 5 PB-T5**

SOF, PROFIBUS-5 (4722) AU

A powerful diagnostic and troubleshooting tool for testing cables, measuring signals and analysing the communication of PROFIBUS networks. It's battery-powered and provides a graphical display, allowing for quick results when working in stand-alone mode. In addition, the BC-700-PB supports the export of test results for advanced analysis.

#### Wet & Dry Block Calibrators



### Fluke 9103 Dry Block Temperature Calibrator -25 to 140°C

FLU.9103 NZ · MY · SG

Dry well calibrator, temperature range -25 to  $140^{\circ}$ C. Is stable to  $\pm 0.02^{\circ}$ C, and its display is calibrated to an accuracy of  $\pm 0.25^{\circ}$ C at all temperatures within its range. Insert type A with hole sizes:  $1/16^{\circ}$ .  $1/4^{\circ}$ .  $3/8^{\circ}$ .  $3/16^{\circ}$ .  $1/8^{\circ}$ . and  $1/2^{\circ}$ .



### Fluke 9144 Dry Block Temperature Calibrator 50 to 660°C

FLU,9144 NZ

Dry well reference calibrator for calibration of temperature probes, including thermocouples, RTD's and PT100's. It is recommended to be used in conjunction with a calibrated reference probe: see Fluke 52 or Fluke 1523. Temperature range: 50° to 660°C. Accuracy ±0.35°C 50° to 420°C; ±1.0°C 420° to 660°C. Heating time: 15min to 650°C. Cooling time: 25min from 650°C to 100°C. Stabilization time 7min. Stability: ±0.04°C 50° to 400°C; ±0.05°C above 400°C. Insert hole sizes 1/8", 3/16", 1/4", 3/8". 3mm, 4mm, 6mm, 8mm & 10mm. Well depth: 150mm. Includes PC software and interface cable.



### Fluke 9170 Dry Block Temperature Calibrator -45 to 140°C

#### FLU,9170 (4825) AU

Temperature range -45 to 140°C in normal room conditions. This product has a large LCD display, numeric keypad, and an on-screen menu. The display shows the block temperature, cut-out temperature, stability criteria, and ramp rate. Certified ISO/IEC 17025 (AU only).



#### **Grant TX150 Temperature Bath**

#### GRA,TX150-ST5 (4820) AU

Temperature range -45 to  $140^{\circ}$ C in normal room conditions. This product has a large LCD display, numeric keypad, and anon-screen menu. The display shows the block temperature, cut-out temperature, stability criteria, and ramp rate. Certified ISO/IEC 17025 (AU only).









#### Jofra CTC-660A Dry Block Temperature Calibrator 28 to 660°C

JOF,CTC-660A (4832) AU · MY · SG

Range 28 to 660 °C. Accuracy ±0.85°C, stability ±0.08°C and resolution of 0.01, 0.1 or 1° deg. Immersion depth 115mm. Supplied with insert M01 (hole sizes, 9, 5, 6, 4, 4, 3mm). Various insert sizes available, please inquire. Certified ISO/IEC 17025 (AU only).



#### Jofra CTC-1200A Temperature Calibrator

JOF,CTC-1200A MY · SG

Compact temperature calibrator. Lightweight, portable for lab and general use. Temperature range: 572 to 2200°F (300 to 1205°C). Excellent Performance Characteristics. Accuracy: ±4.0°F (±2.0°C). Stability: +1.0°F (+0.5°C). Stability Time: 20 minutes. Display in F or C to 0.1 resolution. Fast cooling and heating. User-selectable Slope Rates for controlled. Thermo switch testing. Self Diagnostics includes Semi-Auto Switch Test and Hysteresis Test. Size of thermowell/insert: 6.5mm & 10mm. 1/4" probe. 1/2" probe.



#### Jofra CTC-1205A Dry Block Temperature Calibrator 1200°C

JOF,CTC-1205A (4818) AU

Range 100 to 1,205°C. Accuracy ±2°C, stability ±0.1°C. Immersion depth 110mm (with insulation plug 137mm). Certified ISO/IEC 17025 (AU only).



#### JOF RTC-157 Dry Block Temperature Calibrator -45 to 155°C

JOF,RTC-157A (4816) AU

Range -45 to 155°C. Accuracy  $\pm 0.10$ °C, stability  $\pm 0.005$ °C and resolution of 0.001, 0.01, 0.1 or 1 deg. Immersion depth 160mm. Supplied with insert M09 (hole sizes, 11mm, 10mm, 4mm, 3mm, 1/4"). Various insert sizes available, please inquire. Certified ISO/IEC 17025 (AU only).



#### High Speed Wave Recorders

### Hioki MR8847-53 8 Analogue 16 Logic Channel Memory Recorder

#### HIO.MR8847-53 (4122) AU · MY · SG

Complete with 8 analogue and 16 logic channels (16 logic probes supplied). High-speed 20MS/s, Fully Isolated Memory recorder. Analog unit 8966 has max input of 400VDC. Analog unit 8966 has maxium rated voltage to ground: 300VAC/DC.



### Hioki MR6000-01 8 Analogue 16 logic Channel Memory Recorder

#### HIO,MR6000-01 (4122) AU

20M Sample 8 channels 12bit maxium rated voltage to earth: 300V AC, DC,16 logic channels with voltage detection probes 150V or 15V threshold . Touch screen display with PC remote operation.



#### Data Loggers

### DataTaker DT80M 5 to 15 Channel Logger with Built in Modem

#### DE, DT80M (4234) AU · MY · SG

Includes a built in GSM modem for internet access to the device supports 2G and 3G networks (GSM/GPRS/EDGE/WCDMA). Measures voltage, current, resistance and frequency. Up to 5 analogue (±30V) sensor inputs. Each channel is independent and supports: one isolated 3-wire or 4-wire input, or two isolated 2-wire inputs, or three common referenced 2-wire inputs. Store up to 10 million data points in user defined memory. Generally used at sample rates of 1Hz and slower.



#### **DataTaker DT80 Expansion Module**

#### DE, DTCEM MY · SG

Channel expansion module for DT80 data loggers. Adds 20 full datataker channels to the logger.







#### **Grant Squirrel 2020 Data Logger**

#### GRA, SQ2020-1F8 MY · SG

Measure voltage, current, and resistance. 16 single-ended inputs or 8 differential inputs. 2 high voltage channel (60 v). Includes SquirrelView software for logger configuration and USB data transfer. Stores up to 14 million data.



#### **Graphtec 10 Channel Data Logger**

#### GRA,GL240 NZ

Portable, hand held, battery operated 10 channel data logger. 4.3" TFT colour LCD display for setting up and graphical display of logged data. DC current: 4-20mA (with shunt). DC voltage ranges: GL220: 20mV to 50V (GL240: 20mV to 100V). Thermocouples: J, K, T, R/S, B, E, N and W. 4 Pulse or Logic channels with cable supplied. Maximum sampling rate: 10ms (1 channel), 20ms (2 channels), 50ms (3-5 channels), 100ms (6-10 channels). Create your own units of measure by scaling inputs. Memory capacity: GL220: 2GB internal, USB port for external flash drive. (GL240: 4GB plus extra SD memory card slot, up to 32GB). Software supplied for customising and downloading data. USB interface.







#### Hioki LR8431-20 10 Channel Memory Logger

#### HIO,LR8431-20 (4280) AU · MY · SG

10 Channel Memory Logger with isolated channel to 60VDC which will take thermocouples. 10ms sampling USB interface and USB memory stick. Logging software included. Log directly to memory stick. Includes battery for 2.5hrs continuous operation.



### **Hioki Kit of Three 9322 Differential Probe High Voltage True RMS Interface**

#### HIO,9322-KIT (4119) AU

Used with many memory recorders, eg. Hioki 8835. Operating modes 3. DC mode for waveform monitor output DC to 3MHz, AC mode detection of power surge noise 1kHz to 10MHz. Rectified true RMS output of dc & ac voltages. 40Hz to 100kHz response speed 200ms or less. Max voltage DC 2kV, ac 1kV CATII, AC/DC 600V CATIII, balanced differential input 1/1,000 divider.



### **Hobo Humidity & Temperature Data Loggers** - Set of 5

#### HOB.UX100-011A NZ

Compact pocket-sized loggers to record temperature and humidity with an easy-to-see display screen. Ideally suited for both short and long-term indoor recording with simple process to obtain data. Relative Humidity: 1% to 95%, accuracy: ±2.5% from 10% to 90% Temperature: -20° to 70°C, accuracy: ±0.21°C from 0° to 50°C. Sampling Rate: 1 second to 18 hours, user selectable. Memory: 84,650 measurements. USB cable supplied to download data. Battery Life: up to 1 year with 1 minute logging rate and sampling interval of 15 seconds.



### Hobo Four Channel Temperature Logger HOB.UX120-014M NZ

Four channel data logger for measuring and logging temperature. Four 3m type K thermocouple probes supplied. Easy-to-view LCD display confirms logger operation and battery status. Programmable start, stop, and restart push buttons or start at a preset time. Comes in a weatherproof case suitable for indoor and outdoor use. Thermocouple temperature range: -260 to 980°C. LCD screen displays probe and ambient temperatures. On-screen alarms notify you if temperatures exceeds high or low thresholds. Memory: up to 1.9M readings. Software supplied for programming and download via USB.



### Testo Saveris 2-H2 Temperature Humidity Loggers Kit of 10

#### TES,SAV2-H2-10KIT (4250) AU

Kit of 10 includes a preconfigured WiFi hotspot so the 10 loggers will save their data to the cloud. The logged data is available on line. The temperature sensor  $0\sim40^{\circ}\text{C}$  ±0.3 °C. Humidity sensor  $0\sim100\%$  ±2%RH. 4mm diameter remote probe.



#### Testo Saveris 2-T3 Temperature Loggers Kit of 10

#### TES,SAV2-T3-10KIT (4253) AU

Kit of 10 includes a preconfigured WiFi hotspot so the 10 loggers will save their data to the cloud. The logger data is available online. The temperature sensors are type K thermocouples 0.9m.







### Testo 174H Temperature and Humidity Logger Kit of 2

#### TES,174-KIT20 (4252) AU

-20~70°C ±0.5 °C 0~100%RH±4% (2~98%RH). 160000 readings up to 1min sample rate. 1 year battery life (@15min intervals).



### Testo 175-H1 Temperature & Humidity Logger TES,175-H1 (4251) AU

Large Display. 3 year battery life, 1 million sample memory. RH  $0\sim100\%$  ±2%, temp -20~50°C ±0.4°C. Includes USB interface to download data.



### Testo 184H1-KIT5 Temperature & Humidity Data Logger Kit of 5

#### TES,184H1-KIT5 MY · SG

Simple to use with a tamperproof design. -20~70°C, 0~100%RH. HACCP Certified. Has built in USB port and will download to Android devices using NFC. Battery life 120Days (15min sampling). Includes software for download of data to A PC. Saves data by default to a PDF file.



### Yokogawa MV2020 Twenty Channel Logger YEW.MV2020 NZ

Twenty Channel Data Logger that accepts wide variety of inputs including thermocouples and RTD's. 10.4" TFT colour display for setting up and graphical display of logged data. DC voltage ranges: ±20mV to ±50V. Maximum sampling rate: 125ms. Thermocouples: J, K, T, R, S, B, E, N, W, L, U and WRe. RTDs: Pt100 and JPt100. Triggers include alarm, external contact, time and calculated data. 400MB internal memory, 2GB CF card. Detachable input terminals for easy wiring setup. Supports data collection over ethernet networks. 2 USB ports: 1 for external flash drive, 1 for direct PC connection.



#### Pressure Vacuum Gauges/Recorders

### Additel 681AEx Digital Logging Pressure Gauge 20bar

#### ADD.681AEX-300 (4324) AU

Range: -1 to 20 bar, (-100 to 2,000 kPa), (-15 to 300 psi).

- · Gauge or Absolute pressure
- · Data logging (up to 10,000,000 records)
- · Intrinsically safe
- · Bluetooth communication
- · ISO/IEC 17025 certified (AU only)



### Additel 681AEx Digital Logging Pressure Gauge 70bar

#### ADD,681AEX-1K (4326) AU

Range: 70 bar. (6.900 kPa). (1000 psi).

- · Data logging (up to 10,000,000 records)
- · Intrinsically safe
- · Bluetooth communication
- · Ambient temperature logging
- · ISO/IEC 17025 certified (AU only)



### Additel 681AEx Digital Logging Pressure Gauge 700bar

#### ADD,681AEX-10K (4330) AU

Range: 700 bar, (70,000 kPa), (10,000 psi).

- · Data logging (up to 10,000,000 records)
- · Intrinsically safe
- · Bluetooth communication
- · Ambient temperature logging
- · ISO/IEC 17025 certified (AU only)



#### **Crystal XP2i Digital Gauge & Logger**

CEC,30BAR NZ CEC,140BAR NZ CEC.700BAR NZ

Two tools in one; high accuracy pressure gauge and pressure data logger. Four models available: 20Bar, 30Bar, 140Bar and 700Bar. IANZ calibration. Recording intervals from 1 per second to 18 hours. Records at least 3000 pressure measurements. Temperature compensated. Intrinsically safe. Software supplied for data download and analysis in Microsoft Excel. Battery powered for up to 3 months.







### **Crystal XP2i Digital Logging Pressure Gauge 7 Bar**

CRY,XP2I-100 (4340) AU · MY · SG

Range -1 to 7 bar (100 psi) pressure gauge. Accuracy, ±0.1% of reading between 20 to 100% of full scale, ±0.02% of full scale between 0 to 20% of full scale. Generation 3 gauges have 32,000 point logging capacity at intervals from 1 second to 18 hours, ULP (Ultra Low Power) setting allowing logging for 1 year and PSV/PRV (Pressure Safety/Pressure Relief Value) mode increasing measurement rate to approx. 8x per second. Logs actual pressure, average pressure, average pressure with peaks and, on demand. Intrinsic and safety ratings registered under IECEx, ATEX and DNV standards. Certified ISO/IEC 17025 (AU only).



### **Crystal XP2i Digital Logging Pressure Gauge 20 Bar**

CRY,XP2I-300 (4341) AU · MY · SG

Range -1 to 20 bar (300 psi) pressure gauge. Accuracy, ±0.1% of reading between 20 to 100% of full scale, ±0.02% of full scale between 0 to 20% of full scale. Generation 3 gauges have 32,000 point logging capacity at intervals from 1 second to 18 hours, ULP (Ultra Low Power) setting allowing logging for 1 year and PSV/PRV (Pressure Safety/Pressure Relief Value) mode increasing measurement rate to approx. 8x per second. Logs actual pressure, average pressure, average pressure with peaks and, on demand. Intrinsic and safety ratings registered under IECEx, ATEX and DNV standards. Certified ISO/IEC 17025 (AU only).



#### Crystal XP2i Digital Logging Pressure Gauge 70 Bar

CRY,XP2I-1K (4342) AU · MY · SG

69 bar (1,000 psi) pressure gauge. Accuracy, ±0.1% of reading between 20 to 100% of full scale, ±0.02% of full scale between 0 to 20% of full scale. Generation 3 gauges have 32,000 point logging capacity at intervals from 1 second to 18 hours, ULP (Ultra Low Power) setting allowing logging for 1 year and PSV/PRV (Pressure Safety/Pressure Relief Value) mode increasing measurement rate to approx. 8x per second. Logs actual pressure, average pressure, average pressure with peaks and, on demand. Intrinsic and safety ratings registered under IECEx, ATEX and DNV standards. Certified ISO/IEC 17025. (AU only).



#### Crystal XP2i Digital Logging Pressure Gauge 138 bar

#### CRY.XP2I-2K MY · SG

138 bar (2,000 psi) ISO 17025 certified pressure gauge. Accuracy, ±0.1% of reading between 20 to 100% of full scale, ±0.02% of full scale between 0 to 20% of full scale. Generation 3 gauges have 32,000 point logging capacity at intervals from 1 second to 18 hours, ULP (Ultra Low Power) setting allowing logging for 1 year and PSV/PRV (Pressure Safety/Pressure Relief Value) mode increasing measurement rate to approx. 8x per second. Gen 2 gauges have 6,000 points and logging intervals from 1 second to 18 hours. Logs actual pressure, average pressure, average pressure with peaks and, on demand. Intrinsic and safety ratings registered under IECEx, ATEX and DNV standards.



### Crystal XP2i Digital Logging Pressure Gauge 206 Bar

#### CRY,XP2I-3K (4343) AU

206.8 bar (3,000 psi) pressure gauge. Accuracy, ±0.1% of reading between 20 to 100% of full scale, ±0.02% of full scale between 0 to 20% of full scale. Generation 3 gauges have 32,000 point logging capacity at intervals from 1 second to 18 hours, ULP (Ultra Low Power) setting allowing logging for 1 year and PSV/PRV (Pressure Safety/Pressure Relief Value) mode increasing measurement rate to approx. 8x per second. Logs actual pressure, average pressure, average pressure with peaks and, on demand. Intrinsic and safety ratings registered under IECEx, ATEX and DNV standards. Certified ISO/IEC 17025 (AU only).



### Crystal XP2i Digital Logging Pressure Gauge 690 Bar

#### CRY,XP2I-10K (4344) AU

690 bar (10,000 psi) pressure gauge. Accuracy, ±0.1% of reading between 20 to 100% of full scale, ±0.02% of full scale between 0 to 20% of full scale. Generation 3 gauges have 32,000 point logging capacity at intervals from 1 second to 18 hours, ULP (Ultra Low Power) setting allowing logging for 1 year and PSV/PRV (Pressure Safety/Pressure Relief Value) mode increasing measurement rate to approx. 8x per second. Logs actual pressure, average pressure, average pressure with peaks and, on demand. Intrinsic and safety ratings registered under IECEx, ATEX and DNV standards. Certified ISO/IEC 17025 (AU only).









### **Crystal XP2i Digital Logging Pressure Gauge 1 bar**

CRY,XP2I-15 (4338) AU

Range -1 to 1 bar (15 psi) pressure gauge. Accuracy, ±0.1% of reading between 20 to 100% of full scale, ±0.02% of full scale between 0 to 20% of full scale. Generation 3 gauges have 32,000 point logging capacity at intervals from 1 second to 18 hours, ULP (Ultra Low Power) setting allowing logging for 1 year and PSV/PRV (Pressure Safety/Pressure Relief Value) mode increasing measurement rate to approx. 8x per second. Logs actual pressure, average pressure, average pressure with peaks and, on demand. Intrinsic and safety ratings registered under IECEx, ATEX and DNV standards. Certified ISO/IEC 17025 (AU only).

#### Flow Meters for Liquids & Gases



### Panametrics PT900 Ultrasonic Flowmeter PAN,PT900 (6100) AU · NZ · MY · SG

A portable non-contact liquid flowmeter using transit-time principle. Includes thickness gauge and 2 sets of transducers, one 12.5mm to 50mm the second 50mm to 600mm diameters with temperatures ranges from -40 to 210°C and -40 to 150°C depending on transducers supplied and clamping fixtures. Flow velocity range 0.03 to 12.2m/s. Accuracy typically 1%. Data logging to internal memory, accessed as external drive when plugged into a PC via USB. Setup and monitoring using Android or iOS device. Rechargeable Li-ion batteries and AC power supply/charger. Certified ISO/IEC 17025 (AU only).



### Panametrics PT900 Energy Calculation Kit PAN.PT9E NZ

Used in conjunction with the PT900 flowmeter to provide supply and return temperatures for flowing liquid. By monitoring these temperatures this allows the PT900 flowmeter to measure energy rate and totalised energy. A typical application is in heating & cooling systems. Temperature range: 0° to 149°. Accuracy: ±0.12°C. Fitted with 2 x clampon Pt100 RTDs and cables. Powered from flowmeter.



### Panametrics PT900E Ultrasonic Liquid Flow Energy Meter

PAN, PT900E (E6104) AU · MY · SG

A portable non-contact liquid flowmeter using transit-time principle. Includes thickness gauge and 2 sets of transducers, one 12.5mm to 50mm the second 50mm to 600mm diameters with temperatures ranges from -40 to 210°C and -40 to 150°C depending on transducers supplied and clamping fixtures. Flow velocity range 0.03 to 12.2m/s. Accuracy typically 1%. Data logging to internal memory, accessed as external drive when plugged into a PC via USB. Setup and monitoring using Android or iOS device. Rechargeable Li-ion batteries and AC power supply/charger. Supplied with Energy measurement option to calculate energy flow rate and totalized energy using Analogue I/O. RTD temperature transmitter with range -10 to 150°C. Certified ISO/IEC 17025 (AU only).



### Panametrics PT900 High Penetration Transducers

PAN, PT-CRR05 (6101) AU

The fixture is suitable for pipe larger than 150mm up to 1m. Transducer type #591 suitable for pipes from 150mm pipe to larger sizes -40-130°C.



#### **Panametrics Large Pipe Transducer Set**

PAN, PT9-CRR-05-NT MY · SG

Transducer for PT900 flowmeter for pipe larger than 600mm diameters. Comes with PT9-CRR-05-NT pair of 0.5MHz transducers (-40 to150°C) and additional chain for pipe sizes up to 1200mm.



### Panametrics PT878GC Ultrasonic Gas Flow Meter

PAN.PT878GC-01-MY MY · SG

Portable non-contact gas flowmeter using transit-time principle. For operation with ultrasonic transducer-kits (PAN,GC-RL302 & PAN,GCRL319) - available separately. Compatible with metal or plastic pipes in the range 20 to 300mm. Suitable for use with compressed air, natural gas and other gases. Readout for flow velocity, actual or standard volumetric flow or mass-flow in numerical or graphic format. Internal logging for 100K flow data points. Infrared communications port for download to PC or printer interface. Rechargeable battery for 8h continuous operation.







### Panametrics PT878GC-01 Ultrasonic Gas Flow Meter Kit

#### PAN,PT878GC-01 KIT (6152) AU

Portable non-contact gas flowmeter using transit-time principle. Compatible with metal or plastic pipes and supplied with transducer kit in the range 20~300mm. Suitable for use with compressed air, natural gas and other gases. Readout for flow velocity, actual or standard volumetric flow or mass-flow in numerical or graphic format. Internal logging for 100K flow data points. USB communications port for download to PC.



### Polysonics Hydra SX30 Dual Frequency Doppler Liquid Flowmeter

#### POL, HYDRA-SX30-2 (6132) AU

Dual frequency doppler ultrasonic non-contact flowmeter. Velocity range 0.06 to 10m/s, accuracy ±1%. Pipe size range 12 to 5,000mm diameter. Data logging for 90,000 points, with PC software and interface cable for download via RS232C interface. Transducer temperature range -40 to 122°C. Analogue output 4 to 20mA. Battery operated.



#### Combustion, Flue & Industrial Gas Analysers

▶ See also Environmental Gas & Vapour Meters on pages 144-146.

### Novatech 1637-5 O2 and CO2 Analyser/Transmitter

NOV,1637-5 (5954) NZ · MY · SG

Oxygen and carbon dioxide analyser designed for testing the head-space in packaging atmosphere , general industrial and research use. Oxygen sensor reading 1ppm to 100% with 1% accuracy. NDIR carbon dioxide analysis 0 to 100%  $\pm 3\%$  of full scale. 2 x 4~20mA outputs, 1 common & 3 selectable alarm relays. Gas connection 1/8 Swagelok. Flow rate with internal pump 100 to 500cc/min. AC operation.



#### **Testo 300 Longlife Flue Gas Analyser**

TES,300-LL NZ

Portable industrial flue gas analyser for gas, liquid, and solid fuel burners. Provides a comprehensive analysis of the heating system. Create professional reports by pre-loading Customer information then email with data once the testing is complete. Fuel options: natural gas, butane, propane, light oil, kerosene, heavy oil, coke, wood pellets, anthracite and coke. Measures: O2, CO, CO2, and Temperature. O2: 0 to 21 vol.%. CO: 0 to 8000pm (H2 compensated). CO2: calculated from O2. Display range 0 to CO2 max. Temperature: 1000°C maximum. Display instantaneous values and trending function. Logs up to 1 million data points. 335mm probe supplied. Bluetooth data transfer to Printer (supplied).





#### **Testo 330 Flue Gas Analyser**

**TES.330-2LL NZ** 

Portable industrial flue gas analyser for gas and liquid fuel burners (not suited for solid fuels). Provides a comprehensive analysis of the heating system and logs data. 20 fuel options pre-loaded including gases, light oil, diesel etc. Measures O2, CO, Temperature and Pressure. Calculates CO2, Efficiency, Excess air. Probe 300mm insertion, maximum temperature 500°C. Display provides instantaneous values and graphic representation of tuning. EasyHeat software and Bluetooth printer supplied.











Includes O2, CO (h2 compensated), CO2 (calculated), NO & NO2 sensors. 335 mm engine probe suitable for diesel and boiler testing with temperate probe, 350 mm pitot tube, Bluetooth printer, and easy emission software.



Testo 350 Flue Gas Analyser
TES,350 (5918) AU · MY · SG

With built-in Peltier gas preparation (chiller). Measures O2, CO,NO, NO2, and SO2 concentrations. Calculates CO2 concentration.Ranges: O2 0-25% vol, CO with H2 compensation 0-10,000 ppm, NO 0-4,000ppm, NO2 0-500ppm, SO2 0-5,000 ppm. Comes 0600 7555 Engine probe with temperature up to +1,000 °C. Easy emission software, Battery and AC mains operation.



### Testo 350XL Portable Flue Gas Analyser TES,350XL NZ

Portable Flue Gas/ Combustion Analyser for emission testing and combustion analysis. Measures O2, CO, CO2, NO, NO2, and SO2 concentrations, plus draught, temperature, excess air, and gross/net efficiency values. Ranges: O2 0-25% volume; CO2 measured by NDIR 0-50% volume; CO with H2 compensation 0-10,000 ppm with measuring-range extension and selectable dilution factor; NO 0-4,000 ppm; NO2 0-500 ppm; SO2 0-5,000 ppm. Probes 335mm and 670mm insertion, maximum temperature 500°C and 1000°C respectively. Includes switch-off and rinse function for CO cell and fresh air rinse for longer term measurements. Internal memory for 250,000 readings.Software and printer provided.





### Physical Measurement

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#### Material Hardness Testers



### **GE DynaMic Rebound Hardness Tester GE,DYNAMIC (4936)** AU

Makes hardness testing quick and easy. The simple operation of this unit allows the user to position the impact devices and read the hardness value, all in a matter of seconds. Provides readings in HV, HB, HRC, HRB, HS, HL, and M/mm2. This advanced unit will compensate for changes in testing direction. The Data Logger model can internally store hardness values along with statistical information. Features: Measurements can be conducted in any direction without the need for calibration. Rebound hardness testing standardised according to ASTM A956 and DIN 50156. Ergonomic, lightweight design (0.3kg). Test attachments for curved surfaces. Applications: Solid, coarse-grained components. Machine parts made of steel and cast aluminium alloys. Large series parts during production. Heavy forgings.

#### Non-Destructive Testing

▶ See also Non-Destructive Testing on pages 159-164.



### Defelsko 6000 Ferrous & Non Ferrous Coating Thickness Tester

DEF, POS-6000 (4870) AU · NZ · MY · SG

Ferrous/Non Ferrous metal coating thickness tester with storage of up to 100,000 readings. Supplied with external probe, calibration standards and carry pouch. Measurement range 0 to 1500µm or 0 to 60 mils (selectable). Tolerance ±1µm +1% of reading 0-50µm, ±2µm +1% greater than 50µm. Resolution 0.1µm. Backglow display, HiLo limits audible & visible alerts when measurements exceed specified limits. Continually displays updates average, standard deviation, min/ max thickness and number of readings while measuring. Built in USB, Bluetooth and Wifi for downloading readings.



### 0

### PosiTector 200 B & C Ultrasonic Coating Thickness Gauge

DEF, POS-200ADV (4880) AU · MY · SG

Ultrasonic coating thickness gauge with type B & C Probes. Measures coating thickness over wood, concrete, plastics, composites etc. Will measure up to 3 individual layer thickness in a multi-layer system and features a graphic readout. Supplied with both B, 13 to 1000µm for wood, plastic and composites and C probes 50 to 3800µm for coatings on concrete, fibreglass etc. Accuracy is ±2µm +3% of reading.



#### **Physical Measurement**

### Defelsko Positest Pull Off Adhesion Tester for Concrete & Metal

#### DEF, POSITEST (4895) AU

Measures the force required to pull a specified test diameter of coating away from its substrate using hydraulic pressure. Pressure is displayed in both MPa and PSI on a precision dial indicator and can be related to the strength of adhesion to the substrate. Suitable for coatings on both metal and concrete surfaces. Conforms with standards ASTM D4541 and ISO 4624.

# NEW!

#### **Fischer FMP30 Feritscope**

#### FIS,FMP-30 (4902) AU · MY · SG

Suitable to measure ferrite content in austenitic steel and duplex steel. Supplied with Probe FGAB1.3-Fe and calibration standard set. Non-destructive measurement of the ferrite content in a range from 0.1 to 80 % Fe or 0.1 to 110 FN. Data memory up to 20,000 readings and 100 applications for measurement data and application-specific calibrations.



### Mitutoyo Pro360 Digital Protractor Model 950-317

#### MIT,PRO360 (4907) AU

Measures inclination values on an easy-to-read LCD. Measurements are generated by an electronic gravity sensor. Full 360° range (90° x 4). Alternate reference (zero), reading hold. Display remains upright to view at all angles. (950-317, Pro 360 Model). Accuracy:  $\pm 0.1^{\circ}$ Level  $\pm 10^{\circ}$ , Plumb  $\pm 10^{\circ}$ ,  $\pm 0.2^{\circ}$  Maximum error, Repeatability:  $\pm 0.1^{\circ}$  and Resolution:  $0.1^{\circ}$ .



### Olympus OmniScan MX2 Phased Array Flaw Detector

#### OLY, OMISCAN MX 2 (4901) AU · MY · SG

Second generation OmniScan MX2 with 32:128PR phased array acquisition unit, including a UT conventional channel. Included weld software option, ToFD software option and Multigroup software option. Suitable for weld inspection, composite inspection, corrosion inspection etc.



### Olympus 27mg Ultrasonic Pocket Thickness Gauge

OLY,27MG (4910) AU · NZ · MY · SG

Range  $1\sim500$ mm, fast min mode. Resolution 0.01mm. Probe operates  $-20\sim150$ °C.









### Olympus 38DL Ultrasonic Thickness Gauge OLY.38DL (4905) AU · MY · SG

Performs non-destructive measurements. Supplied with D790-SM and D7906-SM transducers suitable for steel. Capable of THRU-COAT and Echo-to-Echo measurements on painted and coated surfaces. This handheld device is commonly used to measure the remaining thickness of pipes, tubes, tanks, pressure vessels, hulls, and other structures affected by corrosion or erosion. Colour transflective VGA screen, Rugged design for IP67. Data logging capability.



### Olympus 38DL Thickness Gauge Probe OLY.38DL PROBES (4908) AU

Probes suitable for Olympus 38DL thickness gauge:

- 1 x M2008 Probe
- 1 x M202-RM Probe
- 1 x M1036 Probe
- 1 x M109-RM Probe



### Mitutoyo SJ-210 Surface Roughness Tester MIT,SJ210 (4906) AU · MY · SG

Comprises LCD display and a detachable detector/drive unit. Parameters measured in Ra, Rq, Ry, Rz, Rt, Rp, R3z, Rk, Rpk, Rvk, S, Sm, Pc, mr, Mr1, Mr2, A1, A2, Vo units. Ranges: 350, 100, 50um & 10um, resolution from 0.01~0.4um. Tip radius 5mm. Data output. NiCd batteries. Certified ISO/IEC 17025 (AU only).



### PCWI 30kVDC Porosity (Holiday) Detector PCW,DC30 (4885) AU · NZ

Detects pinholes in coatings above 150µm on metal substrates such as pipes and tanks. 0-30kV, 3.5 digit LCD display with battery indicator, display of voltage level. Alarm indicated on front panel, supplied with rechargeable battery, 10h charger, probe handle with neon and 2m length cable, 60mm connector for flat brushes, 7m earth cable with clamp, fan brush, 250mm flat brass wire brush, 450mm probe extension. Dry conditions.



### PCWI 40kV Pulse Porosity (Holiday) Detector PCW.P40-PULSE (4890) AU

Pulse porosity (Holiday) detector. Detects pinholes in coatings and wrapping above 150µm on metal substrates such as pipes and tanks. Can be used on dry or wet surfaces. 0~40kV output, 4 digit LED display of voltage, alarm sensitivity setting between dry and wet. Supplied with rechargeable battery, 10h charger, red probe handle and 2m length of rubber coated cable, 60mm connector for flat brushes, 7m earth cable with clamp, fan brush, 250mm flat brass wire brush, 450mm probe extension and 80mm probe extension.



#### **Physical Measurement**

#### **Testo Wood & Material Moisture Meter**

#### **TES.616 NZ**

Fast and non-destructive observation of the material moisture of woods and building materials. Display is in percent by weight in comparison to the dry mass of the material. Equipped with 10 characteristics curves for soft wood, hard wood, chipboard, anhydrite screed, cement screed, lime sand brick, aerated concrete, concrete, vertical hole brick and solid brick. Measurement depth up to 5cm. Handy shape for optimum contact pressure, hold, max, min function. Illuminated digital display. Advantageous for measurements on exotic woods: non-destructive determination of wood moisture



#### Force Gauges

#### **Mecmesin AFG-1000NALC Force Gauge**

#### MEC.AFG-1000NALC (4428) AU

Range 0~1000N accuracy 0.1%. 5 digit back lit display. Peak data sampling rate 5kHz. 120% overload warning, display invert (reverse) function, dual max, max tension & max compression plus current reading. Outputs: analogue, RS232 & Mitutoyo. Accessories: test hook, compression plate, 30mm extension rod, rotary coupling. Mounting tapped holes x 2, M5 x 0.8 x 5.5mm deep max. Optional smart sensors can be used, such as TW60 static torque wrench.



#### **Ametek DFS3-200 Force Gauge**

#### AME, DFS3-200 (4429) AU

Range - 0 to 1000N/0 to 100 Kgf. Accuracy 0.1% and resolution 0.01 in N and 0.001 in Kgf. Suitable for variety of application and measurements - Peak Tension and Compression, Break Tension and Compression, Load Average/Time. Comes as standard with a USB-C connection used for communication and charging with supplied cable and connection to PC with ForceTest software



#### Load Cells

#### **CAS ECB Counting Scales**

#### CAS.ECB150 NZ

Counting Scales that provide 2 functions; Weight: scales that weigh up to 150kgs, in 10g increments; and Counting: test weigh a sample quantity, load all items and the scales will provide the total number of items. Ideal for stocktaking. Differs slightly from illustration - a folding upstand makes this unit portable.







#### **EMC 2063 Weight Processor and Load Cells**

#### **EMC.2063 NZ**

Self-contained weight (or force) measuring system with selection of loadcells. Typical uses include the weighing of product (in suspended hopper), measuring the force (tensile or compressive) to cause product failure, measuring tensile force resulting from wind or traffic loading. Supplied and configured with your choice of loadcell. Instantaneous display, peak hold and totaliser. Zero and tare adjustment. 70mm LED main display (legible from 6m distance). LED sub display for secondary functions. 100Hz scanning frequency. Mains or battery powered. 0-20mA analogue output for connection to data logger (supplied separately). Housed in weather resistant enclosure (including battery and logger). Cells available; Compressive button cell: 5,000kg; S-type compressive/tensile cells with eyebolts: 100kg, 1,000kg, 5,000kg & 10,000kg.



#### Futek IHH500 Pancake Load Cell 20T Capacity

#### FUT,IHH500-20T (4418) AU

The Futek IHH500 Display & LCF500-FSH02968 loadcell operate at up to 20 tonnes (50,000lb) in compression and tension. The IHH500 hand-held display is a logging microcontroller which can store up to 21000 points, it is powered by a rechargeable battery which can last for up to 30 hours depending on battery condition and load. Will operate from its mains charger if needed. Has a simple Tare function and can display Max Hold using a single front panel key. The lead that connects the loadcell to the display is 1.m long. The load is connected via M33x2-Threads. There are two eye bolts supplied with the system, however the eye bolt capacity is 7 ton. The software is supplied on a USB flash drive/dongle.

# GREAT DEALS ON EX-RENTAL PRODUCTS!

Don't miss out on the vast range of popular rental products now available for purchase.

We are constantly updating our range of test & measurement equipment, which allows us to heavily discount the prices of our ex-rental sales gear with savings up to 80% off the purchased price.



#### Vibration Analysis

▶ See also Sound, Noise & Vibration Monitoring on pages 136-138.

### **Bently Nevada TK3-2E Proximity Probe Test System**

#### BEN,TK3-2E (5085) AU · MY · SG

Simulates shaft vibration and position for calibrating proximity probes. Uses a removable spindle micrometer assembly to check the transducer system and position monitor calibration. Features a universal probe mount that accommodates probe diameters. (5 mm to 19 mm).



### GCDC High Impact USB Accelerometer Data Logger X500-2

#### GCD,X500-2 (5055) AU

USB impact accelerometer provides 3 axis 512Hz sampling. Built in 2G micro SD card. 500g sensors.



### Madgetech 5g Transient Shock Transport Logger

#### MAD, TSR101-EB-5 (5000) AU

Includes a 5g triaxial Accelerometer. The extended battery option gives a 30 day battery life. It also includes the magnetic mount kit. Records detail of all shocks above a user selectable threshold from 1 Hz to 1024 Hz. Has a total of 340k measurements per axis. Resolution .01g accuracy 0.2g.



#### **Rion VA-12 Vibration Analyser**

#### RIO, VA-12 (5040) AU · NZ · MY · SG

Includes magnetic pickup type. Stores measurements. Measures acceleration, velocity and displacement. Displays in either time or frequency domain. Display rms, peak and crest factor. Uses FFT to display power and vibration spectrum. Stores memory to SD.









### Spektra CV-10 Portable Vibration Calibrator SPE.CV-10 (5081) AU

Complete with proximity probe adaptor and sweep frequency option. Suitable for accelerometers, velocity transducers and proximity probes. It can provide 5Hz to 10kHz vibrations. Maximum amplitude 20g (no load). Maximum payload 900gram.



### TMS Portable Vibration Calibrator including Wobulator Option

TMS,9110D-WOB (5080) AU · MY · SG

A compact and completely self-contained unit, suitable for electromechanical testing over a wide range of frequencies and amplitudes. This vibration reference source from TMS operates with digital closed loop control, for enhanced stability and accuracy. Applications Include: Field validation of vibration sensors, proximity probes and vibration monitoring equipment. Accelerometer checking. Velocity transducer testing. Calibrating data collectors and vibration switches. Features: Wide frequency range 7Hz to 10kHz (420 to 600,000 CPM). Internal memory (500 records). USB flash drive output. Customisable calibration certificates compliant with ISO 17025 (AU only). Accelerometer calibration as per ISO 16063-21.

#### Speed Measurement



### Stalker PRO II Radar Speed Gun Kit Including Large Display

STA, PROII-KIT (5722) AU

Includes a radar gun, tripod & large 3.5 digit display with 20cm high digits. Includes 4 modes of operation; Carnival, Baseball, Tennis, and Vehicle modes. Operates at up to 1290 kph.





# Construction

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#### Air Conditioning & Air Flow



### Alnor EBT731 Balometer Electronic Balancing Tool

#### ALN.EBT-731 MY · SG

Features a detachable multi-purpose digital manometer that can be used with the following test and balance tools, such as pitot, static pressure probe or a 16-point velocity matrix. Volume Range: 25 to 2,500 ft cube/min (42 to 4250 m cube/h) with capture hood. Velocity Range: 25 to 2,500 ft/min (0.125 to 12.5 m/s) with velocity matrix. Unit comes with 2ft x 2ft,2ft x 4ft and 1ft x 4ft hoods.



#### **DPM TT550C Digital Micromanometer**

#### DPM,TT550C NZ

High Resolution micromanometer & accessories to measure differential air pressure and air velocity/flow. Differential pressure: 0.06 to 5000Pa in 3 ranges, plus mmH2O, inH2O and mBar. Applications include clean rooms, paint booths and warehouses. Accessories (incl. for high velocity & high temperature); Ellipsoidal pitot extendable to 1.2m, velocity 2 to 90m/s, for temperatures > 200°C; Straight dpm-i<sup>TM</sup> pitot, 0.27 to 30m/s, 300mm long, ideal for hard to access situations. Ane<sup>TM</sup> 100mm, 0.27 to 25 m/s, vaneless anemometer. Three pitot factors & four duct dimensions stored to simplify flow measurement. Programmable autozero frequency. Logs up to 2500 points. Software for downloading to PC. Battery powered.



#### **Druck DPI705 Pressure Gauge 7 Bar ABS**

#### DRU, DPI705-7BARA (5816) MY · SG

Handheld digital pressure gauge range 0~7bar absolute, with remote sensor, accuracy 0.1%. Displays all common engineering units.



#### Testo 417 100mm Vane Anemometer

#### TES,417 (5839) AU

Vane anemometer 100mm head. Display velocity and temperature. Has averaging function to measure ducts. 0.3~20m/sec ±(0.1m/s + 1.5% mv) Temperature 0~50°C ±(0.5°C). 50Hr battery life.



#### **Testo 420 Air Balancing Flow Hood System**

#### TES,420 (5825) AU · MY · SG

Includes 610x610, 360x360, 305x1220, 610 x 1220 hoods and stand and 500mm pitot tube. Measures 40~4000m 3 /hr ±3%, Temperature 0~70°C ±0.5°C -20~0°C ±0.8°C, 0~100%RH ±1.8%+3%Rdg, Differential Pressure -120~120Pa ±2%Rdg+.05Pa. Kit includes a stand and an Android or iPhone app can be downloaded for one man remote operation. Kit includes 500mm pitot tube.



#### Testo 420 Accubalance Balometer

## TES,420 NZ TES,420TRIPOD NZ TES,HD610X1220 NZ

Air balancing hood, 610x610mm, including removable differential pressure measuring instrument. Measures air volume flowing through registers, diffusers and grilles. Weighs only 2.9kgs. Range: 40~4000m³/hr. Differential Pressure: -120 to +120 Pa. Relative Humidity: 0 to 100%. Temperature: -20°C to 70°C. 2GB internal storage, approx. 18,000 measurements. Operating temperature: -5°C to 50°C. Bluetooth connectivity to your smartphone, android or iPhone. Optional Extras: Tripod (on wheels) available. 610 x 1200 hood.



#### **Testo 420 Differential Pressure Instrument**

#### TES,420DP (5814) AU

Used for volume flow measurements, pitot tube measurements and pressure measurements for air conditioning and ventilation systems. Measuring ranges: Flow velocity: 0 to 14m/s, Pressure (absolute pressure): 70 to 110 kPa, Pressure (differential pressure): -120 to +120 Pa. Resolution: Flow velocity: 0.01 m/s, Volume flow: 1 m3/h. Pressure (absolute pressure): 0.1 hPa/0.1 mbar/0.01 kPa, Pressure (differential pressure): 0.00001 hPa/0.00001 mbar/0.0001mm H2O/0.00001 in H2O. Storage temperature: -20 to +60°C, operating temperature: -5 to +50°C.







#### Testo 400 Logger with Temperature/Humidity/ Absolute Pressure Hot Wire Probe

#### TES,400-HW (5840) AU

Includes a Bluetooth extendable probe 0635-1571 measures Temperature -20~70°C, Humidity 5~95%, Abs Pressure 700~1100Hpa & Hot Wire air velocity 0~50m/sec. Extension 57cm~100cm. The instrument itself has Differential Pressure -100~200Pa and Absolute Pressure -700~1100HPa. Extensive communications capability including email, bluetooth, PC management software and even teamviewer for remote control.



### TSI VelociCalc 100mm Vane Anemometer with Volume Display

#### TSI.8324 MY · SG

With 100mm head, supplied with handle and 900mm articulated telescopic extension. Velocity measurement range 0.25 to 30m/s ±1%; temperature measurement range 0 to 80°C ±0.5°C. Volume display range 0 to 4.36 x 106m3/h with input for circular or rectangular duct dimensions. Variable time-constant; sample statistics average, max and min; and "sweep" mode for extended continuous sampling. Internal memory for single point measurements or time-based data logging, for up to 2849 samples and 1,000 test IDs, with serial interface, cable and software for data download. Direct data acquisition [polling] from PC terminal modes. Battery powered with auto-power-off, and optional AC adaptor.



#### TSI VelociCalc 100mm Anemometer

#### TSI,5725 (5838) AU · NZ

Handheld 100mmm reversible vane anemometer and temperature probe. Logs 12700 samples Displays velocity and temperature. Calculates volumetric flow rate when user inputs duct shape and size or area. Anemometer accuracy 1.0% of reading  $\pm 0.02$ m/sec. Temperature Accuracy  $\pm 1.0$ °C. Certified ISO 17025 (AU only, NZ Traceable Calibration Certificate).



### TSI 8710 DP-CALC Differential Micro-Manometer

#### TSI,8710 (5813) AU

Micro-manometer for static or differential pressure, velocity, volumetric flow, atmospheric pressure and temperature. With statistical analysis, density correction, K factor and automatic actual/standard flow calculation. Differential pressure range ±3735Pa. Velocity display to 41m/s (range depends on probe). Supplied with static tip, pitot tube, velocity matrix and temperature probe. Datalogging (1,000 point) with RS232C interface and software. Rechargeable cells or AC adaptor.



#### **TSI 9545A Hot Wire Anemometer**

#### **TSI.9545A NZ**

Hot wire anemometer with digital display. Measures air velocity, temperature and humidity; and calculates flow, dew point and wet bulb temperature. Velocity measurement: 0 to 30 m/s, temperature range: -10° to 60°C, Relative humidity range: 0 to 95%. Probe: 1016mm when fully extended, Ø7mm at tip and Ø13mm at base, the last 197mm is articulated. Data captures 12,700+ samples and has automatic logging. LogDat2 downloading software included.



### TSI 9565A VelociCalc Air Conditioning Efficiency Meter

#### TSI,9565A (5849) AU · MY · SG

Efficiency measurement system for HVAC and related work, with hot wire anemometer, static and differential pressure, temperature and humidity measurement with heat flow efficiency calculation. Velocity (hot wire) 0 to 50m/s, accuracy ±3%. Temperature -10 to 60°C, accuracy ±0.3. Wet bulb temperature 5 to 60°C. Relative humidity 0~95%RH, accuracy ±3%. Dewpoint -15 to 49°C. Static/differential pressure -3,735 to 3,735Pa, accuracy ±1%. Battery operated. USB & Bluetooth download.



#### **TSI TA465A Multi-Function Ventilation Meter**

#### TSI.TA465A MY · SG

Portable, hand held, Multi-Function Ventilation Test Instruments. It comes with differential pressure. It also comes with the 966 articulate probe which measures air velocity, temperature and humidity. Calculations include air flow, heat flow, turbulence, wet bulb and dew point temperature. Velocity Measurement Range: 0 to 9,999 ft/ min (0 to 50 m/s) Accuracy: ±3% of reading or ±3 ft/min (±0.015 m/s) Resolution: 1 ft/min (0.01 m/s) Temperature Measurement Range: 14 to 140°F (-10 to 60°C) Accuracy: ±0.5°F (±0.3°C) Resolution: 0.1°F (0.1°C) Humidity Measurement Range: 0 to 95% RH Accuracy: ±3% RH Resolution: 0.1% RH





#### Air Conditioner Valve Balancing

▶ See also Data Loggers: Testo Temperature & Humidity Loggers on pages 93-94.



#### T&A Scope Balancing Meter 1000kpa

#### TA,SCOPE (5801) AU

Digital flow balancing instrument with color display. For cooling water valve balancing in air conditioning plants and similar applications. Allows for balancing of all hydronic valve types. Differential pressure range -0.5 to 20.5m water gauge at a total pressure of less than 200m. Resolution 0.001m. Flow resolution 0.001l/s. Battery operated.



#### **TA-Scope Balancing Instrument**

#### TA,SCOPE NZ

Digital balancing instrument to measure and document differential pressure, flow, temperature and power in hydronic (cooling water) systems. Ideal for balancing new systems, trouble shooting existing systems and analysing ongoing system performance. Temperature Range: -20° to 120°C, accuracy <0.2°C. Total Pressure: max 2500 kPa. Differential Pressure: 0-200 kPa, accuracy 0.1 kPa or 1%, whichever is the greatest. TA Select PC software supplied.



#### Concrete Testing Equipment

▶ See also Endoscopes, Borescopes & Visual Inspection on pages 75-76 and 164.

### Elcometer 331-SH Cover Meter with Half Cell Measurement

#### ELC,331-SH (4919) AU

Displays the depth and orientation of the reo bars. Standard search head. 40mm diameter bar depth 15 to 95mm. 8mm diameter bard depth 8 to 70mm. Rechargeable battery allows 32h of continuous operation (20h with backlight). Autosizing of bars or orthogonal measuring of bar sizes. Internal storage of readings of depth of cover in batches which can be downloaded to PC with supplied software. XP and Vista supported.



#### Hilti PS1000 X-scan Concrete Scanner

#### HIL,PS1000 (4924) AU

Concrete Scanner supplied with PLC 600 layout tablet. Locate rebars, tendons, metal and plastic conduits, glass-fibre cables, voids, and wood in dry concrete structures at depths of up to 300 mm(450mm with expert mode). PLC 600 layout tablet suitable for 3d view and analysis on site.



### Proceq GPR-Live PRO Concrete Ground Penetrating Radar

#### PRO,GPR-LIVE-PRO (4922) AU · MY · SG

Portable ground penetrating radar (GPR) for concrete testing. Conducts wide frequency spectrum measurement with Line and Area scan modes. Features a compact, wireless probe with standard rechargeable AA batteries. Software supplied with iPad for easy analysis of data on-site. Addtional capabilities like Pro time-slice view, 3D view, Data sharing and reporting, augmented reality and secure cloud features are available.





### Proceq GPR-Live Concrete Ground Penetrating Radar

#### PRO,GPR-LIVE(4923) AU

Portable ground penetrating radar (GPR) for concrete testing. Conducts wide frequency spectrum measurement with Line and Area scan modes. Features a compact, wireless probe with standard rechargeable AA batteries. Proceq GPR Live Basic app supplied with iPad for easy analysis of data on-site.









#### **Proceq Resistivity Meter**

#### PRO, RESIPOD (4925) AU

Can determine the likelihood of corrosion and the corrosion rate in concrete. 0 to  $1,000k\Omega$  measurement range. USB interface, USB charging. Waterproof.



#### Proceq Profoscope Rebar Locator & Cover Meter

#### PRO, PROFOSCOPE (4926) AU · NZ

Rebar locator and covermeter. Short range measurements to 95mm.  $\pm 3$ mm accuracy. Long range 185mm accuracy  $\pm 4$ mm. The unit will determine the position of the rebars, the mid point between rebars, Concrete cover, estimation of bar diameter & the orientation of the rebar. Powered by 2 x AA batteries. Battery life 15h with backlight 55h without.



### Proceq PL-200PE Ultrasonic Concrete Test System

#### PRO,PL-200PE (4927) AU

Can determine depth of perpendicular cracks, slab thickness from a single side and it can also locate and measure voids, pipes, cracks parallel to the surface. It will estimate the "internal" compressive strength of the concrete.



### Proceq SilverSchmidt UN Concrete Test Hammer

#### PRO, SIL-UN (4928) AU

Requires no corrections for angle of test, simple one button operation, datalogging capability with USB download with detailed reporting capability. Impact Energy 2.207Nm. Compressive strength range 10~170MPa. Battery Life >1000 Impacts before recharging is required.



#### **Defelsko Positest Concrete Moisture Meter**

#### DEF,POS-CMM (4950) AU · MY · SG

Concrete moisture meter using the electrical impendance to measure concrete moisture. Designed to do area scans the kit includes a telescopic extender. Measure 0~6% moisture content of concrete, 0~4% carbide method equivalent or 0~100% RH. Accuracy ±0.5% moisture content of concrete.



#### Protimeter Moisture Measurement System

#### PRO, MMS-PLUS (4955) AU

Moisture meter for detection of moisture in non conductive solid materials such as wood and masonry. Two measurement modes, search for qualitative measurements and measure mode for precise and localised moisture content. Supplied with pin type probes, deep wall probes, hygrometer probe and extension cord for RH, ambient temperature or dew point temperature. Hygrostick probe supplied for surface temperature measurement. Logging software and RS232 computer interface supplied.



#### **Protimeter Moisture Measurement System**

#### PRO,MMS2 (4956) AU

Moisture meter for detection of moisture in non conductive solid materials such as wood and masonry. Two measurement modes, search for qualitative measurements and measure mode for precise and localised moisture content. Supplied with pin type probes, deep wall probes, hygrometer probe and extension cord,for RH, ambient temperature or dew point temperature. Hygrostick probe supplied for surface temperature measurement. Also includes IR measurement capability. Logging software and USB interfacecomputer interface supplied.



#### **Testo Wood & Material Moisture Meter**

#### **TES,616 NZ**

Fast and non-destructive observation of the material moisture of woods and building materials. Display is in percent by weight in comparison to the dry mass of the material. Equipped with 10 characteristics curves for soft wood, hard wood, chipboard, anhydrite screed, cement screed, lime sand brick, aerated concrete, concrete, vertical hole brick and solid brick. Measurement depth up to 5cm. Handy shape for optimum contact pressure, hold, max, min function. Illuminated digital display. Advantageous for measurements on exotic woods: non-destructive determination of wood moisture





#### Underground Services Location

▶ See also Endoscopes, Borescopes & Visual Inspection on pages 75-76 and 164.



### C.Scope DXL4 and SGV4 Cable and Pipe Locator

#### CSC,DXL4-SGV4 (3719) AU · MY · SG

Cable and pipe avoidance and location tool with depth measurement. Simultaneous dual 33+131kHz frequency will assist in the detection of smaller buried pipes and cables such as telecoms, cast iron and street lighting spurs. 4 available power levels up to 1 watt and depth detection approximately 3 meters (depending on soil type and operating mode). Four detection modes; Power, Radio, Generator and Allscan. Features a Dynamic Swing Sensor to aid in cable and pipe location.



#### **C.Scope MXL4-MXT4 Cable and Pipe Locator**

#### CSC.MXL4-MXT4 NZ

Traces path of energised cables, conductive pipe or cable and in "radio mode" searches for re-radiated signals, common in underground services. Four detection modes; Power, Radio, Generator and Allscan. Features a Dynamic Swing Sensor to aid in cable and pipe location. Simultaneous dual 33+131kHz frequency will assist in the detection of smaller buried pipes and cables such as telecoms, cast iron and street lighting spurs. Lower frequencies aid location of correct cable in areas where cables are co-located. Multi-frequency generator with 6 signal outputs: 512Hz, 640Hz, 8kHz, 33kHz, 131kHz, simultaneous 33+131kHz. Transmitter: operates with direct connection, tongs or induction. Can determine depth of cable: up to 2m in radio mode, other modes up to 3m. Radio detection mode: 33kHz sondes. Alarm indicates shallow cables (under 300mm). Direct connection current feature aids in locating correct pipe. Automatic daily self-test to confirm working condition.



#### **Dynatel 2273 Buried Cable and Fault Locator**

#### **DYN.2273 NZ**

Used to find cables to 2.5 metres deep underground or in walls. Traces path of energised cables and conductive pipe or cable using multifrequency tone generator. Can also be used to find breaks in cables and "short to earth" problems using an A-frame accessory.



### **Extensive Fleet of Test Equipment**

TechRentals has a diverse fleet of test equipment spanning many categories including General Industrial equipment. This category includes instruments such as:

- **Industrial Process Calibrators**
- Infrared Thermal Imaging Cameras
- Wet and Dry Block Calibrators
- Laser Rotational Shaft Alignment



#### Utility Leak Detection



#### Flir Si124 Partial Discharge & Air Leak Detector

#### FLI.Si124 NZ

2kHz to 65kHz adjustable frequency ultrasonic imager. Performs 2 separate/distinct functions. Firstly locates pressurised leaks in compressed air systems. It filters out industrial background noise to produce precise acoustic images for locating leaks. Instantly view the leak rate (I/min or CFM) and estimate yearly energy cost. Secondly displays partial discharge problems in high-voltage electrical systems. It can classify partial discharge types in day or night, allowing quick replacement of defective components. Automatic detection: 50/60 Hz. Classifies Positive and negative corona, Floating discharge, Surface or internal discharge. Automatic Al-based severity assessment including recommended actions.



#### Fluke ii900 Ultrasonic Industrial Imager

#### FLU, II900 (3805) AU · MY · SG

Displays the location and magnitude of compressed air leaks. Operates from 2kHz~52kHz will detect leaks of .0025L/sec at 7bar from 10m. Sunlight readable display. Frequency band selection. 6hrs of battery life. Recharge time 3hrs.



#### Fluke ii910 Precision Acoustic Imager

#### FLU, 11910 (3805) AU · MY · SG

Suitable to locate partial discharge, corona discharge as well as gas and vacuum leaks. Frequency range 2kHz to 100kHz and detection range 0.5 to >120m. Internal memory with the capacity for 999 picture files and 20 video files. 6hrs of battery life. Recharge time 3hrs. Updated with new MecQ™ modes.



#### **Trotec LD6000 Leak Detection Set**

#### TRO.LD6000 NZ

Portable acoustic detection system for locating leaks in underground pipes, supplied with both a wind protected microphone and high attenuating earphones. Ideal for plumbers and drainlayers for locating leaks in underground pipes. High-resolution colour graphic touchscreen display. Numerous pre-programmed common applications for quick access. Long-term measuring with logging function, data extracted through software via USB. Battery powered 4x type LR14 C 1.5V (up to 14h non-stop & 40h normal operations). IP54 protection.



### **UE Systems UP3000 Digital Ultrasonic Leak Detector**

#### UES,UP3000 (3810) AU · NZ

Ultrasonic inspection system. Displays dB levels. Readings can be stored and downloaded. A tone generator is supplied together with a stethoscope probe and a rubber focusing probe. Interface software to download readings is also supplied.



#### UE System UP9000 Digital Ultrasonic Leak Detector

#### UES, UP9000) MY · SG

A complete digital ultrasonic inspection and information storage/ retrieval system. With the acoustic isolating headphones and frequency tuning, background noises such as machinery and plant are filtered out making it easier to pinpoint any leaks. The range of quickly interchangeable modules as well as the balanced pistolgrip design make the Ultraprobe 9000 useable in a wide variety of situations and perfect for many different tasks.



# 3D Reality Capture Solution

Take a 3D snapshot of your site with the Leica BLK360, Leica RTC360 or Trimble X7 laser scanners from TechRentals.



#### Pipeline & Cavity Inspection



#### **GE Everest PTZ-140 Camera Head**

#### GE.EVEREST PTZ-140 (5129) AU

140mm diameter colour camera module (fits through a 140mm opening) and features a 360°pan, 234° tilt, 36x optical and 12x digital zoom, high-intensity lighting and waterproof packaging to 45m or 4.5 bar (65 psi). Requires the GE,EVEREST CA-ZOOM to operate.



#### **GE Everest PTZ-70 Camera Head**

#### GE, EVEREST PTZ-70 (5130) AU

70mm in diameter (fits through a 76mm opening) and features 10x optical zoom and 4x digital zoom for a total of 40x zoom. Eight 5-watt LED lights with variable intensity control, 360°continuous pan direction and 270°tilt capability. Waterproof to 45m or 4.5 bar (65 psi). Requires the GE,EVEREST CA-ZOOM to operate.



## 0

#### **GE Everest Ca-Zoom**

#### GE, EVEREST CA-ZOOM (5131) AU

Ca-Zoom and hand-held controller is a portable, case-mounted, camera controller with real-time, multitasking software operating system which supports file storage on 64MB of internal flash memory and CompactFlash removable storage media. Provides for integrated image capture and full motion video recording capabilities, onboard file manager and annotation. Includes connectors for camera, handheld controller, video input/output, USB streaming, and keyboard for text generation. Supplied with 30m camera head cable and extension pole 1.8 to 3.6m. Camera heads must be chosen separately, see model GE,EVEREST PT-70 and GE,EVEREST PTZ-140.



#### Wohler L200 Locator

#### WOH,L200 NZ

A lightweight receiver for graphically and audibly locating the head of the Wohler VIS350 inspection camera whether underground, in walls, under floors or in a roof space. Attached to a telescopic handle and moved across the surface to pinpoint the camera beneath. Detects 8.9kHz. Bright LED display. Battery powered with charger. Supplied with headphones.



#### Wohler VIS350 Pan & Tilt Inspection Camera

#### WOH.VIS350 NZ

Self-contained portable 30m flexible push-rod inspection camera system for the internal inspection of pipes, ducts, chimneys, drains, voids, inside/behind walls etc. Includes video display, distance marking, video recording, WLAN interface option to view in smartphone and a choice of two-colour cameras. Camera 1: Ø40mm 130° field of view. Operated remotely from the control unit, ill pan 180° and rotate 360°. IP67 rated. Camera 2: Ø25mm views straight ahead and will not tilt or pan, but at 25mm will access more confined spaces. IP68 rated. 145° Image acquisition angle diagonal. LEDs for illumination in dark environments. Inclination and rotation indication. Battery or AC powered.





### Wohler VIS 500 Service Camera Visual Inspection System

#### WOH, VIS500 (5142) AU · NZ · MY · SG

30m compact colour video inspection system with 26mm forward facing camera head waterproof according to IP68 and a 40mm pan tilt colour camera, waterproof according to IP67 with a viewing angle of 130°. TFT display with Lithium Ion Battery life up to 6 hours. Supplied with L200 locator (except NZ). Applications include damage analysis in water/drainage/sewer pipes, inspection of hollow spaces, ventilation, machines, control panels, exhaust systems and production surveillance.



#### Laser Levels

#### Leica Disto D8 Digital Laser Tape Measure

#### LEI.DISTOD8 NZ

A laser distance measuring instrument. 6.1cm colour display and 4x zoom function allows quick and easy targeting. Measures up to 200m with supplied target plate, 100m without plate. Clearly visible laser dot for indoor/outdoor use. Typical measurement accuracy ±1mm. 360° inclinometer to measure angles. Advanced trigonometrical functions. Tripod available on request.





Manage Costs.
Stay Ahead.
Rent.



#### The 6 Benefits of TechRentals

- 1 Maximise Your Budget
  Renting test equipment lets you pay only when you need it, freeing up cash flow and providing access to more resources without the upfront cost of buying.
- 2 Operate with Flexibility

  Avoid locking up capital in equipment that might go unused. Renting gives you the flexibility to quickly adapt to changing market demands.
- 3 Eliminate Hidden Costs
  Skip maintenance, calibration, and storage expenses. TechRentals ensures minimal downtime with rapid equipment support.
- 4 Stay Up to Date

  Access the latest technology without the risk of owning outdated equipment, keeping your business competitive and agile.
- Make Sustainable Choices
  Renting extends equipment life across multiple users, reducing your carbon footprint while maintaining quality.
- 6 Simplify with One Provider
  TechRentals offers Test and Measurement,
  Communication, Safety, Calibration,
  and Sales solutions—all from one
  trusted provider.



Smart Solutions, Excellent Results.



# Survey & Spatial

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#### Robotic Total Stations

All robotic kits include prism, tablet controller and rangepole. Complimentary tripods and bipods on request.



### Topcon LN-150 Robotic Total Station with Controller

#### TOP,LN150 (5441) AU

Not a conventional total station. It is a simpler one-man instrument designed for trades working with survey CAD data, reducing stringlines and improving precision onsite. Includes 360° prism, pole and FC controller with Magnet Field. Self-levelling simplifies instrument setup. Orientate instrument using known points from CAD files. Maximum range of 130m, ±3mm accuracy. No reflectorless or telescope optic.



#### **Trimble S5 Isec Robotic TS with Controller**

#### TRI,S5\_1SEC\_TSC7 (5444) AU

A workhorse for general surveying tasks. The included MultiTrack active prism ensures the instrument can only find and track your prism, avoiding false reflectors and reducing downtime. Includes 360° prism, pole and TSC controller with Trimble Access. DR Plus EDM allows measurement of surfaces without a prism. Tracklight allows user to reacquire prism tracking at a distance.



#### **Trimble S9 Isec Monitoring Robotic Total Station**

#### TRI,S9\_1SEC (5447) AU

Designed for monitoring, tunnelling, rail and other specialised applications. I" second robotic with VISION, DR HP EDM and FineLock. DR HP EDM offers increased prism measurement accuracy. FineLock sensor can better detect separate prisms that are close together.



### Leica TS16 Isec Robotic Total Station with Controller

#### LEI,TS16\_1SEC\_CS20 (5438) AU

Sets the benchmark for robotic total stations. Offers consistent performance for general purpose land surveying and stakeout tasks, as well as more specialised infrastructure work. Includes 360° prism, pole and CS20 controller with Leica Captivate. PowerSearch and ATRPlus technology enables fast prism acquisition at the press of a button. R500 Reflectorless allows measurement of surfaces without a prism. GeoCOM option for BYO 12d Field users.



#### Laser Scanners

All laser scanner kits include carbon fibre tripod & tablet controller. Complimentary heavy wood tripods on request.

#### Leica BLK360 G2 Laser Scanner

#### LEI,BLK360 G2 (1037) AU

Smaller, lighter and up to 5 times faster than the BLK360 GI, the G2 can capture a medium point cloud scan with HDR images in under 60 seconds. Now with improved USB-C data transfer support and VIS tracking between setups. Requires Cyclone BLK software to process and export scan data.



#### Leica BLK360 Laser Scanner

#### LEI.BLK360 (1040) AU

A small and light entry-level laser scanner for scanning manmade structures and confined spaces. Captures a 360° image and point cloud with 6-8mm precision in minutes. The G1 is also compatible with BYO Matterport software for outdoor scanning and improved 3D model capture. Requires Cyclone BLK software to process and export scan data.



#### **Trimble X7 Laser Scanner**

#### TRI,X7 (1036) AU

In between the BLK360 and RTC360, the Trimble X7 offers a simpler interface and workflow. Unique features include self-levelling and selfcalibration with each scan. Trimble Perspective software allows the user to align and export point clouds with scan locations using only the included field tablet.



#### Leica RTC360 Laser Scanner

#### LEI,RTC360 (1038) AU

One of the fastest and most automated laser scanners on the market, the RTC360 can capture a cleaner, denser and more detailed point cloud with HDR images in under 2 minutes. The VIS system tracks movement between scans for improved auto scan alignment. Requires Cyclone REGISTER software to process and export scan data.



#### **Lenovo Laptop with Cyclone Register**

#### LEI, COMPUTER (1042) AU

Hire workstation laptop for those without access to a powerful PC or those looking to process Leica laser scanner data onsite. i9 CPU, 8GB VRAM, 64GB RAM, 1TB SSD.





#### **GPS Network Rovers**

#### For use inside CORS-Telstra Areas

These kits include CORS-Telstra access, tablet controller & rangepole. Complimentary bipods on request.



#### Leica GS16 Network Rover with Controller

#### LEI,GS16-NET (5327) AU

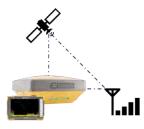
A compact GNSS antenna with Leica RTKplus signal processing, which adapts to changing GNSS conditions by selecting optimal signals and rejecting reflected or noisy signals. Includes pole and CS controller with Leica Captivate. Requires network coverage.



#### Leica GS18 Network Rover with Controller

#### LEI,GS18 ROVER-NET (5326) AU

A compact GNSS antenna with Leica RTKplus signal processing, which adapts to changing GNSS conditions by selecting optimal signals and rejecting reflected or noisy signals. Includes pole and controller with Leica Captivate. Requires network coverage.



### **Topcon HiPerSR Network Rover** with Controller, Pocket 3D

#### TOP, HIPERSR P3-NET (5331) AU

Our simplest and lowest cost GNSS network rover (GPS+Glonass), the Topcon HiperSR is a lightweight choice for a broad range of mapping, construction and engineering tasks. Includes pole andtablet controller with Magnet Field and Pocket 3D. Requires networkcoverage to operate.



#### **Trimble R12 Network Rover with Controller**

#### TRI,R12 ROVER-NET (5333) AU

Complete with ProPoint signal processing enables industry-leading GNSS performance in sky-obstructed and tree-covered environments. Includes pole and TSC controller with Trimble Access. Requires network coverage.



#### GPS Bases & Rovers

#### For use outside CORS-Telstra Areas

Base-only or Rover-only kits available. Base kits includes long-life battery and tribrach. Rover kits includes tablet controller and rangepole. UHF radio licences available for short-term rents. Complimentary bipods on request.

#### Leica GS18 UHF Base Kit

#### LEI,GS18 BASE-UHF (5340) AU

A compact GNSS antenna with Leica RTKplus signal processing, which adapts to changing GNSS conditions by selecting optimal signals and rejecting reflected or noisy signals. Includes tribrach, adapter, base pole extension, base battery. Configure Base using WebUI or controller (not included in base kit). Tripod available on request at booking.



#### Trimble R12 LT UHF Base Kit

#### TRI,R12 BASE-UHF (5342) AU

Complete with ProPoint signal processing enables industry-leading GNSS performance in sky-obstructed and tree-covered environments. Includes tribrach, adapter, base pole extension, base battery. Configure Base using WebUI or controller (not included in base kit). Tripod available on request at booking.



#### Trimble R12 LT UHF Rover with Controller

#### TRI,R12 ROVER-UHF (5344) AU

Complete with ProPoint signal processing enables industryleading GNSS performance in sky-obstructed and treecovered environments. Includes pole and TSC controller with Trimble Access. Requires nearby GNSS Base with UHF radio.



#### **Trimble TDL 450H UHF Repeater**

#### TRI, REPEATER-UHF (5346) AU

TDL450H is a separate UHF radio and 12V battery. Useful for extending the working radio range of GNSS bases sending RTK data to UHF-equipped rovers. Option of 5W temporary ACMA licence (subject to approval) or BYO ACMA licence for up to 35W EIRP transmit power.





#### Traverse Kits

High precision prisms, holders and tribrachs. These kits allow you to achieve the best possible accuracy with your total station. Swap target and robotic for easy reverse measurements. Leica kit includes 2 sets. Trimble kit includes 1 set.



#### **Leica Traverse Kit with 2 Targets**

#### LEI,TRAVERSE (1166) AU

Can be used with the Leica Robotic Total Stations for use as a backsight or for precise traversing. Features: Matches the height of the Leica Instruments. Easy backsights or false centre traversing. Contains 2 x Targets, laser plummets in a single carry case. Provided with 1 or 2 Heavy Duty Tripods if needed.



#### **Trimble Traverse Kit**

#### TRI.TRAVERSE (1168) AU

Can be used with the S7 Robotic Total Station for use as a backsight or for precise traversing and surveying tasks. Features:

- · Matches the height of the S-Series Robotics.
- · Easy backsights or false centre traversing.
- Provided with a Heavy Duty Tripod if needed.

#### Bipods and Tripods

Need an extra set of legs? All of our kits are available with a manufacturer tripod or rangepole rod. Additional bipods, tripods & staffs are complimentary with any corresponding survey equipment rental – simply let our team know when you book.







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#### Airborne Dust & Particle Meters



#### Aerqual Dust Sentry Profiler Outdoor Dust Monitor

#### AER, DUST-PROFILER (5851) AU

Type K, two channel thermometer with 2 probes supplied. Will monitor data and store the information in the cloud. This instrument will log PM1 200ug/m³ range, PM2.5 2000up/m³ range, PM10 5000up/m³ range 5000ug/m³ & TSP range 5000ug/m³. Acc uracy +/-5ug/m³ + 15% of reading. Lowest detection limit <1ug/m³.



# Aeroqual Dust Sentry Outdoor Dust Monitor AER, DUST-SENTRY NZ AER. DUST-WEATHER NZ

Robust weather-proof (lockable) dust monitor. Records the data and stores the information in the cloud, enabling real-time access. Equipped with a PM10 filter (other filters can be supplied if required). Range 0~60mg/m³ accuracy ±2ug/m³ + 5% of reading. Lowest detection limit <1ug/Set email/SMS alerts on parameters to easily identify exceedances. Requires AC power. Ideally suited for perimeter/fenceline monitoring for a variety of applications e.g. construction,deconstruction, waste management, landfill, roadsides, base level monitoring to meet consent conditions etc. Weather station availale as an optional extra.



### TSI 8530 DustrTrak II Desktop Aerosol Monitor TSI,8530 (5873) NZ • MY • SG

Portable dust and particle monitor, light scatter photometer. Measures concentrations of a single dust fraction corresponding to either PM1, PM2.5 or PM10. Aerosol concentrations .001~150mg/M³. Used for industrial/occupational hygiene surveys, indoor air quality monitoring, outdoor environmental monitoring, baseline trending and screening etc. Includes AutoZero Module.



### TSI DustTrak DRX 8533 Aerosol Monitor TSI.8533 (5870) NZ • MY • SG

Portable dust and particle monitor, light scatter photometer. Measure concentrations corresponding to PM1, PM2.5 and PM10. Aerosol concentrations .001 to 150mg/m3. Used for industrial/occupational hygiene surveys, indoor air quality monitoring, outdoor environmental monitoring, baseline trending and screening etc. Will size particles in 4 sizes PM1, PM2.5, PM4 and PM10. Includes AutoZero Module.



### TSI 8535 Environmental Enclosure for DustTrak TSI.8535 NZ

Custom designed weatherproof environmental enclosure for use with the TSI,8530 or TSI,8533 DustTrak Airborne Particle Counters. Using this enclosure enables accurate and precise measurements to be taken in harsh industrial workplaces, construction and environmental sites, and other outdoor applications. Includes a 360° omni-directional sampling inlet specifically designed to sample efficiently in a broad range of wind conditions. Sampling conditions: wind speed 0 to 36kph; operating temperature 0 to 50°C. Battery run time: 24 to 40 hours (typical). 2 batteries included. Solar power option available when this enclosure is used in conjunction with the TSI 8530 or 8533 airborne particle counters.



### TSI Aerotrak Handheld Particle Counter 9306 V2

TSI.9306 AU · MY · SG

Generates Pass/Fail reports for ISO 14644-1, EU GMP Annex1 and FS209E. Count particle sized 0.3~25um, flow rate 2.83L/min. Counts 6 channel sizes. Includes data storage and download.



#### Sound, Noise & Vibration Monitoring

▶ See also Vibration Analysers on pages 109-110.



# ARL NGARA Environmental Noise Logger ARL,NGARA (5690) NZ ARL,COMMS NZ

Class I environmental noise logger designed for unattended monitoring that offers full measurement flexibility. Can be configured to record all sound continuously so noise data can be post-processed. Also capable of providing logged data, WAV data, and alarm/triggered details. The on-board LCD and push-button interface makes for simple control and configuration of the logger. Features: Class I Sound Level Meter. Includes Class I Acoustic Calibrator. 20 to 120dB measurement range. A and C frequency response. Capable of storing raw audio data to USB storage. The ARL,COMMS NZ 3/4G Kit allows the Ngara to be interrograted while in-situ, csv data downloaded and instrument reprogrammed. It requires mains power to the modem at site. Solar power option available.



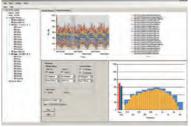
### ARL NGARA Environmental Noise Logger with Modem

ARL,NGARA-4G (5691) AU

A Class I environmental noise logger designed for unattended monitoring. Offers full measurement flexibility. Can be configured to record all sound continuously so noise data can be post-processed. Is also capable of providing logged data, WAV data, and alarm/triggered details. Includes a 4G modem and provides email alarms for noise exceedance. Full data upload to the Noise Cloud is an option. Solar Panels for extended deployment are available. Features: Class I Sound Level Meter, includes Class I Acoustic Calibrator, 20 to I20dB measurement range, 4G modem with email alarms included, solar panels for extended deployment available. Option for Noise Cloud.



### ARLFirefly Acoustic Post Processing Software ARLFIREFLY NZ



Powerful post-processing software package for use with the ARL Ngara Real time sound logger to enable large blocks of Ngara data to be analysed. Create 1/1 and 1/3 Octave statistics. Zoom on regions of interest. Replay audio at a specific time of interest. Interprets the data and displays graphically. Compare multiple sessions simultaneously. Create statistics to the time and frequency weightings of your choice. Export graphs and results to a number of formats, ready for inclusion in reports.



### Casella 350 Personal Sound Exposure Meter CAS,CEL350IS NZ CAS,CEL350ISKIT NZ CAS,DBADGE2PRO-KIT NZ

Intrinsically safe, noise dosimeter for measuring personal workplace noise exposure. Pin or clip to the shoulder of the person being measured. Ideal for OH&S surveys. Operating range: 65 to 140 dB. Built-in display provides status information and key measurement data. Visual "LED light" alarm when exposure levels are exceeded. Time history of noise is logged in 1 minute values of average exposure and peak value. Comes with Class 2 Calibrator for auto-calibration prior to use. Keypad can be locked. Insight software supplied for graphical display and analysis of noise history, and automatic report generation. Battery Powered, 28 hour life. Single unit(s) or a kit of 3. Also available is the dBadge2PRO Kit, which has the following additional features: Audio recording and Octave Band Frequency Analysis.



### Profound Vibra Ground Vibration Logger PRO, VIBRA (5024) AU

Designed for long-term ground vibration logging. It is ideal for applications in the construction industry where safety and environmental considerations must be taken into account. The unit is configured to meet DIN 4150 (part 2, 3 and SBR - part A and B), "Vibration in buildings - Effects on structures" and "Effects on persons in buildings" standards. Features: Long internal battery life. Can be recharged by user supplied USB Power Bank. Velocity range 0 to 100 mm/s. Smart alarm (frequency dependent on velocity according to DIN 4150).





### Profound Vibra Cloud Ground Vibration Logger PRO,VIBRA-CLOUD (5025) AU • NZ

Designed for long-term ground vibration logging. It is ideal for applications in the construction industry where safety and environmental considerations must be taken into account. Includes SMS alarms and is IP65 rated. Cloud access optional. Download of data is possible without interrupting ongoing measurements and the unit is configured to meet DIN 4150 (part 2, 3 and SBR - part A and B), "Vibration in buildings - Effects on structures" and "Effects on persons in buildings" standards. Features: Long internal battery life. Can be recharged by user supplied USB Power Bank. Velocity range 0 to 100 mm/s. Smart alarm (frequency dependent on velocity according to DIN 4150).





### Profound Vibra Wireless Alarm PRO,VIBRA-ALARM (5026) AU

Add one or more visual alarms to a PRO,VIBRA-CLOUD. These rechargeable alarms wirelessly link with one or more Profound ground vibration monitors. With a 5/8" mounting thread these alarms can be mounted on a standard tripod.









### Geophone Mounting Plate – Ground/Floor PRO,VIBRA-MPLATE (5027) AU · NZ

Machined Stainless Steel Mounting plate for Geophone when deployed on horizontal surface. Ball joint allows geophone to be levelled. 3 reversable feet. Rounded end for deployment on hard surfaces. Spike end for deploment on soft surfaces, such as soil or through carpet.

#### NTI XL2+M2230 Sound Level Meter & Acoustic Analyser NTI.XL2+M2230 (5605) MY • SG

Type 1 Sound Level Meter & Acoustic Analyser, includes real time analyser with 1/1 or 1/3 octave-band resolution. Build in FFT Analyser, Polarity, Delay Time and Audio Analyser. Frequency 5Hz to 20kHz, sound pressure level up to 137 dB. All data is save to SD card. Standards compliance check to IEC 61672, IEC 60651, IEC 60804, IEC 61260.



### Rion Type 1 Sound Level Meter

RIO,NL-52EX-RT NZ

Both models are Rion NL-52 Precision integrating sound level meters (SLM) with extended functionality, "RT" model also includes octave analysis and reverberation functions, refer below. Both are IEC type 1 (class 1) specification and IANZ calibration. Frequency range: 20Hz to 20 kHz. Weightings: A, C, & Z. Time weighting: fast & slow. Measurement ranges: A-weighting 25 to 138dB, C-weighting 33 to 138dB, Z-weighting 38 to 138dB. Peak sound level 141dB. Measurement functions include:Lp, Leg, Le, Lmax/Lmin, Ln, Lceq, Lcpeak, Lzpeak, Laieq, Laimax, Latm5 etc. 3" LCD for graphical display of results. Manual or auto storage to SD card. Alkaline batteries (24h). Supplied with Pulsar 105 field calibrator. "RT" model also includes: NX-42RT for realtime 1/1 Octave and 1/3 Octave band analysis. NX-42RV for reverberation time measurement calculations at T20/T30. or user defined intervals. Reverberation time-decay curves can be saved.



### Rion NL52EX SLM with NX42RT Octave and 1/3 Analyser

RIO,NL52EX-NX42RT (5670) AU

Type I Sound Level Meter, including the Octave and 1/3 Octave measurement option NX42RT. This meter can be used to check NC levels for compliance checking. The instrument includes a certified ISO/IEC 17025 calibrator (AU only). All data is save to an SD card.



#### Gas Detectors

### BW Ultra 4 Gas + PID Pumped Gas Detectors BW,ULTRA-PID (5921) AU

A pumped portable five-gas detector. Provides the functionality of a standard 4 gas detector (LEL, O2, CO, H2S). With a PID installed in the 5th sensor spit you get the ability to detect toxic gases far below their explosive limit. Sensors: Flammables (catalytic LEL sensor): 0-100% LEL, 1% LEL resolution. Oxygen: 0.0% – 25.0% vol, 0.1% vol resolution Hydrogen Sulphide (H2S): 0.0ppm -100ppm, 0.1/1ppm resolution. Carbon Monoxide (CO): 0 – 2000ppm, 1ppm resolution. VOCs: 0 – 1000ppm, 1ppm resolution. TechRentals supplies this gas detector in a Confined Space Gas Monitoring Kit. Sample probe and tubing for regular use also 3m sampling hose. IRDA Adapter and download. 14Hr battery life.



### BW Ultra 5 Pumped Gas Detector with Ammonia BW,ULTRA-NH3 (5922) AU

A pumped portable five-gas detector. The BW Ultra provides the functionality of a standard 4 gas detector (LEL, O2, CO, H2S). This configuration has an Ammonia (NH3) sensor installed in the 5th sensor position. Sensors: Flammables (catalytic LEL sensor): 0-100% LEL, 1% LEL resolution. Oxygen: 0.0% – 25.0% vol, 0.1% vol resolution. Hydrogen Sulphide (H2S): 0.0ppm -100ppm, 0.1/1ppm resolution. Carbon Monoxide (CO): 0 – 2000ppm, 1ppm resolution. Ammonia (NH3): 0-100ppm, 1ppm resolution. TechRentals supplies this gas detector in a Confined Space Gas Monitoring Kit. Sample probe and tubing for regular use also 3m sampling hose. IRDA Adapter and download. 14Hr battery life.



### BW Ultra 4 Gas + CO2 Pumped Gas Detector BW,ULTRA-CO2 (5923) AU

A pumped portable five-gas detector. Provides the functionality of a standard 4 gas detector (LEL, O2, CO, H2S). This configuration has a Carbon Dioxide (CO2) sensor installed in the 5th sensor position. If CO2 is a risk it must be monitored with a dedicated sensor. Sensors: Flammables (catalytic LEL sensor): 0- 100% LEL, 1% LEL resolution. Oxygen: 0.0% – 25.0% vol, 0.1% vol resolution. Hydrogen Sulphide (H2S): 0.0ppm -100ppm, 0.1/1ppm resolution. Carbon Monoxide (CO): 0 – 2000ppm, 1ppm resolution. Carbon Dioxide (CO2): 0ppm -50,000ppm, 100ppm resolution. TechRentals supplies this gas detector in a Confined Space Gas Monitoring Kit. Sample probe and tubing for regular use also 3m sampling hose. IRDA Adapter and download. 14Hr battery life.













BW, MICROCLIP (5937) AU · MY · SG

Microclip X3. Continuous LCD shows real time gas concentrations. Simple 1 button operation. Measures: H2S 0 to 100ppm (1ppm resolution), CO 0 to 500ppm (1ppm resolution), O2 0 to 30% (0.1% resolution) and combustible gases 0 to 100% LEL (1% resolution Methane), 0 to 5% v/v (0.1% resolution). Alarms: visual, vibrating and audible (95dB), Low, High, STEL, TWA and OL (over limit). Lithium polymer battery life 12hrs (typical) recharge time <3hrs.

### BW Bump & Logging Download for BW,MICROCLIP

BW,BUMP (5938) AU · MY · SG

Automatic calibration testing and data management system for the BW microclip gas detection equipment. Carries out fully automatic "hands-free" calibration and functional bump test. It also enables data collected during operation of the BW microclip to be downloaded.



### Honeywell BW Flex4 Multi-Gas Detector LEL, O2, H2S, CO

BW,FLEX4 (5940) AU • MY • SG

Large high-resolution display. Simple one button operation H2S 0-200ppm, CO 0-2000pm, O2 0-30% vol, Catalytic LEL sensor and 16hr battery life.



### Honeywell BW Flex4 Multi-Gas Detector IR LEL, O2, H2S, CO

**BW,FLEX4-IR (5940) AU** 

Large high-resolution display. Simple one button operation H2S 0-200ppm, CO 0-2000pm, O2 0-30% vol, IR LEL 0-100%. Two months of battery runtime on a 4.5hr charge with the low powered IR LEL sensor.



### IntelliDox Bump and Calibration Station for Flex4

**BW,INTELLIDOX-FLEX4 (5935) AU** 

Bump and Calibration station for BW,FLEX4 and BW,FLEX4-IR.



### BW Solo Portable Single Gas Detector - H2S BW,SOLO MY

H2S 0~200ppm (0.1 ppm resolution – series 1). Capability of datalogging and event logging. Alarms:- Visual, vibrating, audible (95 dB); Low, High, TWA, STEL, non-compliance.



### Draeger XZONE 5500 Area Gas Monitor - 4 Gas DRA,XZONE-5500 (5960) AU • MY • SG

In combination with X-am 5100 4 gas detector. Pumped area gas monitor with up to 120h battery life. Catalytic LEL, CO, H2S, O2.



### MX4 Ventis Personal Gas Monitor ISC,MX4 NZ

Personal gas monitors for use in hazardous areas and confined spaces, designed to simultaneously and continuously monitor for four gases: Oxygen, Carbon Monoxide, Hydrogen Sulphide, and Combustible gas (LEL). Alarm limits set to Department of Labour Workplace Exposure Standard. Alarms include audible (95dB), vibrating and screen alerts. Weight: 182g. Impact resistant housing. Li-Ion battery for up to 12hr continuous monitoring. Spare set of batteries included. Simple user interface. Intrinsically safe EEX IA T4 rated. Continuous data-logging at 10s intervals with three month cyclic memory.



#### MX4 Ventis Slide-on Pump ISC.MX4PUMP NZ

Attaches to the ISC MX4 pump for testing confined spaces prior to entry. Use this slide-on pump to complete the preentry tests, then remove the pump and you have a personal gas monitor for use in hazardous areas and confined spaces. 5m tube supplied for preentry testing. Rated to pump up to 15m. Li-lon battery for up to 18hrs continuous use.







### Rae Systems PPB PID VOC RAE.PPB3000 NZ

Handheld Volatile Organic Compound (VOC) gas monitor. Its Photoionization Detector's (PID) extended range of 1ppb to 10,000ppm makes it an ideal instrument for applications from HazMat, industrial hygiene, to Indoor Air Quality and military applications. Range: 1ppb to 10,000ppm. Real-time wireless data transmission through built-in Bluetooth & RAElink3 link. Integrated Correction Factors list of 220 compounds. Includes flashlight for dark conditions. Large graphic display presents gas type, correction factor & concentration, IP-67 rated.



#### MiniRAE 3000+ PID for VOC Detection

RAE, MINIRAE 3000 + (5906) AU RAE, 3000 (5912) NZ · MY · SG

Photoionisation Detector's (PID) extended range of 0 to 15,000 ppm. VOC reading range at 0 to 999.9ppm with resolution of 0.1ppm and range at 1,000 to 15,000 with resolution of 1ppm. Battery operated est. 16h of operation. Data logging: Standard 6 months at one-minute intervals.



#### RKI Eagle2 Gas Detector, Confined Space plus Photoionisation (PID) RKI,EAGLE2 (5930) AU

Measures 4 confined space gasses CH4, O2, H2S and CO plus a PID. Alkaline 18 hours or Ni-MH 20 hours capability. Powerful long-life pump up to 38m range. Low flow pump shut off and alarm. Datalogging standard. IrDA communications port. Autocalibration/ single gas calibration. Internal hydrophobic dust filter. External probe with hydrophobic filter. Ergonomic RFI/EMI/chemical/weather resistant enclosure. Intrinsically safe design, CSA approval.



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### Radiation Monitoring & Protection

▶ See also E & H Field Strength Meters on pages 12-13.

# HPI Cypher 5000 Digital Radiation Alert Monitor HPI,CYPHER5000 (5583) AU

Alpha, Beta, Gamma and X-ray radiation monitor. Meter, LED, audible indication and detachable probe. Range 0.1 to 1,000,000 CPM; Accuracy 1% or 2 digits.



# Narda RadMan 2XT ICNIRP 1998/Occupational NAR,RADMAN-2XT (5558) AU

Personal occupational limit monitor and leakage detector for monitoring RF signals in mobile, telecom, broadcast and industrial applications. Easy to use: 5G Ready, mounting adaptor for harnesses with safety lanyard, integrated automatic sensor test, highly visible alarm LEDs, loud buzzer plus vibration alarm, 800h of operation on a single charge. Compliant: Wide frequency monitoring up to 60GHz, ICNIRP compliant for frequencies 900kHz to 60GHz, ICNIRP 2020 compliant for frequencies above 27MHz, detection of short pulsed signals, data logger for permanent recording.



# Narda RadMan Personal RF Field Radiation Monitor

NAR, RADMAN (5557) AU · NZ · MY · SG

Personal occupational limit monitor and leakage detector for monitoring RF signals in mobile, telecom, broadcast and industrial applications. Frequency range H field 27MHz to 1GHz; E field 1MHz to 40GHz. 5G Ready.





### Environmental Gas & Vapour Meters

▶ See also Combustion, Flue & Industrial Gas Analysers on pages 101-102.



### Aeroqual Logging Ozone Monitor – Indoor Air Quality

AER,500L (5958) AU · MY · SG AER,500LEOZ1 NZ

Portable ozone monitor fitted with low concentration-range detection head. Operating range 0~0.5ppm ozone with display in ppm or mg/m³. Gas sensitive semiconductor (GSS) sensor for accurate lowlevel measurements, T90 response approximately 100s. Operation from mains power supply or battery pack (4h operation). Internal data logging for 8000 points with software and cable for download to PC, or data logging direct to PC. Application for indoor air quality measurements.



#### **Aeroqual Portable Monitors**

AER,500LNH1 Ammonia NZ
AER,500LECN1 Carbon Monoxide NZ
AER,500LEF Formaldehyde NZ
AER,S500ECL1 Chlorine NZ
AER,S500LMT1 Methane NZ
AER,500LEND1 Nitrogen Dioxide NZ
AER,500LEOZ1 Ozone NZ
AER,500LPM Particle Monitor NZ
AER,500LESO Sulphur Dioxide NZ

Portable monitors suitable for indoor and outdoor air monitoring. Applications include: personal exposure monitoring, health and safety compliance, indoor air quality testing, process monitoring and source and leak detection. Log up to 8188 records. High and low audible alarm. Sensors available: Ammonia (NH3) 0-1,000ppm, Carbon Monoxide (CO) 0-100ppm, Formaldehyde (CH2O) 0-10ppm, Methane (CH4) 0-10,000ppm, Nitrogen Dioxide (NO2) 0.1ppm, Ozone (O3) 0-10ppm, Particle Monitor (PM2.5 & PM10) and Sulphur Dioxide (SO2) 0-10ppm. Other sensors available on request.



### **Gastec H2S Data Loggers**

GAS,GHS-8AT-EX(500) NZ GAS,GHS-8AT-EX(3000) NZ

Portable H2S gas logger designed to be located close to the source of Hydrogen Sulphide (H2S). Often used in the wastewater industry e.g. within sewerage pumping stations, manholes and inside sewer collection lines. Robust unit, corrosion-resistant and able to log data for extended periods of time. Range: 0-500 ppm or 0-3,000ppm. Accuracy: ±5% of F.S. Increments: 1ppm (500ppm) or 25ppm(3,000ppm). Data logging interval: 1, 5, 10, 15, 30 and 60 minutes. LCD Display: Shows concentration, temperature, time, battery life, remaining data capacity in days. Memory: Up to 45,960 points (approx. 31 days logging at 1 min intervals). Battery life: up to 3 months. Rated IP66/67.



# Odalog NO2 & CO Area Monitor APT.ODA7000CP NZ

Portable multi-gas monitor for area air-quality measurement, logging or personal monitoring in areas such as car-parks, loading areas and related zones. Configured for carbon monoxide [from petrol vehicles] and nitrogen dioxide [from diesel vehicles]. Ranges CO 0~500ppm [to 1ppm] and NO2 0~50ppm [to 0.1ppm]. Dust and water sealed to IP66. Intrinsically safe: rated for general or mines use. Logging interval: from 1 sec to 1 hour. Logging memory: up to 500,000 readings. Integral infrared communications interface, with software and IrDA USB adaptor for configuration and download. Rechargeable: approx 7 days operation on full charge.





### Odalog H2S Area Monitor APT.ODALL-H2S-200 NZ

Portable multi-gas monitor fintrinsically safe, portable H2S gas logger designed to be located close to the source of Hydrogen Sulphide (H2S). Often used in the wastewater industry e.g. within sewerage pumping stations, manholes and inside sewer collection lines. Robust unit, corrosion-resistant and able to log data for extended periods of time. Range: 0-200 ppm. Accuracy: 0.1 ppm 1% Full Scale. Data logging interval: from 1 second to 1 hour. Memory: Up to 42,000 data points. Software supplied for setup and data download. Battery life: up to 12 months. Rated IP66/68.





### OdaLog G20 H2S 200ppm TFS,ODAG20-H2S-200 (5980) AU

Next generation of IECEx certified portable gas loggers, now with Smart Sensor technology to enable predictive maintenance and health indication with a long deployment period of up to 90 days. G20 is designed to be corrosion-resistant and rugged enough to withstand environments with high hydrogen sulfide emissions, such as sewerage pumping stations, receiving manholes and sewer collection lines. With Modbus, Bluetooth and a capability to log 10 million data points, G20 is a versatile solution for portable gas logging applications. Features: ATEX, IECEx Certified. Versatile Communications: USB, Modbus, Bluetooth. Smart Sensor with predictive maintenance and health indication. Long deployment period of up to 90 days. 8 GB SD Card allows 10 million data points. Accompanied with OdaNx™ software for data analysis.







# Ionscience Gascheck G3 Helium Leak Detector ION,GASCHECKG3 (5907) AU • MY • SG

Microthermal conductivity gas detector. Reading in cc/s, g/yr, mg/m³ or ppm. Detects most gases however particularly suited to ammonia, argon, butane, helium, hydrogen & SF6. Calibrated against Helium. Battery Life 40h. Sensitivity (cc/s) He 1x10-5, CH4 5x10-5, R12 5x10-5, Ar 1x10-4. Accuracy 5% of displayed reading + 1 digit. Response 1s. Flow rate 2cc/min. Operating -20 to 60°C.



# PPM HTV-M Formaldehyde Meter PPM.HTV-M MY

Portable Formaldehyde meter for measuring airborne formaldehyde in the workplace. Electrochemical sensor, with internal pump for rapid response. Operating range 0 to 10 ppm with readout on 4 digit LCD display. Kit includes field calibration standard. Operates from 9V alkaline battery or dc adapter if used as a continuous data logger. The mini USB allows data to be downloaded to PC using the htV-m software.

### Laboratory Instruments & Equipment



# Ametek DVPlus RV Viscometer AME.DVPLUS-RV (6350) AU

Range 100 to 40 million Centipoise(cP). Supplied with temperature probe and DVPlus connect app.

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### Air Quality & Heat Stress

# Microsense M1500 Personal Air Sampling Pump MIC,M1500 NZ

Portable air sampling pump to capture particulates in your workplace air for testing and analysis by a Laboratory. The Pump is programmable for flow rate or fixed volume of air to pass through a capture filter. Once complete the filter sample cartridge can be sent to a Laboratory for analysis. Comes with an integrated calibrator for flow rate testing prior to use. Ideal for OH&S surveys. Flow range: 20-1,500mL/min. Rechargeable lithium battery.



# MicroSensor M5000 Air Sampling Pump MIC,M5000 NZ

Portable air sampling pump to capture particulates in your workplace air for testing and analysis by a Laboratory. The Pump is programmable for flow rate or fixed volume of air to pass through a capture filter. Once complete the filter sample cartridge can be sent to a Laboratory for analysis. Comes with an integrated calibrator for flow rate testing prior to use. Ideal for OH&S surveys. Flow range 1,000 to 5,000mL/min. Rechargeable lithium battery.



# QUESTEMP II Personal Heat Stress Monitor QUE,QUESTEMP2 NZ

Personal heat stress monitor provides protection by detecting the individual's physiological heat response. User-selected alarm trip points provide an audio alert to workers experiencing elevated core temperatures. Minute-by-minute data logging documents personal heat exposure. Range and accuracy: ±0.1°C from 32°C to 40°C. Intrinsically safe. Kit includes control module, cable to ear sensor, thermoplastic ear mould assembly, Digital Oral Thermometer, software and serial cable. Expanding foam earplugs and thermometer sheaths available as consumables



# Fluke 975 AirMeter Indoor Air Quality Monitor FLU,975 MY

Indoor Air Quality (IAQ) monitoring, measure temperature, humidity, CO2 and CO concentrations. Humidity range 10 to 90%, temperature range -20 to 50°C. CO measurement range 0 to 500 ppm and CO2 range 0 to 5000 ppm. Dew point temperature and wet bulb temperature is calculated. Data logging for 25,000 data point with 1min to 1h interval. Comes with USB cable for download interface and software viewing and reporting. Battery operated.







# TSI Q-TRAK IAQ Monitor CO2, CO Temperature & Humidity Logger

TSI,7575 (5862) AU · NZ · MY · SG

Portable indoor air quality meter/logger complete with IAQprobe model 982. Measures CO2 0~5000ppm  $\pm 3\%$ , temperature 0~60°C  $\pm 0.6$ °C, humidity 0~95%  $\pm 3\%$ , CO 0~500ppm  $\pm 3\%$  and barometric pressure 517. 15~930.87mmHg  $\pm 2\%$ . Calculates dew point, wet bulb and percent outside air. Displays 5 measurements simultaneously. User selectable logging interval and start stop times. Stores 39 days data at 1min intervals 56,035 data points. This unit also has external thermocouple measurements.



# TSI 7575 Q-Trak Indoor Air Quality Monitor with VOC Sensor

TSI.7575-VOC NZ

Portable indoor air quality meter/logger. Simultaneously measures CO2, low concentration (ppb) VOC, temperature, humidity and barometric pressure. Calculates percent outside air, wet bulb and dew point temperatures. 5 line display. CO2: 0 to 5000 ppm, accuracy ±3% +3 ppm whichever is greater. VOC: 10 to 20,000ppb. Temperature range: -10 to 60°C, Accuracy ±0.5°C. Relative Humidity: 5 to 95%, accuracy ±3% RH. Barometric pressure: 69kPa to 124kPa ±2%. Logging intervals from 1s to 1hr. 63,000 data point logger. Probe: 25mm diameter x 165mm length. Supplied with software and USB cable for uploading result. AC or battery powered.

### Moisture & Humidity Meters



### GE Panametrics PM880 Industrial Moisture Analyser PAN,PM880 (5911) AU

Intrinsically safe moisture analyser for compressed air systems, noncorrosive gases & hydrocarbons such as natural gas (IS certification to ATEX and CSA). Displays dew point, moisture concentration, pressure & temperature. Dew point calibrated measurement range -80 to 20°C with data to -110°C. Pressure range 7 to 69 Bar limited by sensor, gauge and safety-valve (operating range from 5µHg). Temperature range -30 to 70°C. Gas flow operating range from static to 10,000cm/s velocity. Supplied with compact sample system with gauge, safety-valve, sampling valves and fittings (1/4" Swagelok). Data logging of up to 100K moisture points, with infrared port and software for download. Battery powered only (15-24h operation) with second battery and charger (note charger is not IS).



# Testo 635-2 Humidity, Temperature & Dewpoint Meter

TES,635-2 (5859) AU · NZ

Portable humidity meter fitted with robust stainless probe with sintered filter-cap for general or duct measurements to 120°C, and fast-action K-type surface temperature probe. Displays relative humidity, absolute humidity, dew point, degree of humidity, enthalpy, temperature, and differential temperature (dewpoint~surface). Operating range 2~98%RH ±2%). Air temperature -20~120°C (±0.2/0.5). Surface temperature -60~300°C (±0.1). Internal memory for 10,000 values with USB interface, cable and software for download and presentation. Battery operated.





# Testo 635-2 Temperature & Dewpoint Meter for Compressed Air Systems TES,635-2-HPD (5912) AU

Portable humidity meter fitted with 0636 9836 HPD pressure dewpoint probe for measurements in compressed air systems, -60 to +50°C tpd, 0~100%RH. Internal memory for 10,000 values with USB interface, cable and software for download and presentation. Battery operated. Maximum pressure 15bar.



# Testo 440 Humidity and Temperature Meter TES,440 NZ

Complete with calculated channels and logging. Calculating channels include absolute humidity, wet bulb temperature and dew point. 7,500 point logging capacity for spot readings and/or automated reading at intervals from 1s to 60s. Thermocouple input. USB interface, cable and downloading data into Excel. The probe can be used in dusty atmospheres, at high air velocity and under mechanical stress: for example, for measurements in industrial exhaust air (during drying processes) and climatic test cabinets. Supplied with 0636 9775 Probe. 12mm diameter, 270mm long, designed for high temperature readings. Temperature range: -20° to 180°C, Resolution: 0.1°C, Accuracy ±0.4°C (0.1 to +50 otherwise ±0.5°C). Humidity range: 0 to 100% RH, Resolution: 0.1% RH, Accuracy: ±2% RH (2.1 to 98%, otherwise ±3%). Battery Operated.









# Vaisala DMP80 Dewpoint Meter VAI,DMP80 NZ

High precision dew point meter and probe designed for use in extreme conditions including dew point down to -70°C, temperature down to -0° and pressure to 20Bar. The probe may be inserted directly into pressurized processes and it responds rapidly from ambient to process conditions. Typical industrial dew point applications include compressed air lines (using sampling cell), sealed units e.g. transformers, metal treatment, manufacturing processes as well as food and plastics drying. DMP80B Probe Dew Point range: -70°~+60°C; Accuracy: ±2°C. Temperature range: 0°~ +60°C; Accuracy: ±0.2°C. Relative Humidity: 0-70% RH. Operating Temperature range: -10°~+60°C. Response Time: Dry (-70° to 0°C) 5 to 10 sec; Wet (0 to 60°C) 45 sec to 8 min. Logging capacity: up to 5.5m data points. Logging interval: 1s to 12h. Data can be logged and transferred to a PC via USB-C supplied. IP Rating: Meter IP40; Probe IP66. Battery Life: up to 10 hours. Sampling Cell DSC74 with Quick Connector and Leak Screw included.

### Water Quality Meters



### HI-9829 WQM 4m Cable - Temp, EC, pH, ORP, DO & Turbidity HAN,9829-4M (6026) AU

For discharge and surface waters requiring the measurement of Turbidity the HI-9829 is the go to instrument. A compact submersible sonde integrated onto a 4m cable that measures Turbidity temperature, electrical conductivity, pH, oxidation reduction potential and dissolved oxygen. Supplied calibrated with calibration report. Field replaceable C size alkaline batteries. Automatic data logging to the meter. Compatible flow cell included in pump kits.



# Hamilton Beverly Dissolved Oxygen Meter HAM, BEVERLY (6040) AU

Designed for dissolved oxygen measurement in at-line and laboratory use in small and midsize breweries as well as in the beverage industry to provide excellent reliability in a rugged design, and purpose built to handle the environmental extremes encountered in everyday brewing operations.



# YSI Professional Plus pH, Salinity & Conductivity Meter

YSI,PROPLUS NZ

Multi-use instrument. Supplied with temperature, pH, Conductivity and Salinity sensors. 2000 data-set memory with GLP event logging. Interval or single event logging capability. Rugged construction with IP67 waterproof case. Incorporates a back lit display and keypad. The graphic display comes with a detailed Help. Temperature range: -5 to 70°C. Conductivity range: 0 to 200mS/cm (autorange), Accuracy: ±0.5% of reading or 0.001mS/cm whichever is greater (20m cable). Salinity: range 0 to 70ppt, Accuracy: ±1.0% of reading or 0.1ppt whichever is greater. pH: range 0 to 14 units, Accuracy: ±0.2 units. 20m cable with probe.



# YSI ProSolo Optical Dissolved Oxygen & Conductivity Meter

YSI,PROSOLOODCT NZ

Measures dissolved oxygen (DO) in mg/L or percent saturation, and conductivity. Also provides simultaneous readings of O2 & temperature. Dissolved O2 readings are automatically compensated for temperature. Useful for any application requiring accurate, real-time salinity-compensated DO measurements. DO Range: 0 to 50 mg/L. DO Accuracy: 0 to 20 mg/L  $\pm$  0.1 mg/L or  $\pm$  1% of reading, whichever is greater; 20 to 50 mg/L  $\pm$ 8% of the reading. Conductivity Range: 0 to 200 mS/cm. Temperature Range:  $-5^{\circ}$  to  $70^{\circ}$ C. 100,000 data-set memory. 10 metre cable with probe.



# YSI ProSolo Dissolved Oxygen Meter YSI,PROODO NZ

Measures dissolved oxygen (DO) in mg/L or percent saturation. Provides simultaneous readings of O2 & temperature. Dissolved O2 readings are automatically compensated for temperature. Range: 0 to 50 mg/L. Accuracy: 0 to 20 mg/L  $\pm$  0.1 mg/L or  $\pm$  1% of reading, whichever is greater; 20 to 50 mg/L  $\pm$ 15% of the reading. Temperature Range: -5° to 70°C. 5,000 data-set memory. 10 metre cable with probe.





### Water Samplers/Pumps



# Hach AS950 Water Sampler HAC, AS950 (6650) AU

Advanced water sampler for fully programmed collection. Samples are collected in up to 24, 1 litre disposable plastic containers based on a set time period. Fitted with NEMA 4X, 6, (IP67) sealed controller featuring a built-in pump.

### Light Meters



# Hagner EC1-X Lux Meter HAG,EC1-X (5600) AU

Measures from  $0.1\sim200,000$  lux. Has a remote measurement head on 2m cord. Accuracy  $\pm3\%$  of range  $\pm$  last digit. Battery operated. Certified ISO/IEC 17025 (AU only).



# Topcon IBM-9A Luminance Meter TOP,BM-9AC NZ

Portable luminance meter with 6-digit display for measurement of LCDs, OLEDs, LEDs, robotic sensors and various lighting installations including street, tunnel, airport and medical lighting. Can also provide transmittance measurement. Built-in keyboard for inputting correction factor and reference illuminance for deviation/percentage measurement, and also calculate luminous intensity. Comes with a 2° measuring, 5° viewing field detector. Silicon photodiode sensor with automatic 5-step or manual range selection. Built-in USB interface and analogue output. 2m extension cable to detach detector unit from display unit included. Tripod mount and battery powered. Range: 0.01 to 280,000 cd/m². Accuracy: ±2% of reading. Measuring distance: 350mm to infinity. Minimum spot diameter: 10mm.



# Topcon IM-2D Illuminance (Lux) Meter TOP,IM-2D (5606) AU

Measuring range from 0.1~19,9991x. Accuracy 5%, ±1 digit. Autoranging with silicon sensor. Battery operated. Certified ISO/IEC 17025 (AU only).



# Hioki FT3424 Digital Illuminance (Lux) Meter

Complete with manual and auto ranging capability. 4 digit LCD ("2000") for 5 measuring ranges: 20/200/2,000 lux in 1-count steps, 20,000 lux in 10-count steps, and 200,000 lux in 100-count steps with accuracy of ±3% of reading. Response time in autorange mode is 5s, and in manual mode it is 2s. Features autozero, hold, and backlight functions with delay for taking readings in low light. Memory function with 99 storage can be downloaded to a PC via USB connection. Analogue output - 2V/range FS. Connection cable to allow separation of sensor unit and meter provided. Battery powered.



# Hioki FT3425 Digital Illuminance (Lux) Meter HIO,FT3425 NZ

Complete with manual and auto ranging capability. 4 digit LCD ("2000") for 5 measuring ranges 20/200/2,000lx in 1-count steps, 20,000lx in 10-count steps and 200,000lx in 100-count steps with accuracy of +/- 3% of reading. Response time in autorange mode 5s & 2s in manual range mode. Autozero, hold, backlight function with delay for taking reading in low light. Memory function with 99 storage, can be downloaded to PC via USB connection. Analogue output - 2V/ range FS. Connection cable to allow separation of sensor unit and meter provided. Battery powered.



### Yokogawa 51012 Lux Meter YEW,51012 (5607) AU

Measuring range from 0 to 99.9/999/9,990/99,900/999,000lx . Accuracy <3,000lx 4%  $\pm 1$  digit >3,000lx 6%  $\pm 1$  digit. Autoranging with silicon sensor. Battery operated and certified ISO/IEC 17025 (AU only).



### Weather Stations

# Vaisala WXT536 Weather Transmitter VAI,WXT536 (5886) AU

A fully Solid-State Weather Transmitter. It measures: Wind Speed, Wind Direction, Rainfall, Temperature, Humidity and Air Pressure.









# **Environmental Site Assessment**

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### Groundwater



### QED Micropurge Kit – 60m QED,MPKIT-60M (6620) AU

Allows you to reliably conduct industry standard low flow groundwater sampling to a depth of 60m. The Solinst Tagline is easier to clean and safer to handle than bare wire hangers. The laser etched markings every 5cm cable allows you to accurately position the pump at the correct depth. The kit includes: QED MicroPurge MP10 controller with gas hoses. QED Sample Pro Bladder Pump, with push fit fittings. Solinst 100m Tagline. Solinst 100m Tagline. Air Compressor or CO2 Regulator and Cylinder. Consumables available including Sample Pro Replaceable Bladders, Bonded LDPE Twin-Tubing, HDPE Tubing for PFAS sampling and CO2 cylinders. Add an In-Situ AquaTROLL WQM and a Solinst Interface meter for the full low flow sampling solution.



### Solinst 401 Mk4 Peristaltic Pump SOL,PERI-PUMP (6640) AU

Provides the simplest solution for sampling ground water where the depth to water is less than 8m. Flow rates as low as 40mL/min up to 900mL/min are possible when used with 3/8" silicone tubing in the pump head and 1/4" down well tubing. Supplied with SLA battery, charger.



# 60m Solinst 122 Interface Meter – IP SOL,IP-122-60M (6730) AU

Has the functions of a water level meter with the added ability to gauge the thickness of floating and sinking product (LNAPL & DNAPL). This IP has a 10mm width PVDF flat tape with laser marked meter, centimetre and millimetre markings. Certified Intrinsically safe to ATEX standards, the grounding tape must be used in potentially explosive atmospheres. Used for gauging the depth to water in groundwater bores it is an essential instrument when conducting low flow sampling.



# 250m Solinst 101D Water Level DrawDown Meter SOL,WLM-101D-250M (6740) AU

Water Level Meter with Drawdown functionality is used for measuring the water level in deeper bores. The Drawdown functionality is useful when you want to limit the maximum drop in the water while purging or pump testing. Has a combined on/off and sensitivity adjustment dial. The probe is 16mm in diameter by 137mm long, rated to 300m submersion and connected to a 10mm wide flat laser marked tape. The unit is powered by an easily replaceable 9V alkaline battery.



### Water Quality

# Eutech TN100 Turbidity Meter EUT,TN100 (6028) AU

The microprocessor-based waterproof TN100 meter is an easy-to-use turbidimeter that meets the rigor of rugged field applications. It isa "must -have" for anyone monitoring turbidity on the go. Using an Infrared light source. it delivers laboratory accuracy with a resolution of 0.01 NTU across an extended range of up to 20 NTU (Nephelometric Turbidity Units). Turbidity Range: 0 to 1000 NTU. IP67 Waterproof and dustproof, and it floats.. Cleaning and maintenance is simple. Automatic Push-Button Calibration (4 points) for unprecedented full-range accuracy. Sturdy carrying kit complete with 4 calibration standards, 3 empty cuvettes, batteries and comprehensive instruction manual.



# AquaTROLL 500 with pH/ORP/EC/DO/Temp Sensors

#### INS,AT500 (6030) AU

A multiparameter water quality meter measures Conductivity, pH, ORP, Dissolved Oxygen and temperature. A 5m cable connects the sonde to a Bluetooth communications device. Take readings in the Vu-Situ App on the included tablet or connect to your own device so you can email prepared low flow reports. The sensors are designed for long term use and have excellent stability. The optical dissolved oxygen sensor means long term stable operation without recalibration. A flow cell is included for low flow sampling.



### Lovibond MD100 Chlorine Duo LOV,MD100-CL-DUO (6029) AU

A single parameter colorimeter for water quality analysis. This line of rugged, waterproof instruments is lightweight and ideal for field testing or for use in the laboratory. Chlorine is one of the most popular water quality testing parameters and the MD 100 Chlorine Duo Colorimeter offers a testing solution to fit a wide variety of industries and applications. Pre-programmed with three testing ranges for testing Free, Total and Combined Chlorine. All testing ranges use the DPD method and utilise tablet or VARIO Powder Pack reagents, depending on the range selected.





### Gas



### GA5000 Landfill Gas Analyser GEO,GA5000 (5908) AU

A landfill and contaminated land portable gas analyser, with available gas measurements of CH4, CO2, O2, H2S and CO. It is easy to use and calibrate, benefitting from our market leading reliability and helping you to standardise monitoring routines, whilst supporting environmental legislation compliance.



# SEM5000 Laser Methane Detector GEO,SEM5000 (5905) AU

A portable methane detector used to improve reading accuracy and to reduce potentially harmful greenhouse gases. Thanks to patented laser technology, the Geotech SEM5000 is selective, specifically to methane and is able to detect emissions from 1-10000ppm or from 0.1% to 100% v/v concentration.



# MiniRAE 3000+ PID for VOC Detection RAE.MINIRAE3000+ (5906) AU

Photoionisation Detector's (PID) extended range of 0 to 15,000 ppm. VOC reading range at 0 to 999.9ppm with resolution of 0.1ppm and range at 1,000 to 15,000 with resolution of 1ppm. Battery operated est. 16h of operation. Data logging: Standard 6 months at one-minute intervals.





# Non-Destructive Testing (NDT)

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NDT Category is currently available in Malaysia and Singapore, however, if you are interested in NDT equipment and are outside these locations please don't hesitate to contact us.



### Flaw Detectors



# **GE Mentor EM Dual Eddy Current Flaw Detector**

#### GE, MENTOR-EM-DUAL MY · SG

GE Mentor EM Dual Eddy Current Flaw Detector. Dual Probe Module; Connectivity Module with USB and X & Y Encoder Inputs and TTL Outputs. Supplied with Weld Scan Kit contains:

- · 632-266-008 ECLN--PRB 3/8" WLDSCN 4PL
- · 632-265-009 ECLN--PRB 5/8" WLDSCN 4PL
- · 632-134-000 ECP, 130P3, 82µH, 35KHZ-250KHZ
- · 074-140-022 ECLN--CBL 4.9' DIFF



# Olympus Epoch 650 Ultrasonic Flaw Detector OLY.EPOCH650 MY • SG

Designed to meet the requirements of EN12668-1. Full screen A-scan mode and Standard dynamic DAC/TCG and onboard DGS/AVG. Supplied with AM4R-8X9-70, CN4R-10, AM4R-8X9-45, AM4R-8X9-60, A550S-SM probes. Optional Gage View and Corrosion module software included



# Olympus OmniScan MX2 Phased Array Flaw Detector

#### OLY, OMNISCAN MX2 MY · SG

Second generation OmniScan MX2 with 32:128PR phased array acquisition unit, including a UT conventional channel. Included weld software option, ToFD software option and Multigroup software option. Suitable for weld inspection, composite inspection, corrosion inspection, etc.



# Olympus Nortec 600D Eddy Current Flaw Detector

#### OLY, NORTEC 600D MY · SG

EN-15548 compliant Eddy Current Flaw Detector. 10Hz to 12MHz frequency capacity. Automatic internal balancing (BNC connector). Weld Inspection Kit Containing 1 each of WLD-5-63, WLD-8-55, NEC- 2236 SRSM-51020S/WLD, WLD-SAMPLE & CN16-4L-6 included.



### **Non-Destructive Testing**

# GE/Krautkramer USM 36 Ultrasonic Flaw Detector

GE,USM36 MY · SG

USM 36 DAC Ultrasonic Testing Package with evaluation using AWS, DAC, JISDAC and TCG. Supplied with MB 4 S/Straight beam probe. MWB 45-4/ Angle Beam Probe, MWB 60-4/ Angle Beam Probe, MWB 70-4 / Angle Beam Probe and Probe MSEB 4-E TR-Prob. Applications include Weld Inspection, Precise Thickness Measurement, Inspection of Forgings and Inspection of Special Materials.



### **Phased Array**

### **Olympus Cobra Scanner**

OLY, COBRA SCANNER MY · SG

Manual scanner used with Omiscan Phased array units. COBRA scanner holds up to two PA probes for inspections on pipes with outside diameters ranging from 0.84 in. to 4.5 in. (21 mm to 114 mm) Suitable to perform circumferential weld inspections on small-diameter pipes.



### PMI, XRF & LIBS Units

# Olympus Vanta Element Handheld XRF Analyser OLY.VANTA ELEMENT SG

Handheld X-Ray Fluorescence (XRF) analyzer provides elemental analysis for alloy grade ID. Rugged and suitable for demanding PMI applications. Data exportable via USB.





Watch how-to/information videos on any piece of equipment displaying this symbol. Visit the TechRentals YouTube page at: www.youtube.com/TechRentals

### Hardness & Holiday Testers



#### **Elcometer 266 DC Holiday Detector**

ELC,266 MY · SG

Can be used to test porosity on coatings up to 7mm thick and is ideal for inspecting coatings on pipelines and other protective coatings. Features a built-in voltage calculator which will determine and set the correct test voltage based upon the test standard and the thickness of coating being tested. Comes with a DC30 (0.5 - 30kV) DC probe handle.



### **Elcometer 266 High Voltage Detector Accessories**

ELC-266-HV Ki MY · SG

High Voltage Detector Accessories consist of: T99922746 - Stainless steel rolling spring holder T99922744-100A -Stainless Steel Rolling Springs (OD - 264mm to 290mm) for nominal pipe size OD 254mm (10inch) T99922744-120A -Stainless Steel Rolling Springs (OD - 320mm to 350mm) for nominal pipe size OD 305mm (12inch).



#### Fischer FMP30 Feritscope

FIS,FMP-30 MY · SG

Suitable to measure ferrite content in austenitic steel and duplex steel. Supplied with Probe FGAB1.3-Fe and calibration standard set. Non-destructive measurement of the ferrite content in a range from 0.1 to 80 % Fe or 0.1 to 110 FN. Data memory up to 20,000 readings and 100 applications for measurement data and application-specific calibrations.



### Mitutoyo SJ-210-NATA Surface Roughness Tester

MIT,SJ210 MY · SG

Comprises LCD display and a detachable detector/drive unit. Parameters measured in Ra, Rq, Ry, Rz, Rt, Rp, R3z, Rk, Rpk, Rvk, S, Sm, Pc, mr, Mr1, Mr2, A1, A2, Vo units. Ranges: 350, 100, 50um & 10um, resolution from 0.01~0.4um. Tip radius 5mm. Data output. NiCd batteries.

## Thickness & Coating Thickness Gauges



# Cygnus 1 Intrinsically Safe Ultrasonic Thickness Gauge CYG,1 IS MY • SG

Rugged, durable, shock-proof construction, stable calibration – linear accuracy – no zero adjustment. For use in Zone 0, Zone 1 hazardous areas, also approved for use in MINES. Supplied with heavy duty remote 2.25MHz x 13 mm (1/2") diameter probe. Accuracy ±0.1mm (±0.004") or 0.1% of thickness measurement, whichever is greatest, when calibrated in accordance with Cygnus Instruments calibration procedure. Resolution 0.1 mm (0.005") or 0.05 mm (0.002").



### **Non-Destructive Testing**

# Defelsko 6000 Ferrous & Non Ferrous Coating Thickness Tester

DEF,POS-6000 (4870) MY · SG

Ferrous/Non Ferrous metal coating thickness tester with storage of up to 100,000 readings. Supplied with external probe, calibration standards and carry pouch. Measurement range 0 to 1500µm or 0 to 60 mils (selectable). Tolerance ±1µm +1% of reading 0-50µm, ±2µm +1% greater than 50um. Resolution 0.1µm. Backglow display, HiLo limits audible & visible alerts when measurements exceed specified limits. Continually displays updates average, standard deviation, min/max thickness and number of readings while measuring. Built in USB, Bluetooth and Wifi for downloading readings.



# PosiTector 200 B & C Ultrasonic Coating Thickness Gauge

DEF,POS-200ADV (4880) MY · SG

Ultrasonic coating thickness gauge with type B & C Probes. Measures coating thickness over wood, concrete, plastics, composites etc. Will measure up to 3 individual layer thickness in a multi-layer system and features a graphic readout. Supplied with both B, 13 to 1000µm for wood, plastic and composites and C probes 50 to 3800µm for coatings on concrete, fibreglass etc. Accuracy is ±2µm +3% of reading.



# Olympus Ultrasonic Thickness Gauge including Transducers

OLY,38DL (4905) MY · SG

Performs non-destructive measurements. Supplied with transducers that can measure the thickness of steel, cast, corroded steel, rubber, fibreglass and composites. Comes with dual and single element transducers including D7906-SM, M1036, and M2008 M109-RM (including delay line M202-RM), and is capable of THRU-COAT®; and Echo-to-Echo measurements on painted and coated surfaces. This handheld device is commonly used to measure the remaining thickness of pipes, tubes, tanks, pressure vessels, hulls, and other structures affected by corrosion or erosion. Features: Thickness range from 0.08mm to 635mm. Colour transflective VGA screen. Rugged design for IP67. Data logging capability.



### **Olympus 27mg Pocket Thickness Gauge**

OLY.27MG (4910) MY · SG

Range 1~500mm, fast min mode. Resolution 0.01mm. Probe operates -20~150°C.





### Videoscopes & Borescopes



# Olympus IPLEX G Lite 3.5 meter Handheld Videoscope

OLY.IPLEX-GL 3.5 MY · SG

IPLEX G Lite 3.5 meter, 4mm diameter handheld videoscope. With an integrated control unit and LCD monitor for one handed operation. Intuitive icons for menu control, 130 deg articulation (up, down, right, left) and 120 deg FOV, HD still image and HD video recording capabilities, compliant to IP55 and insertion tube operable underwater to 3.5m (excluding stereo tip adapters not included).



# Olympus IPLEX-GT 10 Portable Industrial Videoscope

OLY, IPLEX-GT 10 (5103) MY · SG

Battery powered videoscope. 10m insertion tube, 6mm diameter, 4-way, 90° articulation and 120° FOV. Applications include inspection of heat exchangers, turbines, gearboxes, automotive parts and aircraft. Still and video recording to USB flash, approx 3,400 images and 30 mins per 1GB.



# Olympus IPLEX GT 7.5m Portable Industrial Videoscope

OLY.IPLEX-GT 7.5 MY · SG

Battery powered videoscope. 7.5m insertion tube, 6mm diameter, 4-way, 90° articulation and 120° FOV. Applications include inspection of heat exchangers, turbines, gearboxes, automotive parts and aircraft. Still and video recording to USB flash, approx 3,400 images and 30 mins per 1 GB.

NDT Category is currently available in Malaysia and Singapore, however, if you are interested in NDT equipment and are outside these locations please don't hesitate to contact us.







### Safety Solutions

#### **Body-Worn Cameras**



#### **Motorola VT100**

#### MO,BWC VT-100 AU

The VT100 offers a tailored, fully integrated mobile video solution for enterprises. Capture clear 720p HD video and benefit from a user-friendly design. Simple operation and long battery life standby ensures the VT100 integrates seamlessly with existing workflow. Video is secured on the VT100 to protect the integrity of your footage and supports data protection compliance.



#### Motorola VB400

#### MO.BWC VB-440-AUG AU

The VB400 body camera acts as a reliable, independent witness for security personnel, capturing critical moments with confidence. As the next generation of body-worn camera technology, the VB400 combines a rugged build with high-performance features. Its robust design ensures durability, while multiple connectivity options enable seamless integration. Take control of every situation with advanced recording capabilities, providing peace of mind in the most demanding environments.

#### **Nurse Call Systems**



#### **Nurse Call System**

#### TR.EBOX V2 AU

The Nurse Call System provides reliable communications and incident escalation across your entire site with the touch of a button. Configured as part of your radio network, the system can be built into your emergency and evacuation plans to enhance your safety outcomes.

## **Pedestrian Detection Systems**



#### SensorZone Core

#### GKD.SENSORZONE AU

The SensorZone Core is an advanced proximity warning system designed to enhance safety, by creating virtual safety zones around vehicles and machinery. The SensorZone Core alerts operators and nearby personnel to potential hazards, reducing the risk of accidents. Its reliable performance and easy integration make it a vital component in safeguarding workers in high-risk areas.



#### **Pedestrian Detection Systems**

#### SensorZone Portable Unit

#### **GKD,PPWS AU**

The SensorZone Portable Unit offers flexible safety solutions with its mobile proximity warning system. Designed for temporary worksites and dynamic environments, this portable unit provides the same robust safety features as the SensorZone Core, including the creation of virtual safety zones. Its portability ensures that safety protocols can be maintained even in changing conditions, making it ideal for construction sites, roadworks, and other transient settings.



### Two Way Radios

Local Area Mobile

#### Motorola DM4401e

#### MO.DM4401E AU

The Motorola DM4401e is a high-performance digital mobile radio designed to deliver superior voice and data communications in vehicles and as a fixed base unit . With features like integrated GPS, Bluetooth, and enhanced audio, the DM4401e ensures reliable connectivity on the move, making it an ideal choice for professionals who require dependable communication in dynamic environments.



#### Motorola DM4601e

#### MO,DM4601e AU

Empower your workforce with the MOTOTRBO™ DM4601e mobile two-way radio. This advanced device offers seamless voice and data communication, integrated Bluetooth, text messaging, and a 4-line colour display with day/night mode. Experience superior audio with intelligent audio and customisable voice announcements, ensuring clear communication in any environment.





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#### **Local Area Portable**



#### Motorola DP2400e

#### MO,DP2400e AU

Elevate your team's communication with the versatile DP2400e digital radio, designed for seamless scalability and superior audio performance. This model excels in challenging environments, thanks to its Intelligent Audio and voice announcement features that enhance clarity and ease of communication.

The DP2400e also offers analogue compatibility, allowing a gradual shift to digital without disrupting your existing setup. With options in UHF and VHF frequency bands, it provides 32-channel capacity, three programmable buttons, and an IP67 rating for water resistance, all at a competitive value.



#### Motorola DP2600e

#### MO,DP2600e AU

The DP2600e is dual-mode, allowing seamless integration with your existing analogue systems while preparing for a full digital transition. It offers a robust 128-channel capacity, a clear display, and a comprehensive keypad for quick navigation and control.

Built to endure harsh conditions, the DP2600e comes with an IP67 rating, providing superior protection against water and dust. Choose between UHF and VHF frequency bands to suit your specific needs, and experience advanced communication at a great value.



#### Motorola DP4401e

#### MO.DP4401e AU

From the factory to on the road the Motorola DP4401e combines high-performance digital communication with GPS and Bluetooth capabilities. This rugged radio is built to withstand harsh environments, providing clear audio and a wide range of features, including text messaging and data applications, to enhance operational efficiency. It also offers TIA intrinsically safe options for added safety in hazardous environments.



#### **Local Area Portable**

#### Motorola DP4601e

#### MO,DP4601e AU

The DP4601e portable radio offers unrivalled voice and data communication, with optional integrated GPS and Bluetooth. This feature-packed device delivers exceptional audio quality, including Intelligent Audio and customisable voice announcements for real-time status updates.

User-friendly and robust, the DP4601e supports up to 1,000 channels, features a 4-line black-and-white display, a limited keypad, five programmable buttons, a dedicated emergency button, and meets IP68 standards for submersibility. It also offers TIA intrinsically safe options for added safety in hazardous environments.



#### Motorola DP4801e

#### MO,DP4801e AU

The DP480le portable radio delivers exceptional voice and data communication, with optional GPS and Bluetooth integration. It features Intelligent Audio, customisable voice announcements, and supports up to 1,000 channels. Designed for tough conditions, it meets IP68 standards and includes safety options like TIA intrinsic safety.

With a user-friendly interface, 4-line display, and dedicated emergency button, the DP4801e is a reliable choice for critical communication



#### Motorola DP3441e

#### MO,DP3441e AU

The DP4801e portable radio delivers exceptional voice and data The MOTOTRBO™ DP3441e digital two-way radio keeps you agile, better connected, and safer. Designed for mobile professionals, this compact, high-performance device ensures effective communication. With integrated voice and data, these next-generation radios offer comprehensive connectivity, keeping your organisation seamlessly connected.





#### Local Area Portable



#### Motorola DP3661e

#### MO.DP3661e AU

The Motorola DP3661e is a compact and versatile two-way radio that combines the advantages of digital communication with advanced features such as GPS, Bluetooth, and text messaging. Despite its small size, it delivers powerful performance, featuring a display screen and a capacity of up to 1,000 channels. With clear audio and a robust design, the Motorola DP3661e is ideal for industries like construction, manufacturing, and public safety.



#### **Motorola R7 FKP**

#### MO.R7 AU

The Motorola R7 FKP(Full Keypad) is a cutting-edge two-way radio designed for top-tier communication. With a full keypad and large display, it offers easy access to advanced features such as GPS, Bluetooth, and enhanced audio. Ideal for organisations that require high-performance communication tools, the R7 FKP is perfect for ensuring seamless operations in demanding environments.



#### Motorola P7 NKP

#### MO,R7 NKP AU

The Motorola R7 NKP(Non Keypad) provides powerful communication capabilities in a streamlined design. Without a keypad, this model focuses on delivering clear, reliable audio and essential features like GPS and Bluetooth. It's designed for users who need robust communication tools without the complexity of additional buttons and displays.



#### **Local Area Portable**

#### **Motorola R2**

#### MO.R2 AU

The Motorola R7 NKP(Non Keypad) provides powerful communication capabilities in a streamlined design. Without a keypad, this model focuses on delivering clear, reliable audio and essential features like GPS and Bluetooth. It's designed for users who need robust communication tools without the complexity of additional buttons and displays.



#### Motorola Ion

#### MO,ION AU

The Motorola ION is a next-generation communication device that blends the power of Android with the reliability of Motorola's digital two-way radio technology. It offers a fully integrated platform for voice, video, and data communication, enabling teams to stay connected in the most efficient way possible. With access to Google Play, users can download apps to further enhance their workflow, making the ION an all-in-one solution for modern communication needs.



#### **Motorola Curve**

#### CURVE AU

The Motorola Curve is a sleek and compact two-way radio designed for retail, hospitality, and other customer-facing environments. With an easy-to-use interface and clear audio, it ensures that staff can communicate effectively and discreetly. The Curve's lightweight design and intuitive controls make it the ideal choice for businesses that require efficient communication without bulky equipment.



#### **Motorola SL2600**

#### MO,SL2600 AU

The Motorola SL2600 is a slim and sophisticated twoway radio designed for professionals who need discreet and reliable communication. With its lightweight design, virtual keypad, and clear display, the SL2600 is perfect for environments where image and efficiency are crucial. Despite its small size, it delivers powerful performance with features like Bluetooth and enhanced audio.





#### Local Area Portable



#### Motorola DP4401EX

#### MO.DP4401EX AU

The DP4401Ex radio is so rugged and durable that meets the most stringent Intrinsically Safe standard - ATEX/IECEx. Built to meet these high safety standards, it ensures clear and reliable communication in dangerous settings. It supports both voice and data communications and is engineered to withstand tough conditions. The radio also includes emergency functions, customisable alerts, and long battery life, making it an essential tool for professionals across many industries



#### **Motorola DP4801EX**

#### MO,DP4801EX AU

The DP4801Ex radio is a rugged and durable device that meets the most stringent Intrinsically Safe standard - ATEX/IECEx. The Motorola DP4801EX is an advanced intrinsically safe two-way radio that combines powerful digital communication with safety features for use in hazardous environments. With a full colour display, keypad, and GPS, this radio is designed for professionals who require secure, reliable communication across many dangerous workplaces.



#### Motorola MTP8550EX

#### MO,MTP8550EX AU

The Motorola MTP8550Ex is a TETRA two-way radio designed for use in hazardous environments and certfied to the latest standards listed by ATEX and IECEx. It offers full keypad functionality, advanced communication features, including GPS, Bluetooth, and enhanced encryption, ensuring secure and reliable communication even in the most challenging conditions. The MTP8550Ex is built to withstand extreme environments while providing clear and effective communication



#### **Tait TP3300**

#### TA,TP3300BLK AU

The Tait TP3300 is a versatile and durable two-way radio designed for professionals who need reliable communication across various industries. With clear audio, robust design, the TP3300 ensures seamless communication in challenging environments. Whether on the factory floor or out in the field, this radio is built to perform.



#### **Local Area Repeater**

#### **Motorola SLR1000**

#### MO,SLR1000 AU

Keeping your team connected requires uninterrupted radio coverage. Using the SLR 1000 repeater, you can easily extend the range of your network through dead zones and across remote locations, so everyone's within reach. Deploy the SLR 1000 in doors or outside—it's IP65-rated for dust and water protection. The compact size gives you more installation options with a low transmit power, fanless design that uses less space and energy.



#### **Motorola SLR5500**

#### MO,SLR5500 AU

The Motorola SLR5500 is a high-performance digital repeater engineered to provide extensive coverage and increased capacity for MOTOTRBO™ two-way radio systems. Featuring a slim and lightweight design, it seamlessly integrates into existing setups while offering continuous duty cycle for dependable operation. The SLR5500 supports a wide range of frequencies and configurations, including conventional and trunking systems, making it versatile for various industries.



#### **RFI UHF Notch Duplexer**

#### TR, DUPLEXER AU

The RFI UHF Notch Duplexer is a precision-engineered device designed to enable simultaneous transmission and reception on a single antenna by isolating specific frequency bands (Ideal for UHF radio systems).



### **RFI Mini System**

#### TR, MINISYSTEM AU

The MiniSystem Combiner (MSC) is an innovative solution that simplifies the installation of RF combining for applications requiring 1-4 RF channels. It caters for most standard frequency sub-bands, channel spacings and Tx-Rx frequency separations.



### **RFI Bandpass Duplexer**

#### TR.DUPLEXER AU

RFI's range of compact multi-resonator milled aluminium band pass duplexers are ideal for use where space is restricted or at a premium. The relatively broad pass band characteristic, good duplex port to port isolation, high power and multi carrier capability make these ideal duplexers for either single carrier or combined multicarrier systems.





#### Wide Area Mobile

#### M2000A

#### TRT.M2000A AU



Fully equipped with Push-To-Talk over Cellular (PoC) functionality, the M2000A mobile radio can easily be installed into any vehicle. Now you can use this technology for individual or group calls over the cellular 4G network, or Wi-Fi network. Discover instant global connectedness, enhanced security, and easy device integration.

#### Talkpod N86

#### TP,N86 AU

The Talkpod N86 is a versatile mid-tier in-vehicle two-way radio, offering Australia-wide coverage through 4G networks. Its sleek and simple design ensures ease of use, providing a stable and reliable Push-to-Talk over Cellular (PoC) experience. With crystal-clear, loud audio and a comfortable fist microphone, the N86 is built for clear communication on the move.



#### Wave TLK150

#### MO,TLK150 AU

Experience the extensive coverage of a nationwide cellular network combined with the simplicity of two-way communication. Safely operate while driving with a single push-to-talk button. Enhance coverage, connectivity, and productivity without the need to expand your infrastructure.

#### Wide Area Portable



#### P2000

#### TRT.P2000EU 4G AU

The RAPID P2000EU 4G portable radio combines the proven rugged durability and form of a traditional high-quality digital radio with the technology to enable Push-To-Talk over Cellular (PoC) for wide area communications. Users can enjoy extended talk time with the P2000's high-capacity 4000 mAh li-ion battery.

With a superior quality internal mic and speaker, and commercial grade accessory adaptor for the remote speaker microphone or earpiece, the P2000 performs in even the most demanding conditions.



#### **Wide Area Portable**

#### Talkpod N50

#### TP,N50 AU

The Talkpod N50 is a professional-grade Push to Talk over Cellular (PoC) two-way radio that combines durability with advanced communication features. Built to withstand harsh conditions, the N50 offers clear audio quality and a long battery life, making it ideal for demanding work environments. Its compact design allows for easy operation, ensuring that your team stays connected at all times.



#### Talkpod N56

#### TP.N56 AU

The Talkpod N56 Push-to-Talk over Cellular (PoC) handheld radio features a 1.7 inch high-resolution, full-colour LED display and limited keypad for fast & easy operation featuring enhanced audio clarity, the N56 ensures that your messages are heard loud and clear, even in noisy settings. Its rugged design and extended battery life make it suitable for industries such as logistics, security and event management.



#### Wave TLK100

#### MO,TLK100i AU

The Wave TLK100 is a Push-to-Talk over Cellular (PoC) device that combines the convenience of two-way radio with the coverage of a nationwide mobile network. Designed for businesses that need to stay connected across large areas, the TLK100 offers instant communication with no need for infrastructure. Its sleek design, durable build, and ease of use make it a practical choice for organisations seeking reliable and wide-reaching communication.



#### Wave TLK110

#### MO,TLK110 AU

The Wave TLK110 is an advanced Push-to-Talk over Cellular (PoC) device that provides seamless communication across wide geographic areas. Ideal for teams that need to coordinate in real-time, the TLK110 offers the simplicity of a two-way radio with the extensive coverage of a mobile network. Its rugged construction and intuitive interface ensure dependable communication, whether in the field or on the move.







# **Next Generation Radio**

TechRentals' Push-to- talk-over-Cellular (PTToC) solution, **RAPID**, leads the way in giving you nationwide access to your teams throughout Australia. Either one-to-one or one-to-many, you can communicate with your team using our RAPID Radio next generation solution and experience the superior audio clarity and system performance. Managing your team over a wide area has never been easier or more cost effective.



#### **Discover The RAPID Difference**



**Easy-to-Use:** Instant communication with superior audio quality.



**Quality:** True quality enterprise solution, devices, and voice transmission.



Cost & Efficiency: Reduced infrastructure costs and easy deployment.



Security: High level of security features and protocols.

Available for Australia only.



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### Satellite Devices

#### **Satellite Phones**



#### **Iridium 9575 Extreme**

#### IR.IRID9575 AU

The Iridium 9575 Extreme is Iridium's toughest satellite phone, packed with more features than any other on the market, including real-time tracking and GPS-enabled SOS. Built to military specifications, it can withstand harsh conditions. Paired with the Iridium network, which offers truly global and reliable communications, the 9575 Extreme stands as the top satellite phone available.



#### **Inmarsat Isat Phone Pro 2**

#### **IN.ISATPHONE PRO2 AU**

With 160 hours standby time and network registration in just 45 seconds (with optimum signal), you can rely on the IsatPhone 2 for making satellite calls, sending and receiving texts, emailing, and retrieving voicemails; with the added assurance of GPS tracking and a dedicated assistance button. With a dust, splash, and shock resistant design, (IP65, IK04) and an operating range between -20°C and +55°C, the IsatPhone 2 is the robust option for your satellite phone needs.

#### Satellite PTT (Push to Talk)



#### **Iridium Extreme PTT**

#### IR, IRID9575PTT AU

The Iridium Extreme PTT is designed for high-intensity team communications in the toughest environments. The Iridium 9575 PTT functions both as a satellite handset and a push-to-talk (PTT) device, enabling PTT communication via satellite at the press of a button. It offers global, reliable connectivity with a loud audio speaker, reinforced PTT button, and extended battery. The intuitive interface supports voice calls, SMS, SOS, and instant, secure push-to-talk, keeping you connected with your team anywhere in the world.



#### Icom IC-SAT100 PTT

#### IC,SAT100 AU

The IC-SAT100 offers a rugged LMR experience with its IP67-rated durable housing, loud front-ported speaker, easy-to-use volume and talkgroup selectors, and replaceable antenna. It operates on Iridium Push-To-Talk for global communication and is compatible with Iridium PTT operations.



#### Satellite Internet

#### **Starlink**

#### **Starlink**

#### ST.STARLINK AU

Starlink is the world's first and largest satellite constellation using a low Earth orbit to deliver broadband internet capable of supporting streaming, online gaming, video calls and more. Leveraging advanced satellites and user hardware, Starlink delivers high-speed, low-latency internet to users all over the world. It can deliver download speeds of over 220 mb/s and upload speeds of up to 25 mb/s from anywhere in Australia with a clear view of the sky.



#### **Explorer BGAN 710**

#### IN,BGAN710 AU

The Cobham Explorer 710 BGAN Terminal is the world's smallest and lightest Class 1 BGAN terminal, offering reliable global communication. It supports wireless connectivity for smart devices and can bond signals for IP streaming rates up to 1 Mbps. With streaming rates over 650 kbps out of the box, it features a USB host interface, hot-swappable batteries, and an easy-to-use LED display, all in a compact, portable design.



#### **Iridium GO EXEC**

#### IR, IRIDGOEXEC AU

The Iridium GO EXEC® combines a battery-powered Wi-Fi access device with the global coverage of an Iridium® satellite phone, offering wireless internet connectivity for smartphones and laptops. It supports two high-quality voice lines simultaneously. Compact and lightweight, Iridium GO exec meets both personal and professional connectivity needs, keeping you connected via chat, email, social media, and other popular apps, wherever you are.



#### **Iridium 9575 Drive Dock**

#### IR.DOCK9575 AU

The Vehicular Docking Station enables the use of the Iridium 9575 Extreme and PTT model in vehicles and marine vessels. Includes rugged connectors for wide-ranging vehicle voltages; 9 to 32VDC. Easy connection to an antenna for Iridium and GPS. Supports third party PTT accessories. No need to exit the vehicle/vessel to communicate.





# SATELLITE PHONE COMMUNICATION SOLUTIONS

UNBEATABLE COVERAGE, ANYTIME, ANYWHERE

# Stay connected with satellite equipment rental.

Whether you're looking for satellite telephone, satellite push-to-talk, or data solutions, we have you covered. We provide a range of rental and purchase options designed to solve a variety of needs including remote site work, welfare checks, and transmitting of field data in real time.

#### **Benefits of SAT Communication:**



#### **KEEPING YOU CONNECTED**

A truly global solution to make contact anywhere, anytime.



#### **CHAT FOR LESS**

With competitive market rates, you can now make satellite calls at normal mobile rates.



#### **EMERGENCY FEATURES**

Most satellite handsets today provide GPS coordinates, emergency rescue assistance, and free 000 calls.





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HOL, OX 120 - 0 1410	GRA,SQ2020-1F892	•	JOF,CTC-1200A90
HACH PACIFIC         HAC, AS950       152       HOL, HI-3604       12       JUMO         HAGNER         HAG, EC1-X       152       HPI CYPHER       JUM,1030-0-10BAR       .85         HAMILTON       HOL, HI-3627       KEYSIGHT         HAMILTON       HUKSEFLUX       KEY,33612A       .8         HANNA INSTRUMENTS       HUK, FTN02       .39       KEY,34461A       .7         HAN, 9829-4M       150       HVD, HVA TD60-MC       .56       KEY,E4416A       .20         HULTI       HUC, HI-3607 DC/VLF       .56       KEY,E4418B       .20         HUD, HVA30-DC/VLF       .56       KEY,MS06104A       .8         HVD, HVA94       .57       KEY,N9344C       .16         KEY,N9344C-TG       .16         KEY,N9344C-TG       .16         KEY,N9344C-TG       .16         KIKUSUI       KIK,PLZ1003W       .10	GRA,TX150-ST589	HOB,UX120-014W93	
HACH PACIFIC         HAC, AS950       152       HOL, HI-3604       12       JUMO         HAGNER         HAG, EC1-X       152       HPI CYPHER       JUM,1030-0-10BAR       .85         HAMILTON       HOL, HI-3627       KEYSIGHT         HAMILTON       HUKSEFLUX       KEY,33612A       .8         HANNA INSTRUMENTS       HUK, FTN02       .39       KEY,34461A       .7         HAN, 9829-4M       150       HVD, HVA TD60-MC       .56       KEY,E4416A       .20         HULTI       HUC, HI-3607 DC/VLF       .56       KEY,E4418B       .20         HUD, HVA30-DC/VLF       .56       KEY,MS06104A       .8         HVD, HVA94       .57       KEY,N9344C       .16         KEY,N9344C-TG       .16         KEY,N9344C-TG       .16         KEY,N9344C-TG       .16         KIKUSUI       KIK,PLZ1003W       .10		HOLADAVINSTRUMENTS	JOF,CTC-660A90
HAC, AS950	HACH PACIFIC		
HAGNER HAG,EC1-X	HAC, AS950152		
HAG,EC1-X		HOL,HI-302712	JUMO
HAG,EC1-X	HAGNER	HPICYPHER	JUM,1030-0-10BAR85
HAMILTON HAM, BEVERLY	HAG,EC1-X152		
HORSEFLUX         HAM, BEVERLY       150       HUK, FTN02       39       KEY, 34461A       .7         KEY, DSOX3024A       .8         KEY, E4416A       .20         KEY, E4418B       .20         HULTI       HVD, HVA TD60-MC       .56       KEY, E4418B       .20         HVD, HVA30-DC/VLF       .56       KEY, E5071C       .17         HVD, HVA60-DC/VLF       .57       KEY, MSO6104A       .8         HVD, HVA94       .57       KEY, N9344C       .16         KEY, N9344C-TG       .16         KEY, N9344C-TG       .16         KEY, N9344C-TG       .16         KIKUSUI       KIK, PLZ1003W       .10		111 1,011 1121 10000	
HAM,BEVERLY		HUKSEFLUX	
HANNA INSTRUMENTS HAN,9829-4M 150 HILTI HIL,PS1000 117 HIOKI HIO,3169-20 47 HIO,3360-21 46 HANNA INSTRUMENTS HV DIAGNOSTICS HVD,HVA TD60-MC 56 HVD,HVA TD60-MC 56 HVD,HVA TD60-MC 56 HVD,HVA30-DC/VLF 56 HVD,HVA60-DC/VLF 57 HVD,HVA94 57 KEY,MS06104A 8 KEY,E4418B 20 KEY,E5071C 17 KEY,MS06104A 8 KEY,N9344C 16 KEY,N9344C 16 KEY,N9344C 16	HAM,BEVERLY150		
HAN,9829-4M			
HILTI HIL,PS1000		HV DIAGNOSTICS	KEY,E4416A20
HILTI HIL, PS1000	HAN,9829-4M150	HVD.HVA TD60-MC56	
HILTI HIL,PS1000			KEY,E5071C17
HIC,P\$1000			KEY,MSO6104A8
HIOKI HIO,3169-20	HIL,PS100011/		
HIO,3169-20	LUCK!		KEY,N9344C-TG16
HIO,3360-2146 KIK,PLZ1003W10		ICOM	
T(T() LZ 1000V10		IC,SAT100178	
HIU,355451	, , , , , , , , , , , , , , , , , , ,		
	HIU,355466		KIK,TOS-510151



KINKI28010_2600						
RYORITSU   RYO4200	KINGFISHER		MEG,TTR100-1	58	MO,TLK11017	75
KYO,4200	KIN,KI28010_2600	28	MEG,TXL870	67	MO,TLK1501	74
RYO,4200			PRO,TORKEL-860	67		
LEICA						
LEIBLK360	KYO,4200	39	METREL		MON,PLT200-KIT	79
LEI,BLK360						
LEI,BLK360 G2						
LEI, COMPUTER					MUL,MS-26	60
LEI,DISTOD8 125 MET,MISTOS 36 NAR,NBM-550 13 LEI,GS16-NET 130 MET,MISSOS 38 NAR,RADMAN 143 LEI,GS18 BASE-UHF 131 MET,MISSOS 38 NAR,RADMAN 143 LEI,GS18 ROVER-NET 130 LEI,TS16 3SEC_CS20 128  METRIX NETSCOUT NET,AIRCHECK G2 25 LEI,TS16 3SEC_CS20 128  MICROSENSE NETALLY LOVIBOND MIC,MISOO 147 NET,EXG-200 25 LOV,MD100-CL-DUO 157 MIC,MISOO 147 NET,EXG-300 24 NET,LR-10G 24  MADGETECH MITUTOO MAD,TSR101-EB-5 109 MIT,PRO360 105 NOVATECH MEC,AFG-1000NALC 107 CURVE 171 NTI,XL2+M2230 138  MEGGER MEG,BWASOO 67 MO,BWC VB-440-AUG 166 MEG,DLRO100XB 41 MO,DP4601e 167 APT,DDA/LH2S-200 145 MEG,DLRO10DX 40 MO,DP4601e 167 APT,DDA/LH2S-200 145 MEG,DLRO10DX 41 MO,DP2600e 168 MEG,DLRO10DX 41 MO,DP3661e 170 OLY,27MG 163 MEG,DLRO200 41 MO,DP3661e 170 OLY,38DL 106 MEG,DLRO20 42 MO,DP4401E 169 OLY,38DL 106 MEG,DLRO20 52 MO,DP4801E 169 OLY,38DL 106 MEG,MIT1025 52 MO,DP4801E 169 OLY,28DL 106 MEG,MIT025 52 MO,DP4801E 169 OLY,38DL 106 MEG,MIT025 52 MO,DP4801E 169 OLY,28DL 106 MEG,MIT025 52 MO,DP4801E 171 OLY,PLEX-GL 3.5 164 MEG,MIT025 54 MO,DR 371 170 OLY,PLEX-GL 3.5 164 MEG,MIT025 56 MO,DR 371 170 OLY,PLEX-GL 3.5 164 MEG,MIT025 66 MO,SL 81000 173 OLY,PLEX-GT 15 164 MEG,ROT330 38 MO,SL 2600 171 OLY,PLEX-GT 15 164 MEG,TDRO000-39 35 MO,SL 81000 175 OLY,PLEX-RT 75 76 MEG,SVERKER/80 64 MO,SL 81000 175 OLY,PLEX-RT 75 76 MEG,SVERKER/80 66 MO,SL 81000 175 OLY,PLEX-RT 75 76 MEG,SVERKER/80 66 MO,SL 81000 175 OLY,PLEX-RT 75 76 MEG,SVERKER/80 66 MO,SL 81000 175 OLY,PLEX-RT 75 76						
LEI,GS16-NET						
LEI,GS18 BASE-UHF 131 MET,MI3360-25A 38 NAR,RADMAN-2XT 143 LEI,GS18 ROVER-NET 130 LEI,RTC360 129 METRIX NET,AIRCHECK G2 25 LEI,TS16_3SEC_CS20 128 MICROSENSE NET,AIRCHECK G2 25 LEI,TS16_3SEC_CS20 128 MICROSENSE NET,AIRCHECK G2 25 LEI,TS16_3SEC_CS20 128 MICROSENSE NET,AIRCHECK G2 25 NET,AIRCHDOLO 157 MIC,MI500 147 NET,EXG-200 25 NET,LR-10G 24 NET,LR-10					•	
LEI,GS18 ROVER-NET 130 LEI,RTC360. 129 METRIX MET,MX2040 48 NET,AIRCHECK G2. 25 LEI,TS16_3SEC_CS20 128  MICROSENSE NETALLY LOVIBOND MIC,M5000 147 NET,EXG-200 25 LOV,MD100-CL-DUO 157 MIC,M5000 147 NET,EXG-300 24 MAD,TSR101-EB-5 109 MIT,PR0360 105 NOVATECH MAD,TSR101-EB-5 109 MIT,PR0360 105 NOVATECH MEC,AFG-1000NALC 107 MOTOROLA NTI CURVE 171 NTI,XL2+M2230 138  MEG,BVM300 67 MO,BWC VB-440-AUG 166 MEG,DCM1500S 36 MO,DM4401e 167 APT,ODA7000CP 145 MEG,DET2/3 40 MO,DP2400e 168 MEG,DLR010HDX 40 MO,DP2400e 168 MEG,DLR010HDX 40 MO,DP2400e 168 MEG,DLR010HDX 40 MO,DP2600e 168 MEG,DLR010HDX 40 MO,DP2600e 168 MEG,DLR010HDX 40 MO,DP3661e 170 OLY,27MG 105 MEG,DLRO-LEADSET 42 MO,DP4401E 169 OLY,28BDL 106 MEG,DLRO-LEADSET 42 MO,DP4401E 169 OLY,38BDL 106 MEG,DLRO-LEADSET 42 MO,DP4401E 169 OLY,38BDL 106 MEG,MIT025 52 MO,DP4801E 169 OLY,38BDL 106 MEG,MIT025 52 MO,DP4801E 169 OLY,28BDL 163 MEG,MIT025 52 MO,DP4801E 169 OLY,28BDL 163 MEG,MIT025 52 MO,DP4801E 169 OLY,2FNGE 166 MEG,MIT025 52 MO,DP4801E 169 OLY,2FNGE 160 MEG,MIT025 52 MO,DP4801E 170 OLY,PLEX-GL 2.4 75 MEG,MOM2 42 MO,MTP8550EX 172 MO,RT NRP 170 OLY,PLEX-GL 3.5 164 MEG,PT-SCAN 52 MO,RT NRP 170 OLY,PLEX-GT 10 164 MEG,ROT330 38 MO,SL2600 171 MO,SLR5000 173 OLY,PLEX-RT 5. 76 MEG,TDR2000-3P 35 MO,SLR5000 173 OLY,PLEX-RT 5. 76 MEG,TDR2000-3P 35 MO,SLR5000 173 OLY,PLEX-RT 5. 76 MEG,TDR2000-3P 35 MO,SLR5000 175			MET,MI3309	38		
LEI,RTC360			MET,MI3360-25A	38	NAR,RADMAN-2XT14	43
LEI,TRAVERSE						
LEI,TS16_3SEC_CS20   128						0.5
MICROSENSE   NETALLY	LEI,TRAVERSE	132	MET,MX2040	48	NE I, AIRCHECK G2	25
NET,EXG-200	LEI,TS16_3SEC_CS20	128				
MADGETECH						
MADGETECH         MITUTOYO           MAD,TSR101-EB-5         109         MIT,PRO360         105         NOVATECH           MEC,MESIN         MIT,SJ210         106, 162         NOV,1637-5         101           MEC,AFG-1000NALC         107         MOTOROLA         NTI         NTI,XL2+M2230         138           MEGGER         MO,BWC VB-440-AUG         166         ODALOG           MEG,BVM300         67         MO,BWC VB-440-AUG         166           MEG,DCM1500S         36         MO,DM4401e         167         APT,ODA7000CP         145           MEG,DCM1500S         36         MO,DM4401e         167         APT,ODA7000CP         145           MEG,DLR0100XB         41         MO,DP2400e         168         APT,ODALL-H2S-200         145           MEG,DLR010X         41         MO,DP2600e         168         OLY,27MG         105           MEG,DLR0600         42         MO,DP3441e         169         OLY,27MG         163           MEG,DLRO-LEADSET         42         MO,DP4401e         168         OLY,38DL         106           MEG,DLRO-LEADSET         42         MO,DP4401e         169         OLY,38DL         163           MEG,MIT1025         52         MO,DP4						
MADGETECH         MITUTOYO           MAD,TSR101-EB-5.         109         MIT,PRO360	LOV,MD100-CL-DUO	157	MIC,M5000	147		
MAD,TSR101-EB-5         109         MIT,PRO360         105         NOVATECH           MECMESIN         MIT,SJ210         106, 162         NOV,1637-5         101           MEG, AFG-1000NALC         107         MOTOROLA         NTI         NTI,XL2+M2230         138           MEGGER         MC,BWC VB-440-AUG         166         ODALOG           MEG, BVM300         67         MO,BWC VT-100         166         ODALOG           MEG, DCM1500S         36         MO,DM4401e         167         APT,ODA7000CP         145           MEG, DET2/3         40         MO,DM4601e         167         APT,ODA7000CP         145           MEG,DLR0100XB         41         MO,DP2400e         168         APT,ODA7000CP         145           MEG,DLR010DX         40         MO,DP2600e         168         OLY,27MG         105           MEG,DLR010X         41         MO,DP3661e         170         OLY,27MG         105           MEG,DLR0600         42         MO,DP4401e         168         OLY,38DL         106           MEG,DLRO-LEADSET         42         MO,DP4401eX         172         OLY,38DL         163           MEG,INGWAR         60         MO,DP4801e         169         OLY,					NET,LR-10G2	24
MECMESIN           MEG, AFG-1000NALC         107         MOTOROLA         NTI           MEG, BVM300         67         MO, BWC VB-440-AUG         166           MEG, BVM300         67         MO, BWC VT-100         166         ODALOG           MEG, DCM1500S         36         MO, DM4401e         167         APT, ODA7000CP         145           MEG, DET2/3         40         MO, DM4401e         167         APT, ODA7000CP         145           MEG, DLR0100XB         41         MO, DP2400e         168         APT, ODA7000CP         145           MEG, DLR010DX         40         MO, DP2600e         168         OLY.27MG         105           MEG, DLR0200         41         MO, DP3661e         170         OLY.27MG         105           MEG, DLR0600         42         MO, DP3661e         170         OLY.38DL         106           MEG, DLRO200         41         MO, DP4401e         168         OLY.38DL         106           MEG, DLRO4CLEADSET         42         MO, DP4601e         169         OLY.38DL PROBES         106           MEG, DLRO4CLEADSET         42						
MECMESIN           MEC, AFG-1000NALC         107         MOTOROLA         NTI           CURVE         171         NTI, XL2+M2230         138           MEGGER         MO,BWC VB-440-AUG         166           MEG, BVM300         67         MO,BWC VT-100         166         ODALOG           MEG, DCM1500S         36         MO,DM4401e         167         APT,ODA7000CP         145           MEG, DER0100XB         41         MO,DP2400e         168         APT,ODALL-H2S-200         145           MEG, DLR010XB         41         MO,DP2400e         168         APT,ODALL-H2S-200         145           MEG, DLR010XB         41         MO,DP2600e         168         OLYMPUS/EVIDENT           MEG, DLR010X         41         MO,DP2600e         168         OLY,27MG         105           MEG, DLR010X         41         MO,DP3661e         170         OLY,27MG         105           MEG, DLR0600         42         MO,DP4401e         168         OLY,38DL         106           MEG, DLR0600         42         MO,DP4401eX         172         OLY,38DL         106           MEG, DLR0600         42         MO,DP4801e         169         OLY,38DL         106 <t< td=""><td>MAD,TSR101-EB-5</td><td>109</td><td></td><td></td><td></td><td>0.4</td></t<>	MAD,TSR101-EB-5	109				0.4
MEGGER         MOTOROLA         NTI           MEGGER         MO,BWC VB-440-AUG         166           MEG, BVM300         67         MO,BWC VT-100         166           MEG, DCM1500S         36         MO,DM4401e         167         APT,ODA7000CP         145           MEG, DET2/3         40         MO,DM4601e         167         APT,ODALL-H2S-200         145           MEG, DLR0100XB         41         MO,DP2400e         168         OLYMPUS/EVIDENT           MEG, DLR010DX         40         MO,DP2400e         168         OLY,27MG         105           MEG, DLR010X         41         MO,DP3441e         169         OLY,27MG         105           MEG, DLR0200         41         MO,DP3661e         170         OLY,27MG         163           MEG,DLR0600         42         MO,DP4401e         168         OLY,38DL         106           MEG,DLR0-LEADSET         42         MO,DP4401e         168         OLY,38DL         106           MEG,BLRO-LEADSET         42         MO,DP4601e         169         OLY,38DL         163           MEG,BLRO-LEADSET         42         MO,DP4801e         169         OLY,COBRA SCANNER         161           MEG,INGVAR         60			MIT,SJ2101	106, 162	NOV,1637-510	U1
CURVE         171         NTI,XL2+M2230         138           MEGGER         MO,BWC VB-440-AUG         166         ODALOG           MEG,BVM300         .67         MO,BWC VT-100         166         ODALOG           MEG,DCM1500S         .36         MO,DM4401e         167         APT,ODA7000CP         .145           MEG,DET2/3         .40         MO,DM4601e         .167         APT,ODALL-H2S-200         .145           MEG,DLR0100XB         .41         MO,DP2400e         .168         APT,ODALL-H2S-200         .145           MEG,DLR010DX         .40         MO,DP2600e         .168         OLY27MG         .105           MEG,DLR010X         .41         MO,DP3661e         .170         OLY.27MG         .105           MEG,DLR0200         .41         MO,DP3661e         .170         OLY.27MG         .163           MEG,DLR0600         .42         MO,DP4401e         .168         OLY,38DL         .106           MEG,DLR0-LEADSET         .42         MO,DP4401e         .168         OLY,38DL         .163           MEG,BIRO-LEADSET         .42         MO,DP4601e         .169         OLY,38DL PROBES         .106           MEG,INGVAR         .60	MECMESIN					
MEGGER         MO,BWC VB-440-AUG         166           MEG,BVM300         67         MO,BWC VT-100         166           MEG,DCM1500S         36         MO,DM4401e         167         APT,ODA7000CP         145           MEG,DET2/3         40         MO,DM4601e         167         APT,ODALL-H2S-200         145           MEG,DLR0100XB         41         MO,DP2400e         168         DLYMPUS/EVIDENT           MEG,DLR010HDX         40         MO,DP2600e         168         OLY,27MG         105           MEG,DLR010X         41         MO,DP3441e         169         OLY,27MG         105           MEG,DLR0600         41         MO,DP3661e         170         OLY,38DL         106           MEG,DLR0600         42         MO,DP4401e         168         OLY,38DL         106           MEG,DLR0-LEADSET         42         MO,DP4401e         168         OLY,38DL         106           MEG,INGVAR         60         MO,DP4401e         169         OLY,38DL         163           MEG,INGVAR         60         MO,DP4801e         169         OLY,COBRA SCANNER         161           MEG,MIT1025         52         MO,IDP4801EX         172         OLY,IPLEX-GL 2.4         .75 </td <td></td> <td>40=</td> <td></td> <td></td> <td>AUTO</td> <td></td>		40=			AUTO	
MEG,BVM300         67         MO,BWC VT-100         166         ODALOG           MEG,DCM1500S         36         MO,DM4401e         167         APT,ODA7000CP         145           MEG,DET2/3         40         MO,DM4601e         167         APT,ODALL-H2S-200         145           MEG,DLRO100XB         41         MO,DP2400e         168         DLYMPUS/EVIDENT           MEG,DLRO10HDX         40         MO,DP2600e         168         OLY,27MG         105           MEG,DLRO200         41         MO,DP3661e         170         OLY,27MG         163           MEG,DLRO600         42         MO,DP4401e         168         OLY,38DL         106           MEG,DLRO-LEADSET         42         MO,DP4401e         168         OLY,38DL         106           MEG,INGVAR         60         MO,DP4601e         169         OLY,38DL PROBES         106           MEG,INGVAR         60         MO,DP4801e         169         OLY,COBRA SCANNER         161           MEG,MIT1025         52         MO,IDN         171         OLY,IPLEX-GL 2.4         .75           MEG,MOM2         42         MO,MTP8550EX         172         OLY,IPLEX-GL 3.5         164           MEG,PAT420         37	MEC,AFG-1000NALC	107		474		20
MEG,DCM1500S         36         MO,DM4401e         167         APT,ODA7000CP         145           MEG,DET2/3         40         MO,DM4601e         167         APT,ODALL-H2S-200         145           MEG,DLRO100XB         41         MO,DP2400e         168         OLYMPUS/EVIDENT           MEG,DLRO10HDX         40         MO,DP2600e         168         OLY,27MG         105           MEG,DLRO200         41         MO,DP3661e         170         OLY,27MG         163           MEG,DLRO600         42         MO,DP4401e         168         OLY,38DL         106           MEG,DLRO-LEADSET         42         MO,DP4401EX         172         OLY,38DL         106           MEG,INGVAR         60         MO,DP4601e         169         OLY,COBRA SCANNER         161           MEG,MIT1025         52         MO,DP4801EX         172         OLY,EPOCH650         160           MEG,MIT525         52         MO,ION         171         OLY,IPLEX-GL 2.4         .75           MEG,MOM2         42         MO,MTP8550EX         172         OLY,IPLEX-GL 3.5         164           MEG,PAT420         37         MO,R7         170         OLY,IPLEX-GT 10         .76           MEG,PO-SCAN		107	CURVE			38
MEG,DET2/3         40         MO,DM4601e         167         APT,ODALL-H2S-200         145           MEG,DLRO100XB         41         MO,DP2400e         168           MEG,DLRO10HDX         40         MO,DP2600e         168           MEG,DLRO10X         41         MO,DP2600e         168           MEG,DLRO200         41         MO,DP3441e         169           MEG,DLRO600         42         MO,DP4401e         168           MEG,DLRO-LEADSET         42         MO,DP4401e         168           MEG,DLRO-LEADSET         42         MO,DP4401EX         172           MEG,INGVAR         60         MO,DP4601e         169         OLY,38DL         106           MEG,MIT1025         52         MO,DP4801e         169         OLY,COBRA SCANNER         161           MEG,MIT525         52         MO,DP4801EX         172         OLY,COBRA SCANNER         161           MEG,MOM2         42         MO,DP4801EX         172         OLY,EPOCH650         160           MEG,MOM2         42         MO,MTP8550EX         172         OLY,IPLEX-GL 2.4         .75           MEG,MWA330A         58         MO,R2         171         OLY,IPLEX-GT 1.5         164           MEG,	MEGGER		CURVE MO,BWC VB-440-AUG	166	NTI,XL2+M223013	38
MEG,DLRO100XB         41         MO,DP2400e         168           MEG,DLRO10HDX         40         MO,DP2600e         168           MEG,DLRO10X         41         MO,DP2600e         168           MEG,DLRO200         41         MO,DP3441e         169           MEG,DLRO600         42         MO,DP3661e         170           MEG,DLRO-LEADSET         42         MO,DP4401e         168           MEG,DLRO-LEADSET         42         MO,DP4401EX         172           MEG,EZ-THUMP12         35         MO,DP4601e         169           MEG,INGVAR         60         MO,DP4801e         169           MEG,MIT1025         52         MO,DP4801EX         172           MEG,MIT525         52         MO,ION         171           MEG,MOM2         42         MO,MTP8550EX         172           MEG,MWA330A         58         MO,R2         171           MEG,PAT420         37         MO,R7         170           MEG,PO-SCAN         52         MO,R7 NKP         170           MEG,RCDT330         38         MO,SL2600         171           MEG,SVERKER780         64         MO,SLR5500         173           MEG,TDR2000-3P	MEGGER MEG,BVM300	67	CURVE MO,BWC VB-440-AUG MO,BWC VT-100	1166 166	NTI,XL2+M223013	
MEG,DLRO10HDX.         40         MO,DP2600e         168         OLYMPUS/EVIDENT           MEG,DLRO10X         41         MO,DP3441e         169         OLY,27MG         105           MEG,DLRO200         41         MO,DP3661e         170         OLY,27MG         163           MEG,DLRO600         42         MO,DP4401e         168         OLY,38DL         106           MEG,DLRO-LEADSET         42         MO,DP4401EX         172         OLY,38DL         163           MEG,EZ-THUMP12         35         MO,DP4401EX         172         OLY,38DL         163           MEG,INGVAR         60         MO,DP4601e         169         OLY,COBRA SCANNER         161           MEG,MIT1025         52         MO,DP4801EX         172         OLY,EPOCH650         160           MEG,MIT525         52         MO,ION         171         OLY,IPLEX-GL 2.4         .75           MEG,MOM2         42         MO,MTP8550EX         172         OLY,IPLEX-GL 3.5         164           MEG,MWA330A         58         MO,R2         171         OLY,IPLEX-GL 3.5-6         .75           MEG,PD-SCAN         52         MO,R7 NKP         170         OLY,IPLEX-GT 10         164           MEG,SVERKER780	MEG,BVM300 MEG,DCM1500S	67 36	CURVE MO,BWC VB-440-AUG MO,BWC VT-100 MO,DM4401e	1166 166 167	NTI,XL2+M223013  ODALOG  APT,ODA7000CP14	45
MEG,DLRO10X         41         MO,DP3441e         169         OLY,27MG         105           MEG,DLRO200         41         MO,DP3661e         170         OLY,27MG         163           MEG,DLRO600         42         MO,DP4401e         168         OLY,38DL         106           MEG,DLRO-LEADSET         42         MO,DP4401EX         172         OLY,38DL         163           MEG,EZ-THUMP12         35         MO,DP4601e         169         OLY,38DL PROBES         106           MEG,INGVAR         60         MO,DP4801e         169         OLY,COBRA SCANNER         161           MEG,MIT1025         52         MO,DP4801EX         172         OLY,EPOCH650         160           MEG,MIT525         52         MO,ION         171         OLY,IPLEX-GL 2.4         .75           MEG,MOM2         42         MO,MTP8550EX         172         OLY,IPLEX-GL 3.5         164           MEG,MWA330A         58         MO,R2         171         OLY,IPLEX-GL 3.5-6         .75           MEG,PD-SCAN         52         MO,R7 NKP         170         OLY,IPLEX-GT 10         .164           MEG,SVERKER780         64         MO,SLR5500         173         OLY,IPLEX-GT 7.5         .76	MEG, DET2/3	67 36 40	CURVE MO,BWC VB-440-AUG MO,BWC VT-100 MO,DM4401e MO,DM4601e	166 166 167 167	NTI,XL2+M223013  ODALOG  APT,ODA7000CP14	45
MEG,DLRO200         .41         MO,DP3661e         170         OLY,27MG         .163           MEG,DLRO600         .42         MO,DP4401e         .168         OLY,38DL         .106           MEG,DLRO-LEADSET         .42         MO,DP4401EX         .172         OLY,38DL         .163           MEG,EZ-THUMP12         .35         MO,DP4601e         .169         OLY,38DL PROBES         .106           MEG,INGVAR         .60         MO,DP4801e         .169         OLY,COBRA SCANNER         .161           MEG,MIT1025         .52         MO,DP4801EX         .172         OLY,EPOCH650         .160           MEG,MIT525         .52         MO,ION         .171         OLY,IPLEX-GL 2.4         .75           MEG,MOM2         .42         MO,MTP8550EX         .172         OLY,IPLEX-GL 3.5         .164           MEG,MWA330A         .58         MO,R2         .171         OLY,IPLEX-GL 3.5-6         .75           MEG,PAT420         .37         MO,R7         .170         OLY,IPLEX-GT 10         .76           MEG,RCDT330         .38         MO,SL2600         .171         OLY,IPLEX-GT 7.5         .76           MEG,SVERKER780         .64         MO,SLR5500         .173         OLY,IPLEX-GT 7.5         .1	MEG,BVM300 MEG,DCM1500S MEG,DET2/3 MEG,DLRO100XB	67 36 40 41	CURVE	166 166 167 167 168	NTI,XL2+M223013  ODALOG  APT,ODA7000CP14  APT,ODALL-H2S-20014	45
MEG,DLRO600.         42         MO,DP4401e         168         OLY,38DL         106           MEG,DLRO-LEADSET         .42         MO,DP4401EX         172         OLY,38DL         163           MEG,EZ-THUMP12         .35         MO,DP4601e         169         OLY,38DL PROBES         106           MEG,INGVAR         .60         MO,DP4801e         169         OLY,COBRA SCANNER         161           MEG,MIT1025         .52         MO,DP4801EX         172         OLY,EPOCH650         160           MEG,MIT525         .52         MO,ION         171         OLY,IPLEX-GL 2.4         .75           MEG,MOM2         .42         MO,MTP8550EX         172         OLY,IPLEX-GL 3.5         164           MEG,MWA330A         .58         MO,R2         171         OLY,IPLEX-GL 3.5-6         .75           MEG,PAT420         .37         MO,R7         170         OLY,IPLEX-GT 10         .76           MEG,PD-SCAN         .52         MO,R7 NKP         170         OLY,IPLEX-GT 7.5         .76           MEG,SVERKER780         .64         MO,SLR500         173         OLY,IPLEX-GT 7.5         .76           MEG,TDR2000-3P         .35         MO,SLR5500         173         OLY,IPLEX-RX         .76     <	MEG, DLRO10HDX	67 36 40 41	CURVE	166 166 167 167 168	NTI,XL2+M223013  ODALOG  APT,ODA7000CP14  APT,ODALL-H2S-20012  OLYMPUS/EVIDENT	45 45
MEG,DLRO-LEADSET         .42         MO,DP4401EX         172         OLY,38DL         163           MEG,EZ-THUMP12         .35         MO,DP4601e         169         OLY,38DL PROBES         106           MEG,INGVAR         .60         MO,DP4801e         169         OLY,COBRA SCANNER         161           MEG,MIT1025         .52         MO,DP4801EX         172         OLY,EPOCH650         160           MEG,MIT525         .52         MO,ION         171         OLY,IPLEX-GL 2.4         .75           MEG,MOM2         .42         MO,MTP8550EX         172         OLY,IPLEX-GL 3.5         .164           MEG,MWA330A         .58         MO,R2         171         OLY,IPLEX-GL 3.5-6         .75           MEG,PAT420         .37         MO,R7         170         OLY,IPLEX-GT 10         .76           MEG,PD-SCAN         .52         MO,R7 NKP         170         OLY,IPLEX-GT 10         .164           MEG,RCDT330         .38         MO,SL2600         171         OLY,IPLEX-GT 7.5         .76           MEG,SVERKER780         .64         MO,SLR1000         173         OLY,IPLEX-RT 7.5         .76           MEG,TOR950         .66         MO,TLK100i         175         OLY,IPLEX-RX         .76	MEG, DLRO10XBMEG, DLRO10XBMEG, DLRO10HDXMEG, DLRO10XBMEG, DLRO10HDXMEG, DLRO10X	67 36 40 41 40	CURVE	166 166 167 167 167 168 168	ODALOG APT,ODA7000CP12 APT,ODALL-H2S-20014 OLYMPUS/EVIDENT OLY,27MG10	45 45 05
MEG,EZ-THUMP12         .35         MO,DP4601e         169         OLY,38DL PROBES         106           MEG,INGVAR         .60         MO,DP4801e         169         OLY,COBRA SCANNER         161           MEG,MIT1025         .52         MO,DP4801EX         172         OLY,EPOCH650         160           MEG,MIT525         .52         MO,ION         171         OLY,IPLEX-GL 2.4         .75           MEG,MOM2         .42         MO,MTP8550EX         172         OLY,IPLEX-GL 3.5         .164           MEG,MWA330A         .58         MO,R2         171         OLY,IPLEX-GL 3.5-6         .75           MEG,PAT420         .37         MO,R7         170         OLY,IPLEX-GT 10         .76           MEG,PD-SCAN         .52         MO,R7 NKP         170         OLY,IPLEX-GT 10         .164           MEG,RCDT330         .38         MO,SL2600         171         OLY,IPLEX-GT 7.5         .76           MEG,SVERKER780         .64         MO,SLR1000         173         OLY,IPLEX-GT 7.5         .164           MEG,TDR2000-3P         .35         MO,SLR5500         173         OLY,IPLEX-RX         .76           MEG,TOR950         .66         MO,TLK100i         175         OLY,IPLEX-RX         .76 <td>MEGGER MEG,BVM300</td> <td>67 40 41 40 41</td> <td>CURVE</td> <td>166 166 167 167 168 168 169</td> <td>ODALOG APT,ODA7000CP12 APT,ODALL-H2S-20012 OLYMPUS/EVIDENT OLY,27MG10 OLY,27MG16</td> <td>45 45 05 63</td>	MEGGER MEG,BVM300	67 40 41 40 41	CURVE	166 166 167 167 168 168 169	ODALOG APT,ODA7000CP12 APT,ODALL-H2S-20012 OLYMPUS/EVIDENT OLY,27MG10 OLY,27MG16	45 45 05 63
MEG,INGVAR         60         MO,DP4801e         169         OLY,COBRA SCANNER         161           MEG,MIT1025         .52         MO,DP4801EX         172         OLY,EPOCH650         .160           MEG,MIT525         .52         MO,ION         171         OLY,IPLEX-GL 2.4         .75           MEG,MOM2         .42         MO,MTP8550EX         172         OLY,IPLEX-GL 3.5         .164           MEG,MWA330A         .58         MO,R2         171         OLY,IPLEX-GL 3.5-6         .75           MEG,PAT420         .37         MO,R7         170         OLY,IPLEX-GT 10         .76           MEG,PD-SCAN         .52         MO,R7 NKP         170         OLY,IPLEX-GT 10         .164           MEG,RCDT330         .38         MO,SL2600         .171         OLY,IPLEX-GT 7.5         .76           MEG,SVERKER780         .64         MO,SLR1000         .173         OLY,IPLEX-GT 7.5         .164           MEG,TDR2000-3P         .35         MO,SLR5500         .173         OLY,IPLEX-RX         .76           MEG,TOR950         .66         MO,TLK100i         .175         OLY,IPLEX-RX         .76	MEGGER MEG,BVM300	67 40 41 40 41 41	CURVE	i166 166 167 167 168 168 169 170	ODALOG APT,ODA7000CP	45 45 05 63 06
MEG,MIT1025         52         MO,DP4801EX         172         OLY,EPOCH650         160           MEG,MIT525         52         MO,ION         171         OLY,IPLEX-GL 2.4         .75           MEG,MOM2         42         MO,MTP8550EX         172         OLY,IPLEX-GL 3.5         .164           MEG,MWA330A         58         MO,R2         171         OLY,IPLEX-GL 3.5-6         .75           MEG,PAT420         37         MO,R7         170         OLY,IPLEX-GT 10         .76           MEG,PD-SCAN         52         MO,R7 NKP         170         OLY,IPLEX-GT 10         .164           MEG,RCDT330         38         MO,SL2600         171         OLY,IPLEX-GT 7.5         .76           MEG,SVERKER780         64         MO,SLR1000         173         OLY,IPLEX-GT 7.5         .164           MEG,TDR2000-3P         35         MO,SLR5500         173         OLY,IPLEX-RT 7.5         .76           MEG,TOR950         66         MO,TLK100i         175         OLY,IPLEX-RX         .76	MEGGER MEG,BVM300	67 36 40 41 40 41 41 42	CURVE	1166 166 167 167 168 168 169 170 168	NTI,XL2+M2230	45 45 05 63 06 63
MEG,MIT525         52         MO,ION         171         OLY,IPLEX-GL 2.4         75           MEG,MOM2         42         MO,MTP8550EX         172         OLY,IPLEX-GL 3.5         164           MEG,MWA330A         58         MO,R2         171         OLY,IPLEX-GL 3.5-6         .75           MEG,PAT420         37         MO,R7         170         OLY,IPLEX-GT 10         .76           MEG,PD-SCAN         .52         MO,R7 NKP         170         OLY,IPLEX-GT 10         .164           MEG,RCDT330         .38         MO,SL2600         .171         OLY,IPLEX-GT 7.5         .76           MEG,SVERKER780         .64         MO,SLR1000         .173         OLY,IPLEX-GT 7.5         .164           MEG,TDR2000-3P         .35         MO,SLR5500         .173         OLY,IPLEX-RT 7.5         .76           MEG,TOR950         .66         MO,TLK100i         .175         OLY,IPLEX-RX         .76	MEGGER MEG,BVM300	67 40 41 40 41 41 42 42	CURVE	i166 166 167 167 168 168 169 170 168 172 169	NTI,XL2+M2230	45 45 05 63 06 63 06
MEG,MOM2     .42     MO,MTP8550EX     172     OLY,IPLEX-GL 3.5     .164       MEG,MWA330A     .58     MO,R2     171     OLY,IPLEX-GL 3.5-6     .75       MEG,PAT420     .37     MO,R7     170     OLY,IPLEX-GT 10     .76       MEG,PD-SCAN     .52     MO,R7 NKP     170     OLY,IPLEX-GT 10     .164       MEG,RCDT330     .38     MO,SL2600     .171     OLY,IPLEX-GT 7.5     .76       MEG,SVERKER780     .64     MO,SLR1000     .173     OLY,IPLEX-GT 7.5     .164       MEG,TDR2000-3P     .35     MO,SLR5500     .173     OLY,IPLEX-RT 7.5     .76       MEG,TOR950     .66     MO,TLK100i     .175     OLY,IPLEX-RX     .76	MEGGER MEG,BVM300	6736404140414142423560	CURVE	i166 166 167 167 168 168 169 170 168 172 169	ODALOG APT,ODA7000CP	45 45 05 63 06 63 61
MEG,MWA330A         .58         MO,R2         171         OLY,IPLEX-GL 3.5-6         .75           MEG,PAT42O         .37         MO,R7         170         OLY,IPLEX-GT 10         .76           MEG,PD-SCAN         .52         MO,R7 NKP         170         OLY,IPLEX-GT 10         .164           MEG,RCDT330         .38         MO,SL2600         .171         OLY,IPLEX-GT 7.5         .76           MEG,SVERKER780         .64         MO,SLR1000         .173         OLY,IPLEX-GT 7.5         .164           MEG,TDR2000-3P         .35         MO,SLR5500         .173         OLY,IPLEX-RT 7.5         .76           MEG,TOR950         .66         MO,TLK100i         .175         OLY,IPLEX-RX         .76	MEGGER MEG, BVM300	67 36 40 41 41 41 42 42 35 60	CURVE	i166166167168168169170168169172169172	NTI,XL2+M2230	45 45 53 53 56 63 50 61 60
MEG,PAT420       .37       MO,R7       170       OLY,IPLEX-GT 10       .76         MEG,PD-SCAN       .52       MO,R7 NKP       170       OLY,IPLEX-GT 10       .164         MEG,RCDT330       .38       MO,SL2600       .171       OLY,IPLEX-GT 7.5       .76         MEG,SVERKER780       .64       MO,SLR1000       .173       OLY,IPLEX-GT 7.5       .164         MEG,TDR2000-3P       .35       MO,SLR5500       .173       OLY,IPLEX-RT 7.5       .76         MEG,TOR950       .66       MO,TLK100i       .175       OLY,IPLEX-RX       .76	MEGGER MEG,BVM300	6736404141414242356052	CURVE	1166 166 167 167 168 169 170 168 172 169 169 172	ODALOG APT,ODA7000CP	45 45 05 63 06 61 60 75
MEG,PD-SCAN         .52         MO,R7 NKP         170         OLY,IPLEX-GT 10         .164           MEG,RCDT330         .38         MO,SL 2600         171         OLY,IPLEX-GT 7.5         .76           MEG,SVERKER780         .64         MO,SLR1000         173         OLY,IPLEX-GT 7.5         .164           MEG,TDR2000-3P         .35         MO,SLR5500         173         OLY,IPLEX-RT 7.5         .76           MEG,TOR950         .66         MO,TLK100i         175         OLY,IPLEX-RX         .76	MEGGER MEG, BVM300	673640414141424235605252	CURVE	i166166167168169170168172169172172	ODALOG APT,ODA7000CP	45 45 53 56 63 66 61 60 75 64
MEG,RCDT330      38       MO,SL2600      171       OLY,IPLEX-GT 7.5      76         MEG,SVERKER780      64       MO,SLR1000      173       OLY,IPLEX-GT 7.5	MEGGER MEG,BVM300	673640414141423560525258	CURVE	i166166167168169170168172169172172	ODALOG APT,ODA7000CP	45 45 05 63 06 63 60 75 64 75
MEG,SVERKER780	MEGGER MEG,BVM300	6736404141414235605252524237	CURVE	1166166166167168169170168172169172171172171	ODALOG APT,ODA7000CP	45 45 53 56 63 66 61 60 75 64 75 76
MEG,TDR2000-3P35 MO,SLR5500173 OLY,IPLEX-RT 7.576 MEG,TOR95066 MO,TLK100i175 OLY,IPLEX-RX76	MEGGER MEG,BVM300	673640414141424235605252425837	CURVE	1166166166167168169170168172169172171172171	ODALOG APT,ODA7000CP	45 45 563 566 661 660 75 664 75 766 664
MEG,TDR2000-3P	MEGGER MEG,BVM300	67364041414242356052525258375238	CURVE	i166166166167168169170168172169172171172171170170170	ODALOG APT,ODA7000CP	45 45 45 56 63 66 61 60 75 64 75 76 64 76
MEG,TOR95066 MO,TLK100i	MEGGER MEG,BVM300	6736404141424235605252425837523864	CURVE	i166166166167168169170168172169172171172171170170170	ODALOG APT,ODA7000CP	45 45 563 566 661 660 775 766 664 766 664
OLY,ISPEED379	MEGGER MEG,BVM300	6736404141424235605252425837523864	CURVE	i166166166167168169170168169172169172171172171170170171	ODALOG APT,ODA7000CP	45 45 56 63 66 61 66 75 66 67 66 67 66 67 66 67 66 67 66 67 66 67 66 67 67
	MEGGER MEG,BVM300	673640414142423560525242583752386435	CURVE	i166166166167168169170168169172169172171172171170170171170173	ODALOG APT,ODA7000CP	45 45 05 63 06 63 06 61 63 75 76 64 76 64 76



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OLY,OMNISCAN MX2160	•	SIMCO-ION
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OMI,CIBANO 500	PROFOUND	SOF,PROFIBUS-588
OMI,CMC35663	PRO,VIBRA137	301,1 NOI 1003-300
OMI,CMC356_6185064	PRO,VIBRA-ALARM137	SOLINST
OMI,CMC356_ENHANCED63	PRO,VIBRA-CLOUD137	SOL,IP-122-60M156
OMI,CMGPS58864	PRO,VIBRA-GEOOD137	SOL, PERI-PUMP156
OMI,COMPANO10060	PNO, VIDNA-IVIPLATE130	SOL,WLM-101D-250M156
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	FNO,IVIIVI3-FL03119	SON,MMR-65055
OMI,CPCU161	PRUFTECHNIK	SON,MRU-20040
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TRI,REPEATER-UHF131
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TRI,TRAVERSE132
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TRO,LD6000122
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TSI,7575148
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# TechRentals—The Perfect Solution!

TechRentals vast fleet of equipment offers a range of solutions to many markets. These include the Aviation, HVACR, Defence, Electrical, Mining, Mechanical and Telco markets. If you can't find the equipment you are looking for, our international partner network gives you access to an even larger and diverse inventory to help satisfy your requirements.

It is important to remember that renting is much more efficient than to purchase outright. This enables you to preserve capital for other parts of your business. Should you need to eventually own the assets, TechRentals offers a Rental Purchase Option. No matter your need, we will find the assets you require when you want them.



# Empowering Sustainability Through Equipment Rental

Are you ready to make a positive impact on our planet? At TechRentals, we're proud to offer sustainable solutions that not only benefit your projects but also help protect the environment. Discover the transformative power of equipment rental and join us in building a greener future.

#### WHY RENTING MATTERS FOR THE PLANET:

- Reduce Your Carbon Footprint: By renting equipment instead of purchasing new, you're significantly reducing the demand for manufacturing and the associated carbon emissions.
- Minimise Resource Consumption: Every rental means one less piece of equipment being manufactured, which translates to fewer resources extracted from the earth.
- Optimise Energy Efficiency: Our rental fleet includes a wide range of equipment options designed to minimise energy consumption without compromising performance.
- Promote Sustainable Practices: By choosing rental, you're supporting a sustainable business model that prioritises resource conservation and responsible consumption.
- Flexibility for Changing Needs: Projects evolve, and so do your equipment requirements. With rental, you have the flexibility to adapt to changing needs without the burden of owning equipment that may become obsolete or underutilised.

#### JOIN US IN MAKING A DIFFERENCE

Together, we have the power to create a more sustainable world. Choose TechRentals for your Test and Measurement equipment needs and be part of the solution. Let's work together to protect our planet for future generations. Rent with TechRentals and make a positive impact today.



Smart Solutions, Excellent Results.



Unlocking the potential of technology, empowering our customers to achieve their goals with access to leading solutions and support.





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