Hand held meters

Anemometer
CO / CO$_2$
Conductivity
Chlorine
Force gauge
Heat stress meter
Light meter (lux)
Sound level
Stroboscope
Tachometer
PH / Redox
Pressure meter
Power Analyser
Thickness gauge
Vibration meter

ECEFast NZ Ltd®
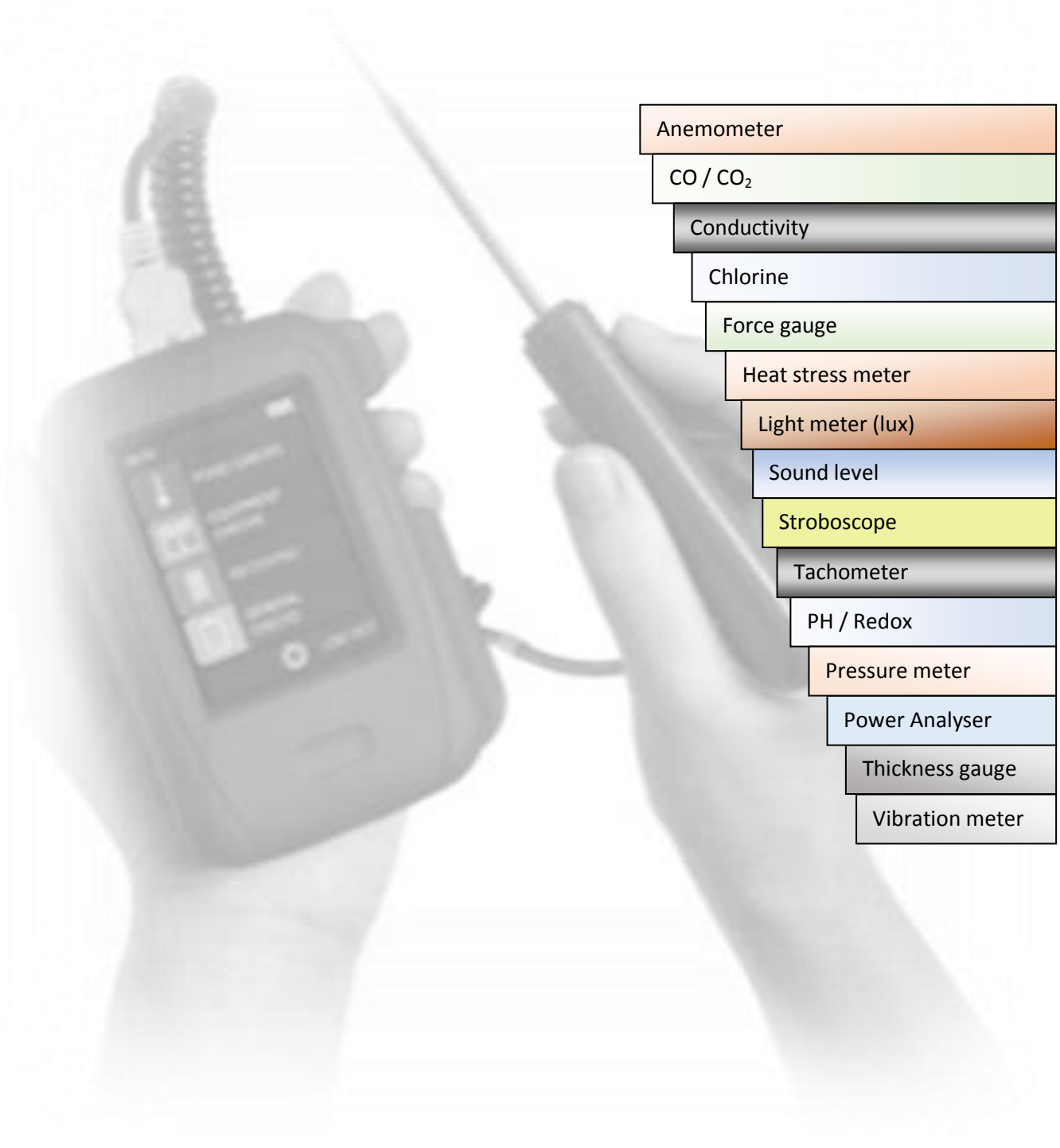
pH meters

LU-PH222

weblink

Model: LU-PH222 $119.00
Pocket style pH meter with built in data logger for up to 100 readings. Calibration is automated in standard buffer solutions at 4, 7 and 10 or other values. Temperature measurement is included on the multiple display and the reading is used for ATC (automatic temperature compensation). IP67 waterproof; Range: 0-14.00 pH and -5 to 80°C; Accuracy: pH ±0.02; Temp: ±0.8°C

Model: LU-PH208/TP07 $198.00
Full function pH / ORP meter for general purpose use. Meter comes with temperature probe for ATC (automatic temperature compensation). pH and ORP probe ordered separately.
Range: 0-14.00 pH; ±1999mV
Accuracy: pH ±0.02 ±2 digit
Optional accessories
LU-PE01 (pH electrode) $189.00
LU-PH-BUFFER-4 $49.00
LU-PH-BUFFER-7 $49.00

LU-PH208/TP07

weblink

Carbon monoxide (CO)

LU-GCO-2008

weblink

Model: LU-GCO-2008 $275.00
Carbon monoxide 0-1000 PPM and temperature 0 to 50°C; RS232/USB computer interface;
Accuracy (CO): ±5% + 2 PPM,
Resolution: 1 PPM (CO) / 0.1°C,
Response time: < 30 seconds,
Repeatability: < 2%,
Display: Dual function 52 x 38 mm,
Display sampling time: 1 second,
Power: Batteries or DC9V adapter,
Advanced setting: CO alarm,
Sensitivity drift: < 5% per year

Carbon dioxide (CO$_2$)

Model: LU-GCH-2018 $645.00
NDIR sensor for long life and stability, alarm setting and warning, separate probe for confined spaces, RS232/USB computer interface, Altitude compensation to 9000m,
Range: 0-4000ppm,
Resolution: 1 ppm,
Repeatability: ±20 ppm,
Accuracy: ±40ppm ≤1000ppm,
Power: Batteries or DC9V adapter,
Accessories included: CO$_2$ probe, humidity probe and carry case

LU-GCH2018

weblink

Chlorine meter

LU-CL2006

weblink

Model: LU-CL2006 $580.00
Free chlorine, total Chlorine measurement. Test swimming pool, municipal water, food and beverage water, or other aqueous solution where fluid clarity is important.
Range: 0 to 3.5 ppm (mg/L),
Resolution: 0.01 ppm (mg/L),
Accuracy: ±0.02 ppm @ 1.00 ppm,
Response time: < 10 seconds,
Record Max, Min. value and hold
Light source: LED 525 nm,
Power: 1.5V battery x 6 pcs

Conductivity meter

Model: LU-PCD431 $179.00
All-in-one tester for TDS and conductivity – pocket sized meter.
Range: 2-2,000 µS and 2-20.00 mS auto ranging for conductivity, 132-1,320 ppm and 1,320-13,200 ppm for TDS, Accuracy: ±3% F.S + 1 decimal, Resolution: 1µS (2-2,000 µS) and 0.01mS (2-20.00 mS)
Dual display: Process value and temperature, 20x28mm LCD,
Record Max, Min. value and hold
Power: 1.5V battery x 4 pcs

LU-PCD431

weblink

Prices mentioned are in NZD and doesn't include GST.

Anemometer

LU-AM4214SD

Hot wire

Vane type

LU-AM4207SD

Model: LU-AM4214SD $455.00
Anemometer + thermometer
Data logging in SD card
Air velocity range: 0.2 to 5.0 m/s, 5.1 to 25.0 m/s, Accuracy: ±5% of the reading or ±1% of F.S; Telescope probe: 12mmØ x 940mm Ideal for grilles & diffusers. Unit selection: m/s, Ft/min, Km/h, Knot, Mile/h; 1 sec to 3600 sec data logging, Air temp range: 0 to 50°C, Accuracy: 0.8°C, Resolution: 0.1°C; Power: 1.5V battery x 6 pcs / DC9V adapter is optional

Model: LU-AM4207SD $395.00
Anemometer + thermometer
Data logging in SD card
Air velocity range: 0.4 to 25.0 m/s, Accuracy: ± (2%+0.2 m/s) Low-friction ball vane wheels make sure high accuracy in high & low velocities. Unit selection: m/s, Ft/min, Km/h, Knot, Mile/h; 1 sec to 3600 sec data logging, Air temp range: 0 to 50°C, Accuracy: 0.8°C, Resolution: 0.1°C; Power: 1.5V battery x 6 pcs / DC9V adapter is optional

weblink

weblink

Anemometer and light meter

LU-SP9202

LU-SP8001

Model: LU-SP9202 $256.00
Environment meter
Air velocity: 0.4 to 20.0 m/s, Airflow: 0.024 to 36,000 CMM Humidity: 10 to 95% Temperature: 0 to 50°C UV Light: $1uW/cm^2$ to $20 mW/cm^2$ Dew point Td: -25.3 to 49.0°C Wet bulb Temp: -5.4 to 49.0°C Wind chill: -9.4 to 44.2°C Heat index: 0-100°C Barometer: 10.0 to 1100 hPa Altitude: -2,000 to 9000m Option:PT1000 temperature probe Power: CR2032 battery DC3V

Model: LU-SP8001 $196.00
Mini pocket weather station
(Air Velocity, airflow, RH, light, Td, T, wind chill, heat index, Lux)
Air velocity: 0.4 to 20.0 m/s, Airflow: 0.024 to 36,000 CMM Humidity: 10 to 95% Temperature: 0 to 50°C Light: 0 -20,000 Lux Dew point Td: -25.3 to 49.0°C Wet bulb Temp: -5.4 to 49.0°C Wind chill: -9.4 to 44.2°C Heat index: 0-100°C Option:PT1000 temperature probe Power: CR2032 battery DC3V

weblink

weblink

Heat stress meter

LU-WBGT-2010SD

Lux meter

LU-LX1128SD

Model: LU-WBGT-2010SD $439.00
Wet bulb global temperature meter with data logging function
Air temperature: 0-50°C, Black globe temperature: 0-80°C, Humidity: 5% to 95% RH, Dew point Temp: -25.3 to 48.9°C, Wet bulb Temp: -21.6 to 50°C Wet bulb globe temperature Indoor: 0-59°C, Outdoor: 0-56°C; Suggested for Occupational health and sports medicine Australia in establishing permissible heat exposure.

Model: LU-LX1128SD $210.00
Light meter with data logger
Separate light sensor for easy measurement. Lux and foot candle readings, three ranges 2,000, 20,000, and 100,000 lux auto-ranging, zero adjustment for light measurement, logging to SD card from 1 sec to 3600 sec intervals. Temperature range: -50.0 to 1300.0°C (K type) probe optional. Power: 1.5V battery x 6 pcs / DC9V adapter is optional

weblink

weblink

Prices mentioned are in NZD and doesn't include GST.

ECEFast NZ Ltd®

Tachometer

LU-DT1236L

combination of contact and non-contact tachometer

LU-DT2236

weblink

Model: LU-DT1236L $299.00	Model: LU-2236 $280.00
Laser	*Photo*
Range: 1 to 99,999 RPM	Range: 5 to 99,999 RPM
Contact tacho: 0.5 to 19,999 RPM	Contact tacho: 0.5 to 19,999 RPM
Surface speed: 0.05 to 1,999.9m/min	Surface speed: 0.05~1,999.9m/min
Detecting distance: 4cm to 200cm	Detecting distance: <600mm
Light source: 1mW class2 laser diode	Light source: IR LED
Accuracy: ± (0.05% + 1 digit)	Accuracy: ± (0.05% + 1 digit)
Power consumption: Approximately DC 22 mA and contact type DC 7mA	Power consumption: Approx. DC 153 mA, contact type DC 10mA
Accessories included: Carry case, 600mm reflecting tape, 1 x adapter cone, 1 x adapter funnel, 1 x surface speed test wheel, instruction manual	Accessories included: Carry case, 600mm reflecting tape, 1 x adapter cone, 1 x adapter funnel, 1 x surface speed test wheel, manual

LU-VT8204
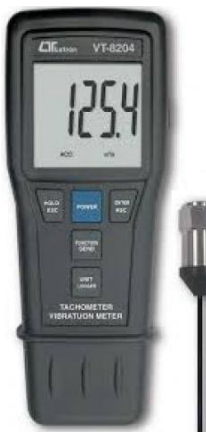
weblink

Vibration + tachometer

Model: LU-VT8204 $839.00
Measures acceleration, velocity, and displacement
Useful guide to machine condition, poor balance, misalignment and looseness in structure.
Acceleration: 0.5 to 199.9m/sec²
Velocity: 0.5 to 199.9mm/sec
Displacement: p-p 0.005 to 1.99mm
Optical Tacho: 10- 99,999 RPM
Contact Tacho: 0.5-19,999 RPM
Accuracy: ±5% + 2 digit(vibration)
±0.05% + 1 digit (RPM)
Optional software available to view real time data and historical trend.

Stroboscope

Model: LU-DT2349 $540.00
Xenon flash tube, high intensity
Ideal for inspecting and measuring the speed of moving gears, fans, pumps, centrifuges and motors. Flash energy: 4W-seconds (joules); Beam angle: 80°; The unit can be powered by either rechargeable batteries (4 x 1.2V Ni-MH) or DC9V adapter (included) – caution: do not use both. The meter has got a battery compartment but batteries not supplied; cooling off period between cycles is required.
Range: 60 to 32,000 RPM, Accuracy 0.05% ±1d F.S; Resolution: 0.1/1RPM;

LU-DT2349

weblink

Stroboscope

A stroboscope is an instrument used to make a cyclically moving object appear to be slow-moving or stationary so that the objects can be visible, otherwise, it cannot be observed by naked eyes.

EC-DT325E

weblink

EC-DT328E

weblink

Model: EC-DT325E $935.00	Model: EC-DT328E $1,122.00
Genuine Cree 10W LED lamps with long battery power	*Strong illumination of the target and clear image of the target.*
Range: 60 – 120,000 Flashes/min	Range: 60 to 120,000 Flashes/min
Resolution: 0.1 fpm to 12,000 fpm and 1 fpm above 12,000 fpm	Resolution: 0.1 fpm to 12,000 fpm and 1 fpm above 12,000 fpm
Setting accuracy 0.01% ±1 digit F.S	Setting accuracy 0.01% ±1 digit F.S
Trigger mode: manual plus external trigger input; Power: AC Adapter 220V(110V) or rechargeable lithium batteries; LED lifetime: 3-5years;	Trigger mode: manual plus external trigger input; Power: AC Adapter 220V(110V) or rechargeable lithium batteries; LED lifetime: 3-5years;
3 LED lamps x 10W (30W total)	9 LED lamps x 10W (90W total)
Battery running time: Approx. 12hrs	Battery running time: Approx. 5hrs

Prices mentioned are in NZD and doesn't include GST.

Thickness gauge

DH-TDS110

weblink

Model	DH-TDS110	$ 960.00
Measuring range	0.75mm~300.0mm	
Sound Velocity Range	1000m/s~9999m/s (0.039~0.394 in/µs)	
Display resolution	0.01mm (< 100.0mm) 0.1mm (> 99.99mm)	
Display	128×64 LCD with LED backlight	
Accuracy	± (0.5% + 0.02 mm), depends on materials and conditions	
Units	Metric/Imperial unit selectable	
Probe model	5MHz probe: Ø20mm x Ø 3.0mm	
Power Source	2pcs 1.5V AA size, batteries.	
	100 hours typical operating time (LED backlight off)	
Dimensions	150 × 74 × 32mm	
Weight	238 g	

Other functions: Probe-zero function, calibration sound-velocity, two-point calibration, coupling status Indicator showing the coupling status, battery information indicates the rest capacity of the battery, auto sleep and auto power off function Four measurements readings per second, Memory up to 5 files (up to 100 values for each file) of stored value

DH-TM8812C

weblink

Model	DH-TM8812C	$ 689.00
Measuring range	1.0-200mm	
Sound Velocity Range	1000 ~ 9000m/s	
Display resolution	0.01mm (< 100.0mm) 0.1mm (> 99.99mm)	
Accuracy	± (0.5% + 0.1 mm) depends on materials and conditions	
Interface	RS232C	
Power Source	4 x 1.5V AAA (UM-4) battery	
Dimensions	120 x 62 x 30mm	
Weight	164 g	

Materials measured: Materials including steel, cast iron, aluminium, red copper, brass, zinc, quartz glass, polyethylene, PVC, cast iron and other materials. Widely used in finding the corrosion of pressure vessels, chemical equipment, boilers, oil storage tanks, etc.

DH-TM210PLUS

weblink

Model	DH- TM210PLUS	$ 486.00
Measuring range	0.75-225.0mm (in steel)	
Sound Velocity Range	1000 ~ 9999m/s	
Probe model	5MHz probe: Ø20mm x Ø 3.0mm	
Display resolution	0.01mm (< 100.0mm) 0.1mm (> 99.99mm)	
Accuracy	± (0.5% + 0.02 mm) depends on materials and conditions	
Interface	USB serial port with Protective Membrane and software to process the memory data on the PC	
Power Source	2 x 1.5V AA size battery	
Dimensions	150 x 74 x 32mm	
Weight	238 g	

Common specification: There are few options available for the probes to use with thickness gauge. At present ECEFast is selling only a right-angled probe, 5MHz model. Other models are available on request. 2M, 5M, 7M. Materials that are generally not suited for ultrasonic gauging because of their poor transmission of high frequency sound waves include wood, paper, concrete, and foam products. The speed of sound varies in various materials and the information is necessary to have when using ultrasonic thickness gauge, as the speed the ultrasound will move through the material to obtain an accurate thickness reading. Couplant are used to help the ultrasonic wave to have better transmission coefficient and give better dB. Liquids like glass water, glycerine, engine oil, consistent grease can be used as a coupling agent. It is always good to contact the supplier to supply the correct coupling agent. Calibration of the meter is very easy. Place the probe on the 4mm test piece with couplant on the surface. Wait for a good coupling sign in the display. Press the zero-point calibration key. The instrument will complete the calibration by a buzzer sound

Prices mentioned are in NZD and doesn't include GST.

ECEFast NZ Ltd®

Force gauge

LU-FG6005SD

weblink

Model	LU-FG6005SD	$ 498.00
Range	5,000 g /176.40 oz/49.03 Newton	
Unit selection	g/oz/Newton	
Display	LCD, 5 digit, 16mm digit size, back light, + and −	
Resolution	1 g/0.02 oz/0.01 Newton	
Minimum display	3 g/0.10 oz/0.03 Newton	
Accuracy	± (0.4% + 1 digit)	
Update time	Fast approx. 0.2 second; Slow approx. 0.6 second	
Functions	Tension & Compression (Push & Pull)	
	Normal force, Peak hold (Max. load)	
	Data logging from 1 sec to 8Hr:59min:59 sec	
Power source	1.5V battery x 6 pcs / DC9V adapter (AC/DC) is optional	

Accessories Included: Operating manual, Adapters: Flat-head, hook, cone, chisel; 120mm extension rod and carrying case.

Optional accessories: SD memory card, software for data logging using RS232 or USB cable; No software required for SD card data logging. (viewed in EXCEL spread sheet)

Other models available: LU-FG6020SD (20Kg) $ 520.00, LU-FG6100SD (100Kg) $ 698.00

Sound level meter

CE-32/323

weblink

Model	CE-323 (with logging)	$ 409.00
	CE-32 (without logging)	$ 239.00
Range	30-130dB in 3 ranges 30-90dB, 50-110dB & 70-130dB	
Dynamic range	60 dB	
Accuracy	±1.4dB (Ref 94dB @ 1KHz)	
Sampling rate	2 times/sec	
Data logging	32,000 records (CE-323)	
Frequency range	20Hz~8KHz	
Microphone	½"electret condenser microphone	
Power source	9V battery (CE-32)	
	1.5V battery x 4 pcs (CE-323)	

Features: Max/Min function; Frequency weighting A/C, Time weighting FAST/SLOW; Complies with IEC 61672-1 Class 2 Standard

Sound level meter *with SD card data logging*

LU-SL4033SD

weblink

Model	LU-SL4033SD (with SD card logging)	$ 420.00
Range	30-130 dB, Auto and manual range selector	
Accuracy	±2.0 dB to ±3.5 dB (between 31.5Hz to 16KHz) (Ref 94dB)	
Sampling rate	Approx. 1 second	
Frequency range	31.5Hz~16KHz	
Microphone	½" standard electric condenser microphone	
Power source	1.5V battery x 6 pcs / DC9V adapter is optional	

Features: Frequency weighting A/C comply with standards. Frequency and time weighting meet IEC 61672 class 1, Time weighting FAST (200 ms)/SLOW (500ms)

Optional accessories: SD memory card, sound wind shield ball (SB-01), software for data logging using RS232 or USB cable; No software required for SD c... (viewed in EXCEL spread sheet),

LU-SC942   *weblink*

Sound calibrator (94/114 dB) (SC-942) $ 295.00

Used for verifying the performance of sound level meters

What is frequency weighting A&C: The 'A' weighting filter covers the full frequency range of the meter, but the shape approximates to the frequency sensitivity of the human ear. 'C' Weighting is a standard weighting of the audible frequencies commonly used for the measurement of Peak Sound Pressure level of the tested equipment, suitable for the noise of machinery

Prices mentioned are in NZD and doesn't include GST.

Power analyser

LU-PC6011SD

Power quality analyser for single-phase or balanced three-phase system. Capture Transient events (including Dip, Swell and Outage) with programmable threshold (%) Accessories included: Test leads 1 set (2pcs), Alligator clips 1 set (2pcs), AC to DC 9V adapter, carry case and instruction manual

Model	LU-PC6011SD (with SD card logging) $ 688.00
Voltage range	10 to 600 ACV (Auto range)
Current range	10 to 2000 ACA (Auto range)
Other measurements	Power factor, phase angle, frequency, harmonics magnitude, harmonics percentage, Total harmonic distortion, Temperature (type K optional probe)
Datalogger	Real time data logger, saved into SD memory card
Sampling time - datalogger	2 seconds to 7200 seconds
Display	LCD size 60 x 44.4mm; Dot matrix backlit 128 x 64 pixels
Safety Standard	IEC 1010, CAT IV 600V
Power source	AA DC 1.5V battery x 2 pcs or DC9V adapter

weblink

LU-DW6093

Analysis for 3 phase multi-power system, 1P/2W, 1P/3W, 3P/3W, 3P/4W. Complete set with 4 PCs Test Leads, 4 PCs Alligator clips, 3 PCs Clamp Probe (CP-1201), AC to DC 9V adapter, 2 G SD memory card and Carrying bag. 3 current probes (CP-1201) are included, if change the current probes, the Calibration procedures are not necessary. Current clamp flexible CP-3000: 30A/300A/3000A (optional)

Model	LU-DW6093SD (with SD card logging) $ 1,749.00
Voltage range	10 to 600 ACV (Auto range)
Current range	0.2 to 1200 ACA (CP-1201)
Input signal (ACV)	200 mV/300 mV/500 mV/1 V/2 V/3 V
Ranges (ACA)	20 A/200 A/2000 A/30 A/300 A/3000 A
Other measurements	True RMS value, True Power, Apparent Power, Reactive Power, Watt-Hour, Power Factor, Phase Angle Programmable CT ratio (1 to 600) & PT ratio (1 to 1000)
Sampling time- datalogger	2 seconds to 7200 seconds
Safety Standard	IEC 1010, CAT III 600V
Power source	AA DC 1.5V alkaline battery x 8 pcs or DC9V adapter

weblink

LU-DW6095

Power Analyser for 3 phases Display of transient waveforms, harmonics, total hormonic distortion and phase diagram; Capture Transient events (including Dip, Swell and Outage) with programmable threshold (%). Save power cost by determining the peak power requirements, balance phases and identify supply faults such as wave form distortion, harmonics, breaks and surges.

Model	LU-DW6095SD (with SD card logging) $ 2,690.00
Voltage range	10 to 600 ACV (Auto range)
Current range	0.2 to 1200 ACA (CP-1201)
Frequency range	45Hz to 65Hz (±0.1 Hz basic accuracy)
Harmonics	1 to 50th (Accuracy ±2% 1-20th and ±6% 21-50th)
Crest Factor	1.00 to 99.99 (Accuracy ±5%+3d)
Overload protection	ACV: 720 ACV rms ACA: 1300 ACA with CP-1201 clamp probe (A1,A2,A3)
Sampling time- datalogger	2 seconds to 7200 seconds
Safety Standard	IEC 1010, CAT III 600V
Power source	AA DC 1.5V alkaline battery x 8 pcs or DC9V adapter

weblink

Prices mentioned are in NZD and doesn't include GST.

Pressure meter

KM-C9500

weblink

Differential pressure meter: For air or non-corrosive gas on both the positive (+) and negative (-) pressure ports and liquids (optional silicon protected diaphragm, for use with liquids). The models cover ranges from 140mbar to 7 bar and all display most common measuring units. Positive or negative pressure (vacuum) measurement.

Model	KM-9551, KM-9553, KM-9555, KM-9557 $ 830.00
	KM-9555/SIL, KM-9557/SIL $ 990.00
Range/Resolution	9551: 0 to ±140 mbar/0.01; 9553: 0 to ±350 mbar/0.1;
	9555: 0 to ±2100 mbar/0.1; 9557: 0 to ±7000 mbar/ 1
Accuracy at +23°C	±0.2% of full scale
Repeatability at +23°C	±0.1% of full scale
Connection	1/8" BSP Female
Battery type/life	6F22 MN 1604, PP3 VT3 UCAR 9V / 90 Hours
Overload pressure	KM-9551: 400 mbar, KM-9553:1000 mbar,
	KM-9555: 6200 mbar; KM-9557: 13,700 mbar
Environmental rating	IP67, BS EN60529, IEC 529
Selectable units	PSI, mbar, Bar, inH_2O, inHg, mmHg, Torr, Pa, KPa, mmH_2O, cmH_2O, $Kgcm^{-2}$

Pressure and Vacuum meter

weblink

PS-9303SD Hand held pressure meter from 2 to 400 bar depending on the interchangeable transducers; *VC-9210SD* Hand held vacuum meter 1-1500mbar absolute. NEW FEATURE! SD Card Data Logging! For easy sharing and analysis with Excel.

Model	LU-PS9303SD (pressure meter only) $ 325.00
	LU-PS100-10 (10 bar pressure sensor) $ 196.00
	LU-VC-9210SD (Vacuum meter + sensor) $ 590.00
Vacuum range	1500 mbar X 1 mbar; 1125 torr x 1 torr
Selectable units	torr, mm Hg, mbar, KPa, hPa, inch Hg, psi
Accuracy at +23°C	± 1 % F.S
Sensor ranges available	2, 5, 10, 20, 50, 100, 200, 400 bar sensor
Selectable units	Bar, Psi, $Kgcm^{-2}$, mm Hg, inch Hg, meter H_2O, inch H_2O, Atmosphere
Accuracy at +23°C	±0.5% + 1d (meter only)
Common features	
Sampling time	1 sec to 8hr:59m:59 sec
Power supply	Alkaline or heavy-duty DC 1.5 V battery x 6 (DC 9V)
	AC/DC power adapter is optional
Optional accessories	SD card, AC to DC 9V adapter
Included	Instructional manual, hard carrying case
	Application: Automobile, Industrial, laboratory, heating, ventilation, medical hospitals

Prices mentioned are in NZD and doesn't include GST.