

We are providing wide range of portable instruments for speedy delivery at competitive prices. Our quality products have been accepted by some well-known int'l companies. Our product line includes Oscilloscope, Power Supplies, Multi-meters, Thermometers, Clamp meter, Light meter, Sound Level Meter, LCR Meters and more.

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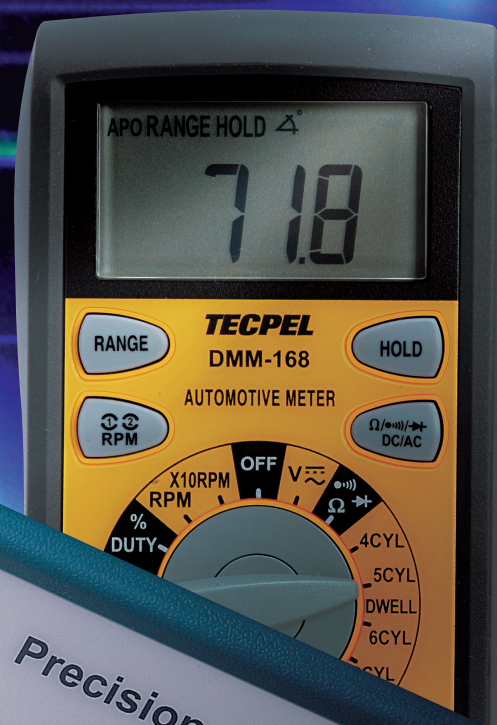
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TECPEL[®]
Your Reliable Partner in T&M™



Test and Measurement



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TECPEL Precision LCR Instrument

200KHz LCR Instrument



LCR-200



- ❑ Measurement parameters: Z, Ls, Lp, Cs, Cp, DCR, ESR, D, Q and basic accuracy 0.1%.
- ❑ Test conditions: 100Hz, 120Hz, 1KHz, 10KHz, 100KHz, 200KHz; 1Vrms, 250mVrms, 50mVrms, 1Vdc(DCR only)
- ❑ DMM functionalities
- ❑ Dual LCD display with LED backlit
- ❑ Open/short calibration
- ❑ Remote binning capability
- ❑ Auto range/range hold selection
- ❑ RS-232 interface

Test conditions		Measurement ranges		AC/DC current	
Frequency	100Hz/120Hz/1KHz/10KHz/ 100KHz/200KHz	Z	0.000 Ω to 500.0 MΩ	Range	2A, 0.2A, 20mA and 2mA
Level	1V rms/250mVrms/ 50mVrms/ 1Vdc (DCR only)	L	0.030 μH to 9999H	Resolution	1mA, 0.1mA, 0.01mA and 1uA
Measurement parameters	Z, Ls, Lp, Cs, Cp, DCR, ESR, D, Q, and θ.	C	0.003 pF to 80.00 mF	Accuracy	±(0.4%+3 digits) DC ±(0.8%+5 digits)AC@40Hz~1KHz
Basic accuracy	0.1%	DCR	0.000 Ω to 500.0 MΩ	Current shunt	0.1Ω@current ≥ 20mA; 10Ω@current ≤ 20mA
Primary parameters display		ESR	0.000 Ω to 9999 Ω	Continuity check	
Z	AC impedance	D	0.000 to 9999	Continuity threshold	50Ω(approximately)
DCR	DC resistance	Q	0.000 to 9999	Continuity indicator	Tone buzzer
Ls	Serial inductance	θ	-180.0° to 180.0°	Input protection:	600V (max)
Lp	Parallel Inductance	V	0.000mV to ± 600.0V	Diode test	
Cs	Serial capacitance	I	0.000mA to ± 2.000A	Test current	2.5mA (typical)
Cp	Parallel capacitance	DMM functionalities	DCV, ACV, DCA, ACA, Diode/ continuity check	Open circuit voltage	5.0VDC (nominal)
Secondary parameters display		DC voltage		Input protection	600V (Max.)
θ	Angle impedance	Range	2V, 20V, 200V and 600V	General	
ESR	Equivalent series resistance	Resolution	1mV, 10mV, 100mV, 1V	Temperature	0 to 40°C (operating) -20 to 70°C (storage)
D	Dissipation factor	Accuracy	±(0.4%+ 3 digits)	Relative humidity	Up to 85%
Q	Quality factor	Input impedance	1MΩ	AC power	110V/220V±10%, 60/50Hz
Combinations of display		AC voltage (true RMS)		Dimensions (DxWxH)	300x220x150mm (11.8"x8.7"x5.9")
Serial mode	Z-θ, Cs-D, Cs-Q, Cs-ESR, Ls-D, Ls-Q, Ls-ESR	Range	2V, 20V, 200V and 600V	Weight	4.5 kgs
Parallel mode	Cp-D, Cp-Q, Lp-D, Lp-Q	Resolution	1mV, 10mV, 100mV, 1V	Standard accessories	TL-09C Kelvin clips x 1pc Test leads x 1pc
		Accuracy	±(0.8%+5 digits) @ 40Hz~ 1KHz		
		Input impedance	1MΩ		

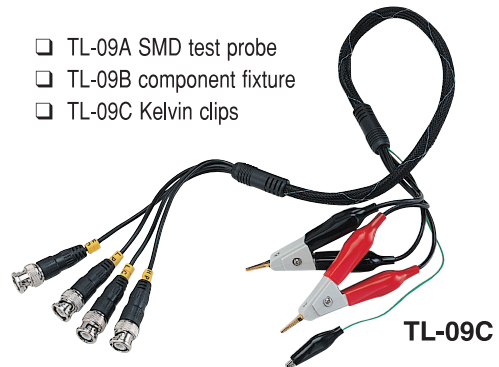
Optional Accessories



TL-09A



TL-09B



TL-09C

- ❑ TL-09A SMD test probe
- ❑ TL-09B component fixture
- ❑ TL-09C Kelvin clips

TECPEL Function Generator

15MHz Digital Function Generator



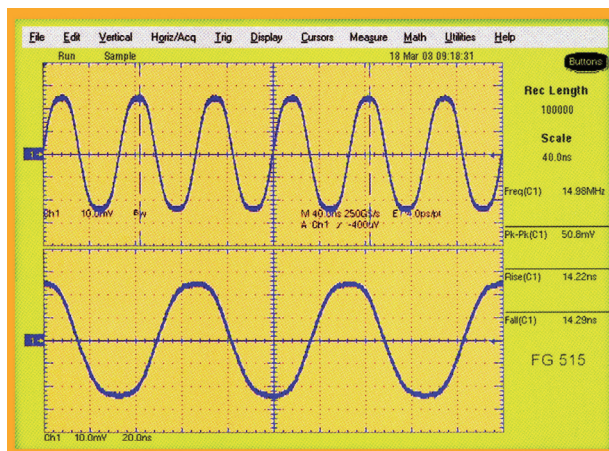
FG-15



- New 15MHz function generator can generate extremely clean and low distortion waveform output
- Rotary menu driven pop up and down function for easy operation
- TTL output up to 90 MHz
- Low noise signal source
- Optional 2GHz frequency counter
- Triangle, square, sine, TTL sync out, asymmetry, ramp up, Log waveforms and DC
- Duty cycle up to 15MHz for TTL, resolution 0.1%
- Amplitude attenuation - 60db

Function generator waveforms	Triangle, square, sine, TTL sync out, asymmetry, ramp up, log waveforms and DC
Function output range	0.2Hz ~ 15MHz
TTL output range	0.2Hz ~ 90MHz
Resolution	4 digits
Symmetry/duty cycle	20% to 80% up to 1MHz; 40% to 60% up to 10MHz
Impedance	50 Ω ± 5%
Amplitude	±10V into open circuit; ±5V into 50Ω
Attenuation	0 dB, -20dB, -40dB, -60dB
DC offset	± 10V into open circuit; ±5V into 50Ω
Square wave	Rise of fall time: < 15nS at full amplitude(50Ω) Aberration: <5% of Vp at full amplitude (50Ω)
Triangle linearity error	99% up to 100KHz
Sine wave distortion	< -30 dB when f ≤ 2MHz < -25 dB when f > 2MHz
Sync output (TTL pulse)	TTL logic clock 0.2Hz ~ 90MHz sync output 0.2 Hz ~ 15MHz output impedance 50Ω

Sweep	Width:	Li or Log during selecting range
	Rate:	0.2Hz~100Hz (5 sec~10 msec)
VCG characteristics	Control range: Max input 0 to 1.8Vdc for selecting range Input impedance: 2KΩ ± 1%	
Function out protection	≤ 20V peak on "func out" terminals	
Frequency counter		
Range	0.2Hz~100MHz (standard) 100MHz~2GHz (option)	
Accuracy	± 5 count + time base error	
Resolution	4 digits for internal counter; 7 1/2 digits for external counter	
Duty cycle measurement (TTL level only)	Resolution: 3 digits Accuracy: 3% + 10 counts; 5Hz ≤ f ≤ 10MHz	
Power	AC 115/230V; 50/60Hz	
Dimensions (DxWxH)	300x220x150mm (11.8"x 8.7"x 5.9")	
Accessories	Power cord	



Real 15MHz
Square waveform

TEPEL Function Generator/ Process Calibrator

3MHz Digital Function Generator



- ❑ 6 Functions, 6 ranges with counter:
Six waveform functions - sine, triangle, square, ramp ± pulse
Frequency range 0.5Hz ~ 3MHz
- ❑ 5 digit autorange counter LED display
- ❑ Internal/external counter function
- ❑ Linear/log sweep, sweep rate 10mS ~ 5S.
- ❑ External counter trigger level control
- ❑ VCF input 0 ~ ±10V voltage control frequency to 1000
- ❑ Amplitude: 20Vp-p (open); 10Vp-p (50Ω load)



FG-32

Main function output		Rate	From 10mS to 5S continuously variable
Frequency range	0.5Hz to 3MHz in 6 ranges	Counter	
Waveforms	Sine, triangle, square, ramp ± pulse	Display	Autorange 5 digits 0.36 red LED display
Amplitude	20Vp-p/ open, 10Vp-p/50Ω load	Gate time	Auto select (0.25S ~ 10S)
Attenuator	0dB, -20dB (± 2%)	Resolution	0.001Hz
Output impedance	50Ω (± 2%)	Mode	INT function generator/ EXT counter
DC offset	±10V with pull ADJ switch	Accuracy	± time base accuracy ± 1 count
Frequency accuracy	Counter accuracy	Time base	20MHz ± 10PPM (23 ± 5°C)
Distortion	< 1% , 1Hz to 100KHz	Accuracy	± 5 count + time base error
Rise/fall time	< 60nS	Frequency range	0.2Hz ~ 60MHz
V.C.F input	0 to ± 10V control frequency to 1000:1	Sensitivity	25mV rms at 1MHz
SYNC output		Max. input	250V rms
Rise time	< 40nS	Max. impedance	1MΩ ± 2%
Level	> 3Vp-p (open)	Power source	AC 115V/230V ±1.0%, 50/60Hz, 25 watt
Waveform	Square, pulse	Dimension (W x H x D)	275x90x300mm (10.9"x3.6"x11.8")
Sweep mode	Linear/log sweep	Net weight	2.5 kgs
Sweep width	>100: 1 continuously variable		

Process Calibrator

- ❑ 4~20mA (1KΩ load, 24V loop supply)
- ❑ 0~100.00mV, 0~1.0000V, 0~12.00V
- ❑ K.J.E.T. thermocouples (°C & °F)
- ❑ Frequency: 2~50,000Hz, 0.005%±2dpts
- ❑ 0.025% basic accuracy
- ❑ 0~20mA, 0~24mA selectable
- ❑ 0~100% input (mA, mV, V)
- ❑ Beeper warning when output is open (mA) or short (mV,V)



CL-325



Electrical specification: (23 ± 5 °C for one year)		
mA DC Current(1KΩ Max, load, 24V loop supply)		
Range	Resolution	Accuracy
0~24mA	1 μA	± 0.025%±3μA
mV, VDC voltage (1mA supply current)		
Range	Resolution	Accuracy
0~100.00mV	10μV	± 0.05% ±30μV
0~10.000V	1mV	± 0.05% ±3 mV
0~1.0000V	100μV	± 0.05% ±300μV
K.J.E.T Type (1°C/°F Resolution, 1KΩ Load Min.)		
Range	Typical accuracy	
K : -200~1370°C/-328~2400°F	± 0.8°C/±1.5°F	
J : -100~760°C/-148~1400°F	± 0.7°C/±1.2°F	
E : -100~700°C/-148~1292°F	± 0.7°C/±1.2°F	
T : -200~400°C/-328~752°F	± 0.8°C/±1.5°F	

General	
Display	2x5 digits Dual LCD display
Power requirement	9V Rechargeable battery
Dimensions	88x17x26mm (3.4"x6.6"x1.0")
Weight	12.34 oz(350g)
Accessories	Carrying case, 9V rechargeable battery, owners manual

TECPEL Programmable DC Power Supplies

Dual output 35V/ 2A x 2



PPS-3520

- Standard GPIB interface
- Electronic calibration via front panel or GPIB
- Programmable over voltage and over current protection
- Low ripple and noise output
- Voltage controlled external programming capabilities
- Output enable and disable
- Remote sensing function
- Programmable up/down fine tuning
- Power-off memory
- 4 Digit LCD display easy to read

DC output Max ratings	70W per channel	Ripple and noise	10mVp-p
Output voltage	Dual 0 to 35V	Read back accuracy	
Output current	Dual 0 to 2A	Voltage	0.1%+2LSB
Programming accuracy		Current	0.2%+5LSB
Voltage	0.05%+2LSB	Transient recovery	50µsec. typical
Current	0.15%+5LSB	Programming	15ms/20ms typical
Programming resolution		General	
Voltage	10mV	Power requirement	115V, 230VAC ±10%, 50/60Hz
Current	0.6 mA	Dimensions (WxHxL)	213x132x399mm (8.4"x5.2"x15.7")
Operating temperature	0 to 50°C.	Weight	18 lbs (8.16kgs)
Ripple and noise	1 mV rms	Accessories	Test leads, power cord and owners manual

Triple Output ± 30V/2.5A



TPT-3025

- Easy operation with up/down keys
- Max. output power 165 watts
- Output voltage: 0 to 30V, 0 to - 30V
- Resolution: 10mV
- Max. output voltage: + 32V/-32V
- Dual tracking: 0 to ±30V
- Output current: 0 to + 2.5A, 0 to -2.5A
- Resolution: 1mA
- Fixed 3.3V/5V output voltage at 3A
- Self test and software calibration
- 12 Bits D/A converter accuracy
- Simultaneous display of voltage and current outputs
- Forced air cooling method
- Overload warning and status change indication by beeper
- RS232 computer interface

Max output power	165 Watts
Output voltage	0 to + 30V, 0 to - 30V, Fixed 3.3V/5V
Setting resolution	10mV
Max output voltage	+32V/-32V
Dual tracking	0 to ±30V
Tracking deviation	±20mV
Line regulation	1mV (Fixed 3.3V/5V 5mV)
Load regulation	2mV
Ripple and noise	1.5mVrms
Ripple peak(p-p)	10mVp-p
Output current	0 to ± 2.5A

Setting resolution	1mA
Max. output current	+3A/-3A
Line regulation	15mA typical
Load regulation	10mA typical
Ripple and noise	1mA rms typical
Ripple peak(p-p)	5mA p-p typical
General	
Power requirement	115V, 230V AC ±10%, 50/60Hz
Dimensions (WxHxL)	213x132x399mm (8.4"x5.2"x15.7")
Weight	18 lbs (8.16 kgs)
Accessories	Test leads, power cord and owners manual

TEPEL Automotive Multimeter

Autoranging + 20A+ Temperature

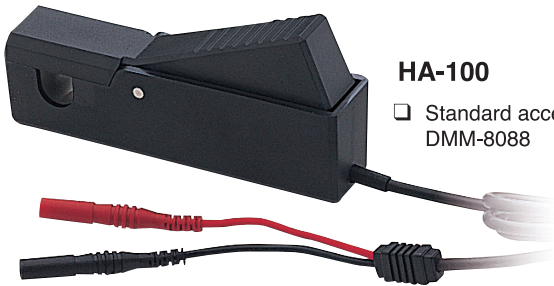


DMM-8088

- 3 3/4 digit, 4000 count display
- Auto-ranging on DC/AC volts, frequency, and capacitance
- Resistance, diode and continuity test
- Read pulse duty cycle and dwell angle for electronic fuel injection feedback carburetors, and ignition
- Inductive RPM pickup
- Milliseconds pulse width to test on-time of fuel injectors, idle air control motors, and electronic transmission controls
- Temperature measurement
- Max/Min, data hold, zero (relative readings) functions
- Overload protection on all ranges

DC voltage ranges	400mV, 4V, 40V, 400V, 1000V $\pm(0.5\%+1\text{dgt})$
AC voltage ranges	400mV, 4V, 40V, 400V, 750V $\pm(2.0\%+5\text{dgt})$
DC current ranges	400mA $\pm(1.0\%+1\text{dgt})$, 20A $\pm(1.5\%+1\text{dgt})$
AC current ranges	400mA $\pm(1.5\%+3\text{dgt})$, 20A $\pm(2.0\%+3\text{dgt})$
Resistance ranges	(Auto-ranging) 400 Ω , 4K Ω , 40K Ω , 400K Ω , 4000K Ω , 40M Ω . $\pm(2.0\%+4\text{dgt})$
Capacitance ranges	(Auto-ranging) 4nF, 40nF, 400nF, 4 μ F, 40 μ F. $\pm(2.0\sim 5.0\%+4\text{dgt})$
Frequency ranges	(Auto-ranging) 100Hz, 1KHz, 10KHz, 100KHz, 400KHz. $\pm(0.1\%+4\text{dgt})$
Temperature ranges	-50 to 1100 $^{\circ}$ C $\pm(1.0\%+2^{\circ}$ C); -50 to 2000 $^{\circ}$ F $\pm(1.0\%+4^{\circ}$ C)
Frequency ranges	(Auto-ranging) 100Hz, 1KHz, 10KHz, 100KHz, 400KHz $\pm(0.1\%+4\text{dgt})$
RPM ranges	600 to 4000 low; 1000 to 12000 high RPM (TACHO) manual ranging $\pm(2\%+1\text{dgt})$
Dwell angle	4,5,6,8 Cylinders $\pm(2.0\%+5\text{dgt})$
Duty cycle	0.0 to 90.0% $\pm(2.0\%+5\text{dgt})$
ms pulse width	0.1ms to 10.0ms $\pm(2\%+0.2\text{ms})$
Diode Test	0.6mA typical $\pm(2.0\% +4\text{dgt})$
Audible continuity	Open circuit voltage: 0.4VDC, audible threshold: <40 Ω
Overload protection	1000VDC or 750VAC RMS for DC/AC voltage; 0.5A, 20A /600V fused for DC/AC current 60VDC or 24VAC RMS for temperature 500VDC or AC RMS for other ranges
General	
Power requirement	9V Battery x1
Dimensions	52x96x200mm (2"x3.8"x7.9")
Weight	17.5 oz(495g)
Accessories	Test leads, holster, battery, owners manual, K-type Thermocouple probe, Inductive RPM pickup probe.
Optional accessories	CA-600 DC/AC current clamp, 400 Amp.

Inductive RPM Pickup Probe



HA-100

- Standard accessory for DMM-8088

AC/DC Current Clamp Adapter



CA-600



- Converts any DMM to a current clamp
- Measure current without disconnecting circuit under test
- AC/DC 600A capability
- Dual Hall-effect sensors
- Accuracy DC: $\pm 2\%+2A$
AC: $\pm 3\%+2A$ (50~ 400Hz)
- For use with any multi-meter at 200mV or 2V ranges for direct readout. Input impedance at least 1M Ω
- Power on indicating
- Zero adjustment knob to compensate the hysteresis effect in DC measurements.
- Transformer ratio: 1000: 1
- Output 1mV/A
- Jaw opening capability: 30mm conductor
- Confirm to Safety: IEC 1010-1, IEC1010-2-032. UL, CE approved.
- Low battery indication
- Able to work with oscilloscope by using optional accessory CA-06 (BNC male to dual binding post)

Measurement range	600A DC or AC
Accuracy	$\pm(2\% \text{ reading} +2A)$
Frequency response(AC)	50Hz to 400Hz
Input resistance	10KHz typical
Maximum conductor size	1.1" (30mm)
General	
Power requirement	9V Battery
Dimensions	178x70x33mm (7"x2.75"x1.3")
Weight	11 oz(290g)
Accessories	Battery, and owners manual



CA-06



3 3/4 DMM + Temperature

- AC True R.M.S. and RS-232C Interface (DMM-8061)
- 3 3/4 digits, 3,999 counts
- Auto and manual ranging
- Data hold function
- Relative mode
- Capacitance measurement
- Temperature measurement (-40°C~1,000°C)
- Frequency measurement (10Hz~10 MHz)
- Audible continuity check
- Diode test
- Overload protection
- Fused 10A protection
- Sleep mode (DMM-8060)
- Over molding rubber overlapping ABS plastic to substitute holster



RS-232

DMM-8060 / DMM-8061

DC voltage ranges	400mV, 4V, 40V, 400V, 1000V ±(0.8%+1dgt)
AC voltage ranges	4V, 40V, 400V, 750V ±(1%+5dgts)
DC current ranges	400µA, 4000µA, 40mA, 400mA, 4A, 10A ±(1 %+2dgts)
AC current ranges	400µA, 4000µA, 40mA, 400mA, 4A, 10A ±(1.5 %+5dgts)
Resistance ranges	400Ω,4KΩ, 40KΩ, 400KΩ, 4MΩ, 40MΩ, ±(1%+2dgts)
Capacitance range	40nF, 400nF, 4µF,40µF, 100µF ±(3%+5dgts)
Frequency range	10 ~ 10MHz ±(0.1%+ 3dgts)
*Duty cycle *Diode test *Continuity buzzer *Data hold *Relative mode	
*Backlight display	
*Low battery display *Input impedance for DC voltage around 10MΩ	
General	
Max. display	3999
Power requirement	9V Battery x1
Dimensions	177x85x40mm (7.0"x3.4"x1.5")
Weight	17 oz(482g)
Accessories	Test leads, battery, soft ware (DMM-8061) and owners manual



3 3/4 DMM + Auto ranging

- 3 3/4 DMM + Auto ranging
- 3 3/4 Digits, 3,999 counts
- 8 functions, 21 ranges
- Continuity beeper
- Diode test
- Auto ranging



DMM-135

DC voltage ranges	400mV, 4V, 40V, 400V, 500V, ±(0.8 %+1dgt)
AC voltage ranges	4V, 40V, 400V, 500V, ±(1.2 %+3dgts)
DC current ranges	400uA, 4000uA, 40 mA, 400mA,4A, 10A ±1.0%+2dgts)
AC current ranges	400uA, 4000uA, 40 mA, 400mA, 4A, 10A ±1.5%+5dgts)
Resistance ranges	400, 4K, 40K, 400K, 4M, 40MΩ, ±(1%+2dgts)
Overload protection	250V for R, diode, continuity & temperature and 500mA, 250V fast type fuse for AC /DC current, 10A unfused., 500V for AC/DC Voltage
Diode test, Continuity beeper, Low battery display, Input impedance for DC voltage measurement approx. 10MΩ	
General	
Power requirement	1.5V Battery (AAA x 2)
Dimensions	130x72x35mm (5.2"x2.8"x1.4")
Weight	5.44 oz(156g)
Accessories	Test leads, battery and owners manual



3 1/2 DMM+ Temperature

- 3 1/2 digits, Max. 1,999 counts display
- 7 Functions, 19 ranges
- Temperature measurement -40°C~1000°C
- Resistance measurement up to 200MΩ
- Continuity beeper
- Data hold function



DMM-134

DC voltage ranges	200mV, 2000mV, 20V, 200V, 500V, ±(0.5 %+2dgt)
AC voltage ranges	200V, 500V, ±(1.2 %+10 dgts)
DC current ranges	2000uA, 20mA, 200mA,10A ±(1 %+2dgts)
Resistance ranges	200, 2K, 20K, 200K, 20MΩ, ±(0.8.%+2dgts)
Overload	250V for R, diode, continuity & temperature and 315mA, 250V fast
Protection	Type fuse for DC current, 10A unfused, 500V for AC/DC voltage(except 200mV range 250V)
Diode test, Continuity beeper, Low battery display, Input impedance for DC voltage measurement approx. 10MΩ	
General	
Power requirement	1.5V Battery (AAA x 2)
Dimensions	130x72x35mm (5.2"x2.8"x1.4")
Weight	5.44 oz(156g)
Accessories	Test leads, battery and owners manual

TECEPEL Heavy Duty Digital Multimeters

3 1/2 DMM+Inductance



DMM-8007



- 0.5% DC V accuracy
- 1.999 count LCD display
- Resistance to 2000MΩ
- Frequency to 20MHz
- Capacitance measurement
- Inductance measurement
- Logic test
- Transistor hFE test
- Audible continuity test
- Drop-proof to 10ft
- Overload protection
- Meet IEC-348 and UL-1244 standard
- 2-year warranty

DC voltage ranges	200mV, 2V, 20V, 200V, 1000V, ±(0.5%+1dgt)
AC voltage ranges	200mV, 2V, 20V, 200V, 750V, ±(1.2~2%+3dgt)
DC current ranges	20mA, 200mA, 20A, ±(1~3%+3dgt)
AC current ranges	20mA, 200mA, 20A, ±(1.5~3.5%+4dgt)
Resistance ranges	200Ω, 2KΩ, 20KΩ, 200KΩ, 2MΩ, 20MΩ, 2000MΩ, ±(1~5%+10dgt)
Capacitance range	2nF, 20nF, 200nF, 2μF, 200μF, ±(5%+10dgt)
Inductance ranges	2mH, 20mH, 200mH, 2H, 20H, ±(5%+10dgt)
Frequency range	2KHz-20MHz, ±(0.5%+10dgt)>20Hz
*Diode test * Transistor test (hFE) *Logic test	
General	
Power requirement	9V Battery x1
Dimensions	190x86x38mm (7.5"x3.4"x1.5")
Weight	17 oz(482g)
Accessories	Test leads, holster, battery, and owners manual

3 3/4 DMM+Capacitance



DMM-8020



- 0.5% DC V accuracy
- 3.999 count LCD display
- Resistance to 2000MΩ
- Frequency to 40MHz
- Capacitance measurement
- Logic test
- Transistor hFE test
- Audible continuity test
- Drop-proof to 10ft
- Overload protection
- Meet IEC-348 and UL-1244 standard
- 2-year warranty

DC voltage ranges	400mV, 4V, 40V, 400V, 1000V, ±(0.5%+1dgt)
AC voltage ranges	400mV, 4V, 40V, 400V, 750V, ±(1.2~2%+3dgt)
DC current ranges	40mA, 400mA, 20A, ±(1~3%+3dgt)
AC current ranges	40mA, 400mA, 20A, ±(1.5~3.5%+4dgt)
Resistance ranges	400Ω, 4KΩ, 40KΩ, 400KΩ, 4MΩ, 40MΩ, ±(0.75~2%+5dgt)
Capacitance range	4nF, 40nF, 400nF, 4μF, 40μF, ±(3%+10dgt)
Frequency range	4KHz, 40KHz, 400KHz, 4000KHz, ±(0.1%+4dgt)
Diode test, Transistor test(hFE), Logic test.	
General	
Power requirement	9V Battery x1
Dimensions	190x86x38mm (7.5"x3.4"x1.5")
Weight	17 oz(482g)
Accessories	Test leads, holster, battery and owners manual

4 1/2 DMM+True RMS



DMM-8050



- True RMS
- 19.999 count LCD display
- 0.05% DC V accuracy
- High voltage to 1,000 DC and 750VAC
- 20A DC/AC current range and 20MΩ
- Frequency measurement
- Data hold
- Logic test
- Duty cycle measurement
- Drop-proof to 10ft.
- Overload protection
- Meet IEC-348 and UL-1244 standard
- 2-year warranty

DC voltage ranges	200mV, 2V, 20V, 200V, 1000V, ±(0.05%+3dgt)
AC voltage ranges	200mV, 2V, 20V, 200V, 750V, (True RMS), ±(1~2%+20dgt)
DC current ranges	200μA, 2mA, 20mA, 200mA, 20A, ±(0.5~2%+10dgt)
AC current ranges	200μA, 2mA, 20mA, 200mA, 20A, (True RMS), ±(0.8~2.5%+10dgt)
Resistance ranges	200Ω, 2KΩ, 20KΩ, 200KΩ, 2MΩ, 20MΩ, ±(0.15~1%+10dgt)
Frequency range	2KHz, 20KHz, 200KHz
Diode test, Logic test.	
General	
Power requirement	9V Battery x1
Dimensions	190x86x38mm (7.5"x3.4"x1.5")
Weight	17 oz(482g)
Accessories	Test leads, holster, battery and owners manual

Low Price Digital Multimeter



DMM-120

- 3 1/2 Digit, 1.2% basic accuracy
- 7 Functions, 17 ranges
- DCV, ACV, DCA and OHMS
- hFE and diode check
- Battery test with load
- Compact, rugged and safety design

DC voltage ranges	2V, 20V, 200V, 600V, $\pm(1.2\%+1\text{dgt})$
AC voltage ranges	200V, 500V, $\pm(2.0\%+4\text{dgt})$
DC current ranges	2A, $\pm(2.5\%+2\text{dgt})$
Resistance ranges	200, 2K, 20K, 200K, 2000K Ω , $\pm(1.5\%+3\text{dgt})$
Overload protection	500V for R, diode 2A fuse
Diode test, Transistor Test(hFE), battery test.	
General	
Power requirement	9V Battery x1
Dimensions	147x70x39mm (5.8"x2.8"x1.5")
Weight	12.9 oz(370g)
Accessories	Test leads, holster, battery and owners manual

DMM + Capacitance



DMM-123

- 3 1/2 Dight, 0.8% basic accuracy
- 9 Functions, 36 Ranges
- Capacitance 2nF~20 μ F
- Instant continuity beeper
- Compact, rugged and safety design
- 10 Amps DC/AC fuse protected

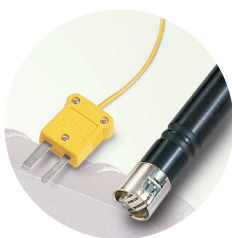
DC voltage ranges	200mV, 2V, 20V, 600V, $\pm(0.8\%+1\text{dgt})$
AC voltage ranges	200mV, 2V, 20V, 600V, $\pm(2.0\%+3\text{dgt})$
DC current ranges	200 μ A, 2mA, 20mA, 200mA, 10A, $\pm(3\%+3\text{dgt})$
Resistance ranges	200 Ω , 2K, 20K, 200K, 2000K, 20M, 2000M Ω , $\pm(1\sim5\%+10\text{dgt})$
Capacitance range	2nF, 20nF, 200nF, 2 μ F, 20 μ F, $\pm(4\%+10\text{dgt})$
Overload protection	500V for R, diode, continuity; 0.5A and 10A fuse
Diode Test, Transistor Test(hFE).	
General	
Power requirement	9V Battery x1
Dimensions	147x70x39mm (5.8"x2.8"x1.5")
Weight	12.9 Oz(370g)
Accessories	Test leads, holster, battery and owners manual

DMM+ Type K Temperature



DMM-124

- 3 1/2 Digit, 1.2% basic accuracy
- 8 Functions, 23 ranges
- DCV, ACV, and Ohms measurement
- Capacitance 20 μ F ~20mF
- Frequency measurement 10Hz to 40kHz
- Type K temperature measurement
-20°C~750°C, -4°F~1400°F
- Phase indicator
- Diode /continuity test



DC voltage ranges	200mV, 2V, 20V, 600V $\pm(1.2\%+1\text{dgt})$
AC voltage ranges	200mV, 2V, 600V $\pm(2.0\%+4\text{dgt})$
Resistance ranges	200 Ω , 2K Ω , 20K Ω , 200K Ω , 2000K Ω , 20M Ω , 2000M Ω , $\pm(1.0\sim2.0\%+4\text{dgt})$ 200 Ω ~10M Ω
Capacitance ranges	20 μ F, 200 μ F, 2000 μ F, 20mF
Temperature	-20°C~750°C, -4°F~1400°F, $\pm(3.0\%rdg+2^\circ\text{C})$, $\pm(3.0\%rdg+4^\circ\text{F})$
Frequency range	Auto ranging 10Hz to 40KHz. $\pm(0.1\%+2\text{dgt})$
Phase Indicator	Freq. 45Hz to 450Hz, Voltage: 80V to 480V
Overload protection	Temperature: 60VDC or 24V AC RMS Capacitance : 250V/1.5A 500V DC for other ranges
Diode test, Continuity Beeper < 100Ω	
General	
Power requirement	9V Battery x1
Dimensions	147x70x39mm (5.8"x2.8"x1.5")
Weight	12 oz(340g)
Accessories	Test leads, holster, battery, K-type thermocouple TPK-01x1 and owners manual.



Autoranging + Bar Graph

- ❑ 3200 Count, 1.2% basic accuracy
- ❑ 7 Functions, 27 Ranges
- ❑ Auto and manual ranging
- ❑ 34 Segment fast bargraph
- ❑ Auto Power OFF to save battery
- ❑ 10 Amps and mA DC/AC fuse protected

DMM-125

DC voltage ranges	320mV, 3.2V, 32V, 320V, 600V, $\pm(1.2\%+1\text{dgt})$
AC voltage ranges	3.2V, 32V, 320V, 600V, $\pm(2.0\%+4\text{dgt})$
DC current ranges	320 μ A, 3200 μ A, 32mA, 320mA, 10A, $\pm(3.0\%+3\text{dgt})$
AC current ranges	320 μ A, 3200 μ A, 32mA, 320mA, 10A, $\pm(3.5\%+4\text{dgt})$
Resistance ranges	320, 3.2K, 32K, 320K, 3.2M, 32M Ω , $\pm(1.5\sim 5\%+5\text{dgt})$
Overload protection	500V for R, diode, continuity; 0.5A and 10A fuses
Diode test, Transistor test(hFE), Continuity beeper.	
General	
Power requirement	9V Battery x1
Dimension	147x70x39mm (5.8"x2.8"x1.5")
Weight	12.9 oz(370g)
Accessories	Test leads, holster, battery and owners manual



DMM-168

Automotive Multimeter

- ❑ 3999 Counts digital display
- ❑ DC/AC Voltage
- ❑ DC/AC Current
- ❑ Resistance, frequency, temperature, RPM measurement
- ❑ Duty cycle, DWELL angle
- ❑ Continuity test, diode test
- ❑ Data hold, auto ranging, auto power off
- ❑ Overload protection
- ❑ Safety Input jacks
- ❑ Safety test leads
- ❑ Safety: IEC/EN61010-1, CATIII 600V, CE approved

DC voltage	400mV, 4V, 40V, 400V, 600V $\pm 1.0\%$
AC voltage	400mV, 4V, 40V, 400V, 600V $\pm 2.0\%$ (50~500Hz)
DC current	400 μ A, 4000 μ A, 40mA, 400mA, 10A $\pm 2.0\%$
AC current	400 μ A, 4000 μ A, 40mA, 400mA, 10A $\pm 2.5\%$ (50~500Hz)
Resistance	400, 4K, 40K, 4M, 40M Ω $\pm 1.5\%$
Frequency	10Hz~400Hz $\pm 0.1\%$
Temperature	-20°C to 1000°C (-4°F to 1832°F) $\pm 2.0\%$ K type thermocouple
RPM	Tacho measurement 600~12000RPM $\pm 2.0\%$
Duty cycle %	1% - 90% $\pm 2.0\%$
DWELL angle	4, 5, 6, 8 cylinders $\pm 2.0\%$



DMM-113B

Pocket Multimeter + NCV

- ❑ Low Cost + Rugged + Good performance + New design
- ❑ NCV (non contact voltage indicator)
- ❑ maximum reading of 3400
- ❑ 3 1/2 digit LCD display
- ❑ 34-segment analog bar-graph
- ❑ Special design for test lead storage holder
- ❑ It's convenient to carry it in your pocket

Function	Range	Accuracy	Range	Accuracy	Input Impedance	Overload Protection
DC voltage	340mV, 34V, 340V, 600V	$\pm 2\%$ $+2$ digits	3.4V	$\pm 1\% + 2$ digits	100 M Ω	600V DC or AC rms
AC voltage	3.4V, 34V, 340V, 600V	$\pm 4\% + 5$ digits (50Hz~60Hz)	-	-	10M Ω (3.4V) others 9.1M Ω	600V DC or AC rms
Resistance	340 Ω , 3.4 K, 34K, 340K Ω	$\pm 2\% + 4$ digits	3.4 M Ω (34M Ω)	$\pm 3\% + 4$ digits ($\pm 5\% + 5$ digits)	Open circuit Volts: -1.2Vdc	450V DC or AC rms
Continuity test	340 Ω	< 35 Ω Threshold	-	-	Response time:500ms	450V DC or AC rms
Diode test	2V	$\pm 3\% + 3$ digits	-	-	Test current 1.0mA	450V DC or AC rms
Power	2x1.5V Button-type batteries	(IEC #LR-44, NEDA # 1166A)	-	-	-	-
Safety	IEC/EN61010-1CATIII 300V CAT II 600V	CE approval	-	-	-	-

AC True RMS



DMM-129A

20A

- 3 3/4 Digits, 3,999 Count
- Auto/Manual range
- 42 Segment analog bar graph
- Data Hold/Max-Min memory
- Capacitance measurement
- Overload protection
- Frequency measurement
- Audible continuity check
- Relative mode, diode test, auto power off
- 20Amp range measurement
- Double fuse protection (500mA, 20A)
- Overlapping rubber holster
- Temperature measurement
-50°C~1300°C (-58°F ~2372°F).
- RS232 interface

DC voltage ranges	400mV, 4V, 40V, 400V, 1000V ±0.1%
AC voltage ranges	400mV, 4V, 40V, 400V, 750V ±1%
DC current ranges	400uA, 4000 uA, 40mA, 400mA, 20A ±1%
AC current ranges	400uA, 4000 uA, 40mA, 400mA, 20A ±1.5%
Resistance ranges	400Ω, 4KΩ, 40KΩ, 400KΩ, 4MΩ, 40MΩ, ±0.5%
Capacitance range	4nF, 40nF, 400nF, 4uF, 40uF, 400uF, 4mF, 40mF ±3.0 %
Frequency range	4K, 40K, 400K, 4MHz, 40MHz ±0.1%
Overload protection	450VDC or AC RMS for DC/AC voltage, R, diode, continuity
Temperature	-50°C~1300°C (-58°F ~ 2372°F) ±0.8% K type thermocouple
*Diode test, Continuity test, Hz button, ACV.DCV, ACA/DCA measurement MAX/MIN hold, RS-232,	
Resolution	100uV, 0.1uA, 0.1Ω, 1P, 1Hz, 1°C, 1°F
General	
Power requirement	9V Battery x 1
Dimension	7.7"x3.5"x1.7" (198x90x44mm)
Weight	13.9 oz(395g)
Accessories	Test leads, holster, battery and owners manual

High Voltage Test Probe



HV-40

Connect to any digital multimeter with industry standard jacks to measure up to 40K VDC or peak AC or 28KV rms AC.

Max. working voltage	40KV DC or Peak AC 28KV rms AC
Accuracy	DC Volts: ±1% (1KV to 20KV); ±2%(20KV to 40KV)
AC volts	Typically 5% at 60Hz
Division ratio	1000: 1
Input resistance	Approx. 1000MΩ
Cable length	1 Meter

AC/ DC mA Current Clamp



CA-60

- This miniature clamp meter features two hall effect sensors
- For use with any multimeter with 200mV or/and 2V ranges for direct readout input impedance of at least 10KΩ
- High conversion factor for low DC and AC mA measurement
- With the small jaw size it can fit into tight space in circuit panel or wire bundle to take the reading
- The high frequency response at 20KHz is useful for waveform monitoring on an oscilloscope
- Zero adjustment is made easy by just pushing the ZERO button
- It is best for locating small signal, industrial control, battery leakage, and automotive usage
- Able to work with oscilloscope by using optional accessory CA-06 (BNC male to dual binding post)

Measurement range	0~60 A DC or AC
Accuracy	DCA: ± 1.5% ACA: ± 2% (40Hz ~ 2KHz) ACA: ± 4% (2K ~ 10KHz) ACA: ± 6% (10K ~ 20KHz)
Frequency response (AC)	50Hz to 20KHz
Transformer ratio	10:1, 100:1 (1 mV/10mA or 1 mV/100mA conversion)
Output	1mV/10mA, 1mV/100mA
Input resistance	Minimum 10KΩ
Conductor jaw opening capability	9mm 3/8", fits tight space
General	
Power requirement	9V Battery x1
Dimension	178x70x33mm (7"x2.75"x1.3")
Weight	11 oz(290g)
Accessories	Battery, owners manual
Safety design	meet IEC 100-1 , IEC 1010-2-032 CE

LCR Meter



- L.C.R. 3-function measurement
- 1% Basic accuracy
- High resolution 0.1μH, 0.1pF and 1mΩ
- 0.1μH to 200H inductance measurement
- 1mΩ to 20MΩ resistance measurement
- Dissipation factor measurement
- Zero adjustment
- The test lead TL-06 (option) is specially designed for measuring SMD (surface mount device) resistor, capacitor and inductor

CE
EMC-LVD
LCR-610

Capacitance ranges	200pF, 2nF, 20nF, 200nF, 2μF, 20μF, 200μF, 2mF, 20mF, 9 ranges
	Resolution: 0.1pF-10μF. Accuracy 200pF-200μF 1%+2dgt, 2mF-20mF 2%+2dgt
Inductance ranges	200μH, 2mH, 20mH, 200mH, 2H, 20H, 200H, 7 ranges
	Resolution: 0.1μH - 100mH, Basic Accuracy: 3%+2 dgt
Resistance ranges	2Ω, 20Ω, 200Ω, 2KΩ, 20KΩ, 200KΩ, 2MΩ, 20MΩ, 8 ranges
	Resolution: 0.1mΩ - 10KΩ, Basic Accuracy: 2%+2dgt
General	Power requirements: 9V battery,
	Dimension: 175x87x35mm (6.8"x 3.4"x1.37")
	Weights: 12.2 oz(350g) comes complete with test leads, battery and owners manual

Dual Display Auto-Ranging



- Basic accuracy: 0.5% for resistance; 0.7% for inductance, capacitance
- Dual displays provide quick tested results readouts, with L.C.R. display values up to 19999 counts and Q.D.R. display values up to 9999 counts (auto range)
- Excellent resolutions: resistance up to 0.001W, inductance capacitance up to 0.1μH/0.1pF
- Provided up to 4 testing parameters: Ls+(Q,D,Rs), Lp+(Q,D,Rp); Cs+(Q,D,Rs), Cp+(Q,D,Rp)
- Auto-power off function
- Fuse detection function: to inform that the fuse is open or damaged
- External DC adapter functions

RS-232
CE
EMC-LVD
LCR-612

LCR Test Lead



TL-06

- The test lead TL-06 (option) is specially designed for measuring SMD (surface mount device) resistor, capacitor and inductor

Capacitance ranges	8 Ranges	1KHz Accuracy	120Hz Accuracy	Resistance ranges	7 Ranges 1KHz/120Hz accuracy	
	20mF	Nil	± (5.0 %+5 counts)/(DF<0.1)		10MΩ	± (2.0% + 8 counts)
	2000μF	± (5.0 %+5 counts)/(DF<0.1)	± (1.0 %+5 counts)/(DF<0.1)		2000KΩ	± (0.5% + 5 counts)
	200μF	± (1.0 %+5 counts)/(DF<0.5)	± (0.7 %+3 counts)/(DF<0.5)		200KΩ	± (0.5% + 3 counts)
	20μF	± (0.7 %+3 counts)/(DF<0.5)	± (0.7 %+3 counts)/(DF<0.5)		20KΩ	± (0.5% + 3 counts)
	2000nF	± (0.7 %+3 counts)/(DF<0.5)	± (0.7 %+3 counts)/(DF<0.5)		2000KΩ	± (0.5% + 5 counts)
	200nF	± (0.7 %+3 counts)/(DF<0.5)	± (0.7 %+5 counts)/(DF<0.5)		200KΩ	± (0.8% + 5 counts)
	20nF	± (0.7 %+5 counts)/(DF<0.5)	± (1.0 %+5 counts)/(DF<0.1)		20Ω	± (1.2% + 8 counts)
	2000pF	± (1.0 %+5 counts)/(DF<0.1)	Nil		Resolution up to 0.001Ω	
	Resolution: up to 0.1 pF				Parameter measurement	Ls+(Q,D,Rs), Lp+(Q,D,Rp); Cs+(Q,D,Rs), Cp+(Q,D,Rp)
Inductance ranges	8 Ranges	1KHz Accuracy	120Hz Accuracy	Overload	"OL" is display	
	10000H	Nil	No specified	Range mode	Auto and manual	
	2000H	No specified	± (1.0%+5 counts)	Test frequency	1KHz and 120Hz	
	200H	± (1.0%+5 counts)	± (0.7%+5 counts)	Measurement rate	Approx. 1 time per second, nominal	
	20H	± (0.7 %+5 counts)	± (0.7%+5 counts)	General		
	2000mH	± (0.7 %+5 counts)	± (0.7%+5 counts)	Power requirement	(1). Single standard 9V battery (NEDA 1604, IEC 6F22 006P)	
	200mH	± (0.7 %+5 counts)	± (1.0%+5 counts)	(2). External DC adapter 12Vmin to 15Vmax/50mA. (optional)		
	20mH	± (1.2%+5 counts)	± (2.0%+5 counts)	Auto power off	The meter key switch inactive for more than 5 minutes	
	2000μH	± (2.0%+5 counts)	Nil	Overload protection	0.1A/250V fast below fuse	
	Resolution: up to 0.1 μH				Dimension (HxWxD)	192x91x52.5mm (7.55"x3.58"x2.1")
				Weight	365g (including accessories)	
				Accessories	Comes complete with leads, battery, software disk and owners manual	

TECPEL Digital Clamp-on Meters



EMC-LVD

DCM-2600

1000A AC Amp + 2000MΩ

- 3 1/2 Digit display
- AC current up to 1000A
- AC voltage up to 750V
- DC voltage up to 1000V
- Resistance up to 2000MΩ
- Display hold function
- Audible continuity test
- Overrange indication
- Maximum recording mode
- Confirm to the IEC-1010-1,
- UL1244/UL3111, CE standard
- Hand guard protection
- Carrying case

DC voltage ranges	1000V, ± (0.5%+1dgt)
AC voltage ranges	750V, ± (1.2%+4dgts)
AC current ranges	200A, 1000A, ± (1.5%+5dgts)
Resistance ranges	200Ω, 20KΩ, 20MΩ, 2000MΩ, ± (1%+3dgts)
Continuity test	Audible indication 200Ω, threshold <75Ω
General	
Power requirement	9V Battery x1
Dimension	275x90x43mm (10.8"x3.6"x1.7")
Weight	17 oz(482g)
Accessories	Test leads, soft carrying case, battery and owners manual.

conductor jaw size : 57mm



EMC-LVD

DCM-2605

1000A AC/DC Amp + Frequency

- 3 1/2 Digit display
- AC/DC current up to 1000A
- AC voltage up to 750V
- DC voltage up to 1000V
- Resistance up to 200KΩ
- Frequency up to 40KHz
- Display hold function
- Audible continuity test
- Over range indication
- Maximum recording mode
- Confirm to the IEC-1010-1
- UL 1244/UL3111, CE standard
- Hand guard protection
- Carrying case

DC voltage ranges	1000V, ± (0.5%+1dgt)
AC voltage ranges	200V, 750V, ± (1.5%+4dgts)
AC current ranges	200A, 1000A ± (1.5%+5dgts)
DC current ranges	200A, 1000A ± (1.5%+5dgts)
Resistance range	200Ω, 200KΩ ± (1.0%+3dgts)
Continuity test	Audible indication less than 30Ω
General	
Power requirement	9V Battery x1
Dimension	277x102x49mm (10.9"x4.0"x1.9")
Weight	18.9 oz(540g)
Accessories	Test leads, soft carrying case, battery and owner manual.

conductor jaw size : 57mm



EMC-LVD

DCM-2606

1000 Amp AC/DC + TRUE-RMS

- 3 3/4 Digit display with bargraph
- AC/DC current up to 1000A
- AC/DC voltage up to 1000V
- Display hold function
- Audible continuity test
- Overrange indication
- Frequency up to 400KHz
- Capacitance measurement
- Resistance up to 40MΩ
- Relative mode to read offset values (Zero Key)
- Peak hold for transient measurements
- Max/Min recording mode
- Confirm to the IEC-1010-1,
- UL1244/UL3111, CE standard
- Hand guard protection
- True-RMS reading
- Diode test
- Carrying case

DC voltage ranges	400mV, 4V, 40V, 400V, 1000V, ± (0.5%+1dgt)
AC voltage ranges	True RMS 400mV, 4V, 40V, 400V, 750V, ± (1.5%+4dgts)
AC current ranges	True RMS 400A, 1000A, ± (1.5%+5dgts)
DC current ranges	400A, 1000A, ± (1.5%+5dgts)
Resistance ranges	400Ω, 4KΩ, 40KΩ, 400KΩ, 4MΩ, 40MΩ, ± (1%+2dgts)
Frequency ranges	100, 1K, 10K, 100K, 400KHz, ± (0.5%+3dgts)
Continuity test	Audible indication 400Ω, threshold <40Ω
General	
Power requirement	9V Battery x1
Dimension	275x90x43mm (10.8"x3.6"x1.7")
Weight	17 oz(482g)
Accessories	Test leads, soft carrying case, battery and owners manual.

conductor jaw size : 57mm



CE
EMC-LVD
DCM-2608

1500A AC/2000A DC + Bar Graph

- 3 1/2 digit display
- AC current up to 1500A; DC current up to 2000A
- AC voltage up to 750V; DC voltage up to 1000V
- Resistance up to 40M Ω
- Frequency up to 400kHz
- Capacitance measurement
- Audible continuity test / Diode test
- Over range indication
- Max/Min recording mode
- Relative mode to read offset values(Zero Δ key)
- Peak hold for transient measurement
- Confirm to the IEC-1010-1
- UL 1244/UL3111, CE standard
- Hand guard protection
- Carrying case

DC voltage ranges	400mV, 4V, 40V, 400V, 1000V, $\pm(0.5\%+1\text{dgt})$
AC voltage ranges	400mV, 4V, 40V, 400V, 750V, $\pm(1.5\%+4\text{dgt})$
AC current ranges	200A, 1500A $\pm(1.5\sim5\%+5\text{dgt})$
DC current ranges	200A, 2000A $\pm(1.5\sim5\%+5\text{dgt})$
Resistance range	400 Ω , 4k Ω , 40k Ω , 400k Ω , 4000k Ω , 40M Ω (1.0%+4dgt)
Continuity test	Audible indication <40 Ω / Diode test 0.6mA . approx.
General	
Power requirement	9V Battery x1
Dimension	10.9"x4.0"x1.9"(277x102x49mm)
Weight	18.9 oz(540g)
Accessories	Test leads; soft carrying case, battery and owner manual.

conductor jaw size : 57mm



CE
EMC-LVD
DCM-036

300A AC Amp + Frequency

- 3 1/2 Digit, 1999 count display
- AC current up to 300A
- AC/DC voltage up to 600V
- Resistance up to 200K Ω
- Max/Data hold function
- Audible continuity test
- Overload protection
- Confirm to IEC-1010-1 and IEC1010-2-031, CATIII 600V
- Hand guard protection.

DC voltage ranges	20V, 600V $\pm(1.0\%+1\text{dgt})$
AC voltage ranges	200V, 600V $\pm 2.0\%+4\text{dgt})$ 50~500Hz
AC current ranges	20A, 200A, 300A $\pm(3.0\%rdg+5\text{dgt})$ 50~60Hz
Resistance ranges	200 Ω , 200K Ω $\pm(1.2\%+4\text{dgt})$
Frequency ranges	2K, 40K(10KHz~40KHz) $\pm(0.1\%+3\text{dgt})$
Continuity test	Audible indication: < 100 Ω ; Diode test current: 1.0mA
General	
Power requirement	9V Battery x1
Dimension	177x45x43mm (6.9"x1.8"x1.7")
Weight	7 oz(200g)
Accessories	Test leads, carrying case, battery and owners manual

conductor jaw size : 23mm



CE
EMC-LVD
DCM-037

Auto ranging + Bar Graph

- 3 3/4 Digit, 3400 Count display
- Analog bar graph.
- AC current up to 300A
- AC/DC voltage up to 600V
- Resistance up to 34M Ω
- Data hold function
- Audible continuity test
- Overload protection
- Confirm to IEC-1010-1 and IEC1010-2-031, CATIII 600V
- Hand guard protection.

DC voltage ranges	340mV, 3.4V, 34V, 340V, 600V $\pm(1.0\%+1\text{dgt})$
AC voltage ranges	340mV, 3.4V, 34V, 340V, 600V $\pm(2.0\%+4\text{dgt})$ 50~500Hz
AC current ranges	34A, 300A $\pm(3.0\%rdg+5\text{dgt})$ 50~60Hz
Resistance ranges	340 Ω , 3.4K Ω , 34K200 Ω , 340K Ω , 3.4M Ω , 34M Ω $\pm(1.5\sim 4.0\%+4\text{dgt})$
Continuity test	Audible Indication: < 40 Ω ; Diode test current: 1.0mA
General	
Power requirement	9V Battery x1
Dimension	177x45x43mm (6.9"x1.8"x1.7")
Weight	7 oz(200g)
Accessories	Test leads, carrying case, battery and owners manual

conductor jaw size : 23mm

TECPEL Clamp Meter / Leakage Current Tester

200A AC/DC Amp Clamp Meter

- 3 3/4 Digits 4,000 counts
- High resolution to 10mA AC/DC
- One touch auto zero for DC current measurements
- Voltage, resistance, and frequency
- Fast 40 segment bar graph
- Min/Max, data hold, Auto power off
- Overload protection 600V for Ω measurement



CE
EMC-LVD
DCM-039

DC voltage ranges	0~400V, 0.1V, $\pm 0.1V \pm 1.5\% \pm 2dgt$ s
AC voltage ranges	0~400V, 0.1V, $\pm 1.0\% \pm 2dgt$ s
DC current ranges	0~40A 10mA $\pm 1.0\% \pm 2dgt$ s 0 to 150A 100mA $\pm 1.0\% \pm 2dgt$ s 150 to 200A 100mA $\pm 2.2\% \pm 2dgt$ s
AC current ranges	0~40A 10mA $\pm 1.0\% \pm 3dgt$ s 0 to 150A 100mA $\pm 1.0\% \pm 3dgt$ s 150 to 200A 100mA $\pm 2.2\% \pm 3dgt$ s
Resistance ranges	40 to 400 Ω 0.1 Ω $\pm 1.0\% \pm 2dgt$ s beep <38 Ω 600V AC
Frequency ranges	100 to 10k 0.01Hz $\pm 0.5\% \pm 2dgt$ s sensitivity 10V, 600VAC protection
General	
Power requirement	1.5V SUM-3 Battery x2
Dimension	210x64x36 mm (8.3"x2.5"x1.4")
Weight	6.7 oz(190g)
Accessories	Test leads, Soft carrying case, battery, owners manual

conductor jaw size : 23mm

Leakage Current Tester

- For leakage/ground currents measurement
- 3 3/4 Digits, 4000 count LCD display
- High resolution up to 10 μ A with fast bargraph (20 times/sec)
- Shielded transformer jaw minimizes the effect of stray magnetic fields
- Selectable 50/60Hz filter circuit to eliminate high frequency noise and harmonics
- Max/Min, data hold functions, and relative measurement
- Continuity measurements.
- 600V overload protection for Ω measurement
- Five ranges (40mA, 400mA, 4A, 40A, 60A) 30mm(1.2") Jaw diameter



CE
EMC-LVD
DCM-040

AC Current: Accuracy specified at 25°C

Range	Resolution	50/60 Hz (40 - 1KHz)	Wide
0-40mA	10 μ A	$\pm 1.0\% \pm 3dgt$ s	$\pm 2.0\% \pm 5dgt$ s
0-400mA	100 μ A	$\pm 1.0\% \pm 3dgt$ s	$\pm 2.0\% \pm 5dgt$ s
0-4A	1mA	$\pm 1.0\% \pm 3dgt$ s	$\pm 2.0\% \pm 5dgt$ s
0-40A	10mA	$\pm 1.0\% \pm 3dgt$ s	$\pm 2.0\% \pm 5dgt$ s
0-60A(0-50A)	100mA	$\pm 1.5\% \pm 3dgt$ s	$\pm 3.0\% \pm 5dgt$ s
60A(50 - 60A) *	100mA	$\pm 3.0\% \pm 5dgt$ s	$\pm 3.5\% \pm 5dgt$ s

* Displays over 60A are possible but the accuracy of such measurements is not specified

AC Voltage:(input impedance: 10M Ω)

Range	Resolution	50/60 Hz (40 - 1KHz)	Overload protection
400V	0.1V	$\pm 1.5\% \pm 2dgt$ s	AC 800V

Resistance (Ω) and Continuity: (open voltage 0.4V)

Range	Resolution	Accuracy	Beeping	OL protection
0-400 Ω	0.1 Ω	$\pm 1.0\% \pm 2dgt$ s	< 38.0 Ω	AC 600V

General	
Power requirement	1.5V SUM-3 Battery x3
Dimension	210x64x36 mm (8.3"x2.5"x1.4")
Weight	6.7 oz(190g)
Accessories	Test leads, Soft carrying case, battery, owners manual

conductor jaw size : 30mm



CE
EMC-LVD
DCM-032

- Auto ranging
- Diode
- Continuity buzzer
- Max hold
- Data hold
- Full icon display
- Sleep mode
- Low battery display
- Input impedance for DC voltage measurement around 10MΩ
- Max display 1999

Specifications basic functions range best accuracy	
DC voltage	200mV/2V/20V/200V/600V (0.8%+1)
AC voltage	2V/20V/200V/600V (1.2%+5)
AC current	2A/20A/200A/400A (1.5%+5)
Resistance	200Ω/2KΩ/20KΩ/200KΩ/2MΩ/20MΩ (1%+2)
Temperature (°C)/(°F)	-40°C~1000°C(1%+3) / -40°F~1832°F(1%+6)
General characteristics	
Power	3V Battery (AAA) x2
LCD size	35.6x18mm
Colour/Net weight	Red and grey / 7.7 oz(220g)
Size	210x75.6x30mm (8.2"x19.2"x1.18")
Accessories	Test lead, batteries, English manual, point contact temperature probe, carrying bag



CE
EMC-LVD
DCM-033

- Max. display 3999
- Frequency
- Duty cycle
- Special functions
- Auto ranging
- Diode
- Continuity buzzer
- Data hold
- Full icon display
- Sleep mode
- Low battery display
- Input impedance for DC voltage measurement around 10MΩ

Specifications basic functions range best accuracy	
DC voltage	400mV/4V/40V/400V/600V (0.8%+1)
AC voltage	4V/40V/400V/600V (1%+5)
DC current	40A/400A (2%+3)
AC current	40A/400A (2.5%+5)
Resistance	400 /4k/40k/400k/4M/40MΩ (1%+2)
Frequency	10Hz~1MHz (0.1%+3)
Duty cycle	0.1%~99.9%
General characteristics	
Power	9V Battery (6F22)
LCD size	35.6 x 18 mm
Colour/Net weight	Red and Grey / 7 oz(200g)
Size	210x75.6x30mm (8.2"x19.2"x1.18")
Accessories	Test lead, English manual, carrying bag



CE
EMC-LVD
CA-1000D

- 1000A AC or DC current clamp
- Measure current without disconnecting circuit under test
- Measure to 1000A DC or AC
- Outputs 1mV per Amp, operates on 2V range of any DMM

DC current range	0-1000A ±(1.5~ 3.5%+3A)
AC current range	0-1000A ±(1.5~3.5% +3A)
Output	0~1V rms or DC with >=1MΩ input impedance
Transfer rate	1mV/1A
Overload protection	1200A for 60 seconds maximum.
General	
Jaws opening capability	57mm Conductor, 70x18mm bus bars
Power requirement	9V Battery x1
Dimension	244x100x40mm (9.6"x3.9"x1.6")

Megohm /Insulation Meter

- Measure insulation resistance up to 2000MΩ
- 1000V pulse to test insulation
- 3 1/2 Digit LCD back light display
- Auto data hold function after releasing MEAS button
- Auto power off function
- Portability and simplicity for one hand operation
- Valox housing to withstand accidental drops

CE
EMC-LVD
DIM-570

Measurement ranges	20MΩ, 2000MΩ
Accuracy	20MΩ ±(2.0% rdg + 2 dgts), 2000MΩ < 500MΩ ±(4.0% rdg +2 dgts), ±(5.0% rdg + 2 dgts)
Test voltage	1000V DC approx.
Resolution	10KΩ
Zero	Automatic
Polarity	Automatic positive implied, negative polarity indication
General	
Power requirement general	
Power requirement	1.5V(AAA size) Batteries x4
Dimension	170x44x40mm (6.7"x1.7"x1.6")
Weight	6.3 oz(180g)
Accessories	Test leads, Soft carrying case, batteries, owners manual

TECEPEL Insulation Tester

Digital Insulation Tester



CE
EMC-LVD
DIM-571

- DIM 571 is an LCD indicated instruments for insulation (M Ohm), Continuity (OHM) and AC voltage
- Three Insulation test voltage (DCV): 250V, 500V, 1,000V
- Large LCD display(68x34mm)
- Test Insulation at rated voltage into 1 1mA load
- 200mA short circuit continuity current
- Timer for test functions (3 ~ 5 minutes)
- Data Hold, auto power off function
- Automatic circuit discharge
- Fuse protection
- EN61010 CAT III 600V, . BS 16" Edition



Insulation resistance	
Test range(DCV)	250V, 500V, 1,000V
Measuring ranges (auto)	20, 200, 2000MΩ
Resolution	0.01, 0.1., 1MΩ
Accuracy	20MΩ:± (1.5%rdg+ 5dgt) 200MΩ: ± (2.5% rdg+3dgt) 2000MΩ: ± (5% rdg+5dgt)
Continuity test	
Measuring ranges(auto)	20, 200, 2000Ω ± (1.5% rdg+3dgt)
Resolution	0.01, 0.1 , 1Ω
AC voltage	
AC voltage range	0~ 600V ± (1.5% rdg+3dgt)
Resolution	1V
Line frequency	40~120Hz
General	
LCD display	3 1/2 digits (2000 counts)
Over display	1
Dimension	205x90x55mm (8.1"x 3.5"x 2.2")
Weight	23 oz(600g)
Power source	1.5V x 6 type AA
Accessories	Test leads, owners manual, fuse (0.5A, 250V). carrying case

Digital Insulation and Insulation Continuity-Voltage Tester



DIM-572

- Insulation resistance testing
- Voltage (AC-DC) measurement with automatic hold facility
- Continuity test with a short circuit current of minimum 200mA
- Test voltage of 250V, 500V, and 1000V DC
- Ω key to select the continuity test to auto-null the test leads and fuse
- Automatic Voltmeter to be accessed after start up

Insulation	
Test voltage	250V/ 500V/ 1000V
Output voltage	@1mA Rated test voltage +10% Max
Measuring range	2K-2G/ 4K-4G/ 8K-8G Ω
Accuracy	± 2~5%
Continuity test	
Measuring ranges	0.01~1999 Ω
Accuracy	± 1.0~2.0%
Short circuit current	>220mA
Open circuit voltage	5V DC
Resolution	± 2 count
Voltmeter	
AC voltage (Auto)	0~700V
DC voltage (Auto)	0~950V
Accuracy	± 1.5% of full scale
Resolution	± 1V

MOV test	
Test voltage	5 ~ 1020V DC
Voltage result accuracy	± 3%
Voltage result resolution	± 2 counts
GAS arrester test	
Test voltage	5~1020V DC
Voltage result accuracy	± 3%
Voltage result resolution	± 2 counts
Protections	
Overload	700V (Between all terminals)
Over voltage	Class III- 700V toward ground
Fuses	1 x 500mA, 5x20mm, HBC, 600 Fas blow
General	
Power	Source 1.5x8 (Alkaline)
Dimension	175x 85x75mm (6.9"x3.35"x2.95")
Weight	655g Approx. (battery included)
Accessories	Test leads (TL-AL11-A), shoulder belt, instrucion manual, batteries

Phase Sequence Indicator/ Earth Resistance Tester

Phase Sequence Indicator



PHS-863



- ❑ Two functions in one unit including open phase and phase sequence
- ❑ Large size alligator clips: able to clip on switch-board terminals easily
- ❑ Identify 3 phase sequence and open phase check
- ❑ Applications: This model is ideal for installing conveyor lines, pump systems and interconnected drivers
- ❑ Safety Approval: CE marks EN 6101-1 CAT. III. EN 61010-2-031

Input voltage	100~600V AC
Frequency range	45~70Hz
Circuit structure	All electronic (not mechanical)
AC power consumption	Approx. 7mA per phase rotation field indicator
Dimension	102x78x32.5mm (4.0"x3.1"x1.3")
Weigh	8 oz(228g)
Accessories	Soft carrying bag, owners manual

Earth Resistance Tester



ERT-580

- ❑ ERT 580 Earth resistance tester
- ❑ Measures down to 0.01Ω
- ❑ 3 Earth Ranges: 20, 200, 2000Ω
- ❑ One test current of 2 mA RMS
- ❑ Indication if resistance of auxiliary spikes resistance is within range
- ❑ Two or three-terminal measurement
- ❑ Three-terminal measurement for earth electrode testing
- ❑ Large LCD display
- ❑ Data hold function
- ❑ Calibration performed with supplied test leads (3 T fully compensated)
- ❑ Measure earth voltage up to 200V AC
- ❑ Simple to use and lower power
- ❑ Open loop indication with " 1 " (MSD) on display and LED Light off
- ❑ Lightweight, robust and compact design
- ❑ Low Battery Indication
- ❑ "O-Ring" Sealed case for outdoor usage and better protection
- ❑ Standard accessories for 3T and 2T

Earth resistance ranges	0~ 19.99Ω, 0~199.9Ω, 0~1999Ω
Accuracy of earth resistance	1.5% ± 2dgt
Test current(Reversing DC)	2mA
AC voltage range (Sine 40~60Hz)	0~199.9V Accuracy 1% ± 1dgt
Maximum output voltage(E-C)	0~ 80V
General	
LCD display	3 1/2 digits (2000 counts)
Over display	1
Dimension	205x90x55mm (8.1"x3.5"x2.2")
Weight	23 oz(600g)
Power source	1.5V x 6 type AA
Safety	Meet Bs7671, 7430., 6651, IEC364, NFC15-100, SABS0142, VDE0413
Accessories	Color-coded test leads, owners manual, carrying case



Personal Safety High Voltage Detector / Cable Tracer

Personal Safety High Voltage Detector



CE EMC-LVD SVD-588

- Non Contact AC detector
- Detect 44KV from up to 30ft (10m) away
- Sound annunciator (Buzzer)
- Ultra High bright LED indication
- Pocket and belt clip able to attach to a belt
- Self test function to ensure pooper operation
- Low battery indication
- Water proof (Sealed to IP65) suitable for indoor and outdoor use

Application:

- Detect residual or induced high voltages for Workers safety
- Safely warning high voltage source while approaching it
- Check and detect live high voltage cables

Detection frequency	40 to 70Hz
Detection	Detects voltage from 240V to 44KV
(Depends on distance)	Recommend use above 5KV
Alert indicators	Audible buzzer and flashing LED
Power supply	9V alkaline battery with one year operation
Low battery indication	Beeper sound every 5 seconds
Operating temp. and Humidity	-15~55° C (5~130° F), 0~93% RH@ 40° C
General	
Power requirement	9V alkaline battery for one year operation
Dimension	115x67x30mm (4.5"x 2.6"x1.2")
Weight	5.1 oz(146g)
Accessories	Soft carrying case, battery, neck strap, owners manual

High Voltage Proximity Detector



CE EMC-LVD HVP-275

- Sealed by "O" Ring.
- 8 Voltage settings: 240VAC, 2KV, 6KV, 11KV, 22KV, 33KV, 132KV and 275KV
- High bright LEDs visual indication
- Sound indication
- Easy-to-proov method
- Self-test selection
- Use 3x1.5V "C" batteries
- High impact nylon casing
- Non-contact work by proximity
- Compatible with most link sticks
- Light weight, robust and compact
- Suitable for indoor and outdoor use
- Detect low voltage on any systems
- Easy access to batteries
- No special parts needed
- Three-year warranty
- Simple and efficient to use

Expected test results (laboratory testing)	
Range	240V, 2KV, 6KV, 11KV, 22KV, 33KV, 132KV, 275KV
Typical observation of test results made in the field	
Range	11KV, 22KV, 33KV, 132KV, 275KV
Operated from variable from 80V or depending on the type of source	
Range	250V, 500V, 1000V, 1500V, 4000V, 8000V, 22KV
Min. detection MDV as % of voltage (MDV) line Voltage	
Range	1KV 9.1%, 2KV 9.1%, 3.1KV 9.4%, 12.5KV 9.5%, 22.5KV 8.2%

Cable Tracer



CE EMC-LVD CT-581

Amplifier Probe (CT-581A)

- The amplifier probe identifies and traces wires or cables within a group

Without damaging the insulation

- Works with any tone generator to identify wires
- Adjustable volume to suit work environment
- A plug receptacle for headset or hand set
- Work with 9V battery and come with soft carrying case

Tone Generator (CT-581G)

- A great tool for locating and identifying cable pairs or individual conductors
- Serves as a continuity and polarity tester
- A three-colored LED display for test result

TECPEL Digital Thermometers

Single Input (DTM 305B)/Dual Inputs (DTM 307B)



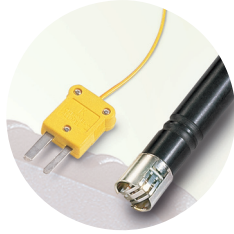
DTM-305B

- Thermocouple probe connection detector shown by red LED
- 50°C~1300°C (-58°F ~ 2000°F)
- 3 1/2 Digit LCD display
- K-type thermocouple
- Reading hold °C of °F annunciators
- Single thermocouple input (DTM-305B)
- Dual thermocouple input (DTM-307B)
- Differential temperature T1-T2 (DTM-307B)
- Switchable resolution 0.1°/1.0°
- Front panel offset adjustment
- Automatic low battery indication
- Maximum record
- Over range indication

Measurement range	-50°C to 1300°C (-58°F to 2000°F)
Accuracy	
-50°C to 1000°C	± (0.3% rdg + 1°C)
1000°C to 1300°C	± (0.5% rdg + 1°C)
-58°F to 2000°F	± (0.3% rdg + 2°F)
Temperature scale	Celsius or fahrenheit user-selectable
Resolution	1°C or 1°F (or 0.1°C or 0.1°F)
Sensor	K-type thermocouple
Sampling rat	3 times/per second
General	
Power requirement	9V Battery x1
Dimension	147x70x39mm (5.8"x2.8"x1.5")
Weight	12.2 oz(350g)
Accessories	TPK-01x1 (DTM-305B), TPK-01x 2(DTM-307B), holster and owners manual



DTM-307B



Single Input (DTM 305)/Dual Inputs (DTM 307)



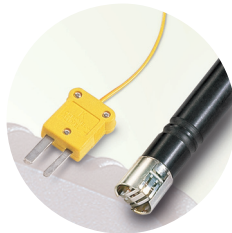
DTM-305

- 50°C~1300°C (-58°F ~ 2000°F)
- 3 1/2 Digit LCD display
- K-type thermocouple
- Reading hold °C of °F annunciators
- Single thermocouple input
- Switchable resolution 0.1°/1.0°
- Dual thermocouple input (DTM-307)
- Differential temperature (T1-T2) (DTM-307)
- Front panel offset adjustment
- Automatic low battery indication
- Maximum record
- Over range indication

Measurement range	-50°C to 1300°C(-58°F to 2000°F)
Accuracy	
-50°C to 1000°C	± (0.3% rdg + 1°C)
1000°C to 1300°C	± (0.5% rdg + 1°C)
-58°F to 2000°F	± (0.3% rdg + 2°F)
Temperature scale	Celsius or fahrenheit user-selectable
Resolution	1°C or 1°F (or 0.1°C of 0.1°F under 199°C)
Sensor	K-type thermocouple
Sampling rate	3 times/per second
General	
Power requirement	9V Battery x1
Dimension	147x70x39mm (5.8"x2.8"x1.5")
Weight	13.8 oz(395g)
Accessories	TPK-01x1 (DTM-305), TPK-01 x 2 (DTM-307), holster and owners manual



DTM-307



TEPEL Digital Thermometers

Single Input + Timer



RS-232



DTM-315

- 200°C~1370°C (-328°F~2498°F)
- 4 Digit LCD display
- Timer function
- K-type thermocouple
- Reading hold °C or °F annunciators
- Single thermocouple input
- MAX. AVG. MIN. function
- Auto power off
- HOLD, REL function
- Automatic low battery indication
- Overrange indication
- RS-232 or USB cable and soft ware (SE-300 option)

Measurement range	-200°C to 1370°C (-328°F to 2498°F)
Accuracy	
-200°C to 1370°C	± (0.5% rdg + 1°C) typical
-328°F to 2498°F	± (0.5% rdg + 1°F) typical
Temperature scale	Celsius or fahrenheit user-selectable
Resolution	1°C or 1°F (-200°C~200°C, 0.1°C)
Sensor	K-type thermocouple
Sampling rate	2.5 Times/per second
General	
Power requirement	9V Battery x1
Dimension	184x64x30mm (7.2"x2.5"x1.2")
Weight	7.4 oz(210g)
Accessories	TPK-01x1, soft carrying case and owners manual

Dual Input



RS-232



DTM-316

- 200°C~1370°C (-328°F~2498°F)
- 4 Digit LCD display
- K-type thermocouple
- Function & unit sign display °C or °F annunciators
- Dual thermocouple input
- Differential temperature (T1-T2)
- MAX. AVG. MIN. function
- Auto power off
- HOLD, REL function
- Automatic low battery indication
- Overrange indication
- RS-232 or USB cable and soft ware (SE-300 option)

Measurement range	-200°C to 1370°C (-328°F to 2498°F)
Accuracy	
-200°C to 1370°C	± (0.5% rdg + 1°C) typical
-328°F to 2498°F	± (0.5% rdg + 1°F) typical
Temperature scale	Celsius or fahrenheit user-selectable
Resolution	1°C or 1°F (-200°C~200°C, 0.1°C)
Sensor	K-type thermocouple
Sampling rate	2.5 Times/per second
General	
Power requirement	9V Battery x1
Dimension	184x64x30mm (7.2"x2.5"x1.2")
Weight	7.4 oz(210g)
Accessories	TPK-01x2, soft carrying case and owners manual

K/J/T/E/R/S/N-Type Dual Input Thermometer+ Datalogger



RS-232



DTM-506B

- T/C offset adjust
- Save measured data: 128 samples W/real-time data
- Data logger: 16 sets, maximum 1024 data capacity
- RS-232 interface, you can download data to a PC (optional software and USB cable)
- Dual input /Triple display
- T1, T2, T1-T2, time and memory No.
- K/J/T/E/R/S/N-types thermocouple selection
- REC, MAX, MIN, MAX-MIN, AVG, REL, HOLD function
- Resolution 0.1°C/1°C, 0.1°F/1°F
- Warning beeper with Hi/Lo setting
- TIME, Record interval, APO time setting
- Easy reads data with down and up key on meter
- Real time clock with calendar
- Selectable auto power off function
- Programmable Hi-Lo Limits W/mini-DIN output port
- DC ADAPTER: 12V
- Backlight
- 4 1/2 digital 20000 counts with triple display

Measurement range	K-type (0.1°C) -200°C to 1372°C, -328°F to 2501°F J-type (0.1°C) -210°C to 1050°C, -346°F to 1922°F T-type (0.1°C) -200°C to 400°C, -328°F to 752°F E-type (0.1°C) -210°C to 790°C, -346°F to 1454°F R-type (1°C) 0°C to 1767°C, 32°F to 3212°F S-type (1°C) 0°C to 1767°C, 32°F to 3212°F N-type (0.1°C) -50°C to 1300°C, -58°F to 2372°F
Accuracy	Stated accuracy at 23°C±5°C, <75% R.H.
-210°C to 1767°C	± (0.05% rdg + 0.3°C) typical
-346°F to 3212°F	± (0.05%rdg + 1.6°F) typical
Temperature scale	Celsius or fahrenheit user-selectable
Resolution	0.1°C or 0.1°F Except R,S type,
Sensor	K/J/T/E/R/S/N-Types thermocouple
Sampling rate	1 Times/per second
General	
Power requirement	9V Battery x1
Dimensions	195x92x53mm (7.7"x3.6"x2.1")
Weight	8.8 oz(250g)
Accessories	TPK-01x2, rubber holster and owners manual RS232 cable and software disk

TECPEL Digital Thermometers Data logger



RS-232
CE
EMC-LVD
DTM-317

Single Input + Data recorder

- -200°C~1370°C (-328°F~2498°F)
- Data logging capacity 16,000 records
- 4 Digit LCD, triple display
- Timer display
- Recording interval setup
- Reading hold °C or °F annunciators
- Single K-type thermocouple input
- MAX. MIN. function
- Auto power off
- Hold, REL functions
- Automatic low battery indication
- High resolution 0.1°C, 0.1°F
- Real time display
- USB cable (option)

Measurement range	-200°C to 1370°C (-328°F to 2498°F)
Accuracy	
-200°C to 1370°C	± (0.5% rdg +1°C) typical
-328°F to 2498°F	± (0.5% rdg +1°F) typical
Temperature scale	Celsius or fahrenheit user-selectable
Resolution	0.1°C or 0.1°F (200°C~1370°C, 1°C)
Sensor	K-type bead thermocouple probe
Sampling rate	2.5 Times/per second
Input protection	60V DC or 24V rms AC Maximum
General	
Power requirement	9V Battery x1
Dimension	184x64x30mm (7.2"x2.5"x1.2")
Weight	7.4 oz(210g)
Accessories	1 x TPK-01 probe, 9V battery, deluxe carrying case, owners manual, RS-232 cable and software program



RS-232
CE
EMC-LVD
DTM-318

Dual Input + Data recorder

- -200°C~1370°C(-328°F~2498°F)
- Data logging capacity 16,000 records
- 4 Digit LCD , triple display
- Timer display button
- Recording interval set up
- Reading hold °C or °F annunciators
- Dual K-type thermocouple inputs
- MAX. MIN. function
- Auto power off
- Hold functions
- Automatic low battery indication
- High resolution 0.1°C, 0.1°F
- Real time display
- USB cable (option)

Measurement range	-200°C to 1370°C (-328°F to 2498°F)
Accuracy	
-200°C to 1370°C	± (0.5% rdg +1°C) typical
-328°F to 2498°F	± (0.5% rdg +1°F) typical
Temperature scale	Celsius or fahrenheit user-selectable
Resolution	0.1°C or 0.1°F (200°C~1370°C, 1°C)
Sensor	K-type bead thermocouple probe
Sampling rate	2.5 Times/per second
Input protection	60V DC or 24V rms AC Maximum
General	
Power requirement	9V Battery x1
Dimension	184x64x30mm (7.2"x2.5"x1.2")
Weight	7.4 oz(210g)
Accessories	2 x TPK-01 probes, 9V battery, deluxe carrying case, owners manual, RS-232 cable and software program.



RS-232
CE
EMC-LVD
DTM-319

Quad Input + Data recorder

- -200°C~1370°C (-328 °F ~ 3498 °F)
- Data logging capacity 16,000 records per channel
- 4 Digit LCD display
- Timer function
- Reading hold °C or °F annunciators
- 4 K-type thermocouple inputs
- MAX. MIN. function
- Auto power off, HOLD function
- Automatic low battery indication
- Overrange indication
- Real time display
- USB cable (option)



Real time display (DTM-317, 318, 319)

Measurement range	-200°C -1370°C (-328°F ~ 2498°F)
Accuracy	
-200°C to 200°C	± (0.2% rdg +1°C)
200°C to 400°C	± (0.5% rdg +1°C)
400°C to 1370°C	± (0.2% rdg +1°C)
-328°F to 200°F	± (0.5% rdg +1°F)
200°F to 200°F	± (0.2% rdg +1°F)
200°F to 2498°F	± (0.3% rdg +1°F)
Temperature scale	Celsius or fahrenheit user-selectable
Resolution	0.1°C or 0.1°F (200°C~1370°C, 1°C)
Sensor	K-type bead thermocouple probe
Sampling rate	3 seconds per testing circle
Input protection	60V DC or 24V rms AC Maximum
General specifications	
Power requirement	9V Battery x1
Dimension	184x64x30mm (7.2"x2.5"x1.2")
Weight	7.4 oz(210g)
Accessories	RS-232 cable and software for WINDOWS, deluxe carrying case, owners manual, TPK-01 bead probe x 2 pcs
Option accessory	Adaptor (AC 120V or 220V input , DC 9V output)

TECEP Infrared Thermometers

Infrared Thermometer



DIT-501A  EMC-LVD

- DIT 501A as small as your wrist watch
- IR-SoC technology (infrared system on chip) and batch calibration technology drive the dimension and cost to the lowest limit
- Emissivity adjustable
- Max; Min and lock modes
- Equipped with a mini-stand, can monitor temperature continuously for hours
- Scale selection: Fahrenheit/Celsius available
- Battery-low warning: 1/4 battery life remained

Measurement range	-33°C to 220°C
Display resolution	0.1°C
Accuracy	Accuracy : 0.5°C when temp. object=15~35°C; temp. ambient =25°C, 2% or 2°C whichever is greater
D:S (Distance : Spot)	1:1
D:S (Distance : Spot)	
Emissivity	Emissivity: adjustable; default at 0.95
Response time	<1.0 sec (0~90% response)
Operating temp. range	32~122F (0~50°C)
General	
Power requirement	Battery CR2032 *1 unit
Dimension	67.8x36.7x18 mm (2.67" x 1.45" x 0.71")
Weight	0.88 oz(25g)
Accessories	Carrying case, owners manual, battery

Infrared Thermometer



 EMC-LVD
DIT-510 / DIT-512

- 20°C to 260°C (DIT-510)
- 20°C to 550°C (DIT-512)
- For simple one hand operation
- Auto power off function
- Valox housing to withstand accidental drops
- Detection element : thermopile
- Sighting : laser marker 1mW
- Backlit LCD display
- Analog output:1mV/°C (DIT-510)
- Emissivity (ε) : 0.95 (DIT-510),
- Emissivity (ε) : 0.01~ 1.00 (DIT-512)
- Max, Min record, set high, low limit beeper (DIT-512)
- D:S (Distance: Spot) = 10:1
- Auto-hold function after releasing MEAS button

Measurement range	-20°C to 260°C (DIT 510), -20°C to 550°C (DIT 512)
Display resolution	1°C
Accuracy	± 3% of reading or ± 3°C whichever is greater
Temperature coefficient	± 2% of reading or +/-2°C whichever is greater
Response time	1 Second
General	
Power requirement	1.5V(AAA size) battery x4
Dimension	170x44x40mm (6.7"x1.7"x1.6")
Weight	5.6 oz(160g)
Accessories	Soft carrying case and owners manual

Infrared Thermometer



 EMC-LVD
DIT-513 / DIT-515

- 30°C to 550°C (-22°F to 1200°F)
- For simple one hand operation
- Auto power off function 10 seconds
- Detection element: thermopile
- Backlit LCD display
- Field of view (D:S) 10: 1
- Emissivity: 0.95 (DIT-513); 0.1 to 1.00 (DIT-515)
- Accuracy: ± 2% or 2°C which ever is larger
- Auto-hold function after releasing triggering button
- Alarm beeper set function for both low and high temperature (DIT-515)
- Sighting: laser marker 1mW

Measurement range	-30°C to 550°C(-22°F to 1,200°F)
Display resolution	0.5°C, 0.5°F
Accuracy	±2% of reading or ±2°C whichever is greater
Temperature coefficient	±2% of reading or ±0.2°C whichever is greater
Response time	0.25 second
General	
Power requirement	9V Battery x1
Dimension	148x105x42mm (5.8"x4.1"x1.1")
Weight	5.2 oz(145g)
Accessories	One battery 9V, PVC sleeve, operation manual

TECPEL Temperature and Humidity Meter

Dual Input



- Temp: -20°C~60°C(-4°F~140°F)
K-type: -200°C~1370°C(-328°F~2498°F)
Humidity: 0~100%RH
- 4 Digit, triple display
- K-type thermocouple
- Reading hold, °C or °F annunciators
- MAX. MIN. function
- Auto power off
- REL function
- Automatic low battery indication
- RS-232 computer interface
- RS-232 or USB cable and software for Windows (options)

RS-232



DTM-321



Real time display

Measurement range	T1: -20°C ~ 60°C (-4°F~140°F) T2: K-type: -200°C~1370°C (-328°F~2498°F)
Humidity	0~100%RH, Accuracy ±2.5%RH
Accuracy	
-20°C~+60°C	T1: ±0.7°C
-4°F~140°F	T1: ±1.4°F
-200°C~1370°C	T2: ± (0.3% rdg +1°C) typical
-328°F~2498°F	T2: ± (0.3% rdg +2°F) typical
Temperature scale	Celsius or fahrenheit user-selectable
Resolution	Humidity: 0.1% RH; Temp. T1: 0.1°C, 0.1°F T2: -200°C~200°C, 0.1°C; 200°C~1370°C, 1°C.
Sensor	K-type thermocouple
Response time(T1)	Humidity: 75 sec. in slowly moving air
Temperature	40 sec. in slowly moving air
Input protection	60V DC or 24V rms AC maximum
General	
Power requirement	9V Battery x1
Dimension	Meter: 186x64x30mm (10.8"x2.5"x1.2") Probe: 190x15mm (7.5"x0.6") Weight: 11.2 oz(320g)
Accessories	1 x TPK-01 probe, 9V battery, deluxe carrying case, owners manual

Model	DTM 321	DTM 322
Δ REL function		N/A
Data logging	N/A	
RS-232 cable & software		option

Dual Input +Data Recorder



- Temp: -20°C~60°C(-4°F~140°F)
K-type: -200°C~1370°C(-328°F~2498°F)
Humidity: 0~100%RH
- Data logging capacity 16,000 records
- 4 Digit, triple display
- K-type thermocouple
- Reading hold, °C or °F annunciators
- MAX. MIN. function
- Auto power off
- Time function
- Automatic low battery indication
- RS-232 computer interface
- RS-232 or USB cable and software for Windows (options)

RS-232



DTM-322



Real time display

Measurement range	T1: -20°C ~ 60°C (-4°F~140°F) T2: K-type: -200°C~1370°C (-328°F~2498°F)
Humidity	0~100%RH, accuracy ±2.5%RH
Accuracy	
-20°C~+60°C	T1: ±0.7°C
-4°F~140°F	T1: ±1.4°F
-200°C~1370°C	T2: ± (0.3% rdg +1°C) typical
-328°F~2498°F	T2: ± (0.3% rdg +2°F) typical
Temperature scale	Celsius or Fahrenheit user-selectable
Resolution	Humidity: 0.1% RH; Temp. T1: 0.1°C, 0.1°F T2: -200°C~200°C, 0.1°C; 200°C~1370°C, 1°C.
Sensor	K-type thermocouple
Response time(T1)	Humidity: 75 sec. in slowly moving air
Temperature	40 sec. in slowly moving air
Input protection	60V DC or 24V rms AC maximum
General	
Power requirement	9V Battery x1
Dimensions	Meter: 186x64x30mm (10.8"x2.5"x1.2") Probe: 190x15mm (7.5"x0.6") Weight: 11.2 oz(320g)
Accessories	1 x TPK-01 probe, 9V battery, deluxe carrying case, owners manual, RS-232 cable & software for Windows

Highly Accurate Hygrometer



DTM-550

- Temp: -20°C~100°C
Humidity: 0~100%RH
- 3 1/2 Digit , back light display
- Use highly accurate RTD temperature sensor
- MAX, DATA, HOLD function
- Automatic low battery indication
- Valox housing to withstand accidental drops

Measurement range	Temp: -20°C~100°C
Humidity	0~100%RH
Temp. accuracy	± 0.5°C -0°C~50°C, ±1°C -20°C to 0°C, 50°C to 100°C
Humidity accuracy	± 2.5% at 25°C, 10% to 90%RH ± 5% at 25°C, 0% to 10%RH, 90% to 100%RH
Resolution	Temperature: 0.1°C.; Humidity: 0.1%RH
Sensor	Pt385/1000Ω, RTD temperature sensor
General	
Power requirement	4 Piece 1.5V(AAA size) batteries
Dimension	170x44x40mm (6.7"x1.7"x1.6")
Weight	6.3 oz(180g)
Accessories	Soft carrying case, batteries, owners manual.

Dew Point, Wet/Dry Bulb Hygrometer



DTM-323

- 3 1/2 LCD display, Max. 1999
- Highly stable humidity measurement ±2.5%
- Processing & RH and temperature simultaneously
- Two temperature sensors (NTC and K-Type) & Humidity sensor together
- Wet/Dry bulb, dew point and %RH
- Easy switching between K/NTC/K-DP
- MAX/MIN/AVG/REL/HOLD function
- Auto power off function
- Low battery indication

Measurement range	±0.5°C on 10°C to 45°C
at 23°C±5°C, <75% R.H.	±2°C on 45°C to 60°C; ±2°C on 0°C to 10°C, ±1°F on 50°F to 113°F
T2 : K type	±4°F on 113°F to 140°F; ±4°F on 32°F to 50°F, ±(0.1% rdg+1°C) on 50°C to 1000°C ±(0.1% rdg+2°F) on -50°F to 1832°F
Humidity	Range: 0% to 100%RH, capacitive sensor
Accuracy	±2.5% at 25°C(77°F), 10% to 90%RH ±5% at 25°C(77°F), 0% to 10%RH, 90% to 100%RH
Resolution	0°C to 60°C(0.1°C), 32°F to 140°F (0.1°F)
Sensor	Temperature thermistor; humidity capacitive
Operating environment	0°C to 50°C at <80% R.H.
General	
Power Requirement	1.5Vx4 pcs AAA size
Dimension	148x48x24mm (5.8"x1.9"x0.9")
Weight	9.2 oz(265g)
Accessories	TPK-01 x 1, holster, owners manual

Economic Hygrometer



DTM-551

- Easy to read LCD display
- Temperature and humidity memory recalling
- Temperature unit °F/°C selectable
- Low battery indication
- Rubber coated housing
- Max/Min (°F/°C) temperature & humidity
- On/Off switch

Measurement range	0°C~+50°C or 32°F~+122°F
Accuracy	±1.0° or ±1.8°F (-20°C~+70°C or -4°F~+158°F) otherwise more than ±1.0°C or ±1.8°F
Humidity	20%~100% R.H.
Accuracy	±5% at 25°C(77°F), 50%RH
Resolution	0°C to 50°C (0.1°C), 0°F to 122°F (0.1°F)
Operating environment	0°C~+50°C or 32°F~+122°F
General	
Power requirement	3 V "CR 2032" x 1
Dimension	165x35x20mm (6.5"x1.38"x0.78")
Weight	1.8 oz(52g)
Accessories	Battery, carrying case, owners manual

TEPEL Hygrometer/Moisture Meter

Thermo Hygrometer + Ext. Temperature



DTM-303

- Temperature: -10°C to +50°C(+23°F to +122°F) with 0.1°C
- Humidity: 20% ~ 99%RH with 1% resolution
- 2 Rows big digits 2.7cm(height)x1.5cm(width) LCD display
- Max. and Min. temperature and humidity memory function
- Daily reset of max. and min. records function with internal clock
- Indoor temperature and humidity display at the same time
- Use one "AAA" size battery (1.5V DC)
- For wall mounting or table standing
- Outdoor temperature measuring range: -50°C to +70°C (-58°F to 158°F) with 0.1°C(°F) resolution

Measurement ranges	-10°C to +50°C(+23°F to +122°F); °C/°F range selectable
Accuracy	
Temperature	±0.5°C(10°C~40°C), ±1°C(the remainder range)
Humidity	±6% at 25°C(30~80%)
Resolution	0.1°C; 1%RH
Sampling time	Every 30 seconds
LCD display	2 rows big digits 2.7cm(High) x 1.5 cm(width) Daily reset of max. and min. records function Display both temperature and humidity values at the same time.
General	
Power requirement	1 Piece 1.5V (AAA size) battery
Dimension	122x103x20mm (4.8"x3.6"x0.9")
Weight	3.14 oz(90g)

Thermo Hygrometer + Ext. Temperature



DTM-303A

- On/Off, indoor/outdoor temperature measurement
- Indoor humidity measurement
- °F/°C, MAX/MIN (°F/°C) temperature & Humidity memory recalling
- Comfortable and uncomfortable index (comfort/warm/cool)
- Temperature unit °F/°C selectable
- Maximum and minimum (°F/°C)
- Temperature and humidity memory recalling

Measurement	
Temp. accuracy	-50°C~+70°C or -58°F~+158°F±1
Humidity accuracy	20%~100%RH ±5% at 25, 50%RH
3-Meter Ext. sensor	-50°C~+70°C or -58°F~+158°F
Resolution	0.1°C, 0.1°F; 0.1%RH
Sampling time	Every 30 seconds
General	
Power	1.5V (AAA size) x 2
Dimension	110 x90 x20mm (4.3"x 3.5"x0.8")
Weight	5.7 oz(165 g)
Accessories	1,5A (AAA)x2, owners manual



DTM-303H

- Time alarm/snooze set (DTM-303H)
- 12/24 hour format (DTM-303H)

Wood Moisture Meter



TMM-590

- Portability and simplicity one-hand operation
- According to EN50081-1(97)
- Automatic power off
- Jack socket for pin extension leads
- Three lights to indicate moisture content in wood:
Green: "Air, Dry" conditions
Yellow: Slightly in excess of normal
Red: Excess moisture
- Measuring principle is electrical resistance
- Valox housing to withstand accidental drops

Measurement range	8%~28%
Accuracy	±2%, at 23°C±5°C, <75% R.H.
Operating environment	0°C to 40°C, 15 to 80% R.H.
Storage environment	-20°C to 60°C, 0 to 80%R.H. with battery removed from meter
Dimensions	193x44x40mm (7.62"x1.75"x2.9")
Weight	5.20 oz(150g including batteries)
Accessories	Soft carrying bag, 1.5V AAA x4, owner manual

TECPEL Temperature Calibrators



High Precision Calibrator



CL-327

- ❑ Simple & easy to key-in the exact temperature value you need
- ❑ Dual LCD display to show the reference and room temperature at the same time
- ❑ Accept 11 different type of thermocouple (K, J, E, T, R, S, N, L, U, B, C)
- ❑ Auto-Ramp & . T input, T increment, and T decrement function
- ❑ °C, °F, mV output

Thermocouple type	K, J, E, T, R, S, N, L, U, B, C & mV measurement
Range	Typical accuracy
K: -200~1370°C, -328~2498°F	±0.4°C, ±0.7°F
J: -200~1050°C, -328~1922°F	±0.4°C, ±0.7°F
E: -150~800°C, -238~1472°F	±0.4°C, ±0.7°F
T: -200~400°C, -328~752°F	±0.4°C, ±0.7°F
R: 0~1760°C, 32~3200°F	±0.5°C, ±0.9°F
S: 0~1760°C, 32~3200°F	±0.5°C, ±1.0°F
N: -200~1300°C, -328~2372°F	±0.4°C, ±0.7°F
L: -200~900°C, -328~1652°F	±0.4°C, ±0.7°F
U: -200~600°C, -328~1112°F	±0.4°C, ±0.7°F
B: 600~1820°C, 1112~3308°F	±0.5°C, ±1.0°F
C: 0~2310°C, 32~4190°F	±0.5°C, ±0.9°F
mV: -9.999~60	10µV

Accuracy	±0.3°C~0.9°C (K,J type -100°C~1000°C ±0.4°C)~9.999mV/60 mV: 10µV
Resolution	0.1°C, 0.1°F
General	
Battery type	9V Alkaline battery (external power input 9-15V)
Display	4 + 5 Digits
Operating temperature	0 to 50°C (32 to 122°F)
Operating humidity	Less than 85% relative
Storage temperature	20 to 60°C (-4 to 140°F)
Storage humidity	Less than 85% relative
Dimension	88x168x26 mm (3.46"x6.61"x1.03")
Weight	11.63 oz(330g)
Accessories	Carrying case x 1, users manual x1, K type thermocouple connector 9V Battery x1

Dual Input/Output Thermometer & Calibrator



CL-326

- ❑ 3 1/2 Digital 2000 counts with high resolution
- ❑ Display back-light feature
- ❑ K/J/T/E-types thermocouple selection dual input
- ❑ HOLD function
- ❑ Highly accurate with 0.1%
- ❑ Auto range 0.1°/1°
- ❑ °C/ °F user-selective
- ❑ Auto power off function
- ❑ Low battery indication approval

LCD display:	3 1/2 digit 19999
Over range indication:	OL
Zero:	Automatic
Measurement rate:	1 Time/second
Operating environment:	0°C to 50°C, <70%R.H..
Storage environment:	-20°C to 60°C, 0 to 80%R.H. with battery removed from meter.
Accuracy	K-type (0.1°C) -200°C to 1372°C, -328°F to 1999°F
Stated accuracy at 23°C±5°C, <75% R.H	J-type (0.1°C) -210°C to 1200°C, -346°F to 1999°F
(Accuracy specification does not include type K thermocouple probe accuracy.)	T-type (0.1°C) -200°C to 400°C, -328°F to 752°F
	E-type (0.1°C) -220°C to 1000°C, -364°F to 1832°F
	According to temperature standard ITS-90
	Accuracy: ±(0.1%rdg+1°C) on -60°C to 1372°C
	± (0.1%rdg+2°C) on -60°C to -220°C
	± (0.1%rdg+2°F) on -76°F to 1999°F
	± (0.1%rdg+4°F) on -76°F to -364°F
General	
Power requirement:	9V Battery x1
Dimensions:	195x92x53mm (7.7"x3.6"x2.1")
Weight:	8.7 oz(250g)
Accessories	Battery, operation manual, TPK-01 x 2, thermo connector x 1

Digital Lightmeter/Data Logger

Digital Lux Lightmeter



DLM-530

- For simple one hand operation
- Accurate visible compensation filter f'1 is used
- CIE (λ): f'1 <2%, <3%, <5%, <8%, v(λ) match
- Cosine response: f'2 < 2%
- Range: from 20 to 200,000 Lux
- Valox housing to withstand accidental drops
- Analog output function: 0.1mV/counts
- Highly accurate f'1 compensation and diffuser f'2 < 2%
- MAX/Data hold function
- Backlit LCD display

Photometric formulas	10,764: footcandles= 1 Lux (lumens/meter ²)
Ranges	20Lux, 200Lux, 2,000Lux, 20,000Lux, 200,000Lux.
Resolution	0.01Lux.
Spectral response	CIE photopic
Acceptance angle	f'2<2% cosine corrected (150°)
Total accuracy	for CIE standard illuminate A (2856K): (±3%rdg+10dgts)
Sampling rate	3 Times/per second
General	
Power requirement	4 Piece 1.5V(AAA size) batteries
Dimension	170x44x40mm (6.7"x1.7"x1.6")
Weight	7.7 oz(220g)
Accessories	Test leads, soft carrying case and owners manual.

Digital Lux/FC Lightmeter



DLM-531

- For simple one hand operation
- Accurate visible compensation filter f' is used.
- CIE (λ):f' <2%,<3%,<5%,<8%,v(λ)match
- Cosine response:f'<2%
- Range : 20Lux,200Lux, 2000Lux, 20,000Lux
20fc, 200fc, 2000fc, 20,000fc
- Analog output standard (output impedance 500Ω)
- Valox housing to withstand accidental drops
- Analog output function: 0.1mV/counts
- Highly accurate f' compensation and Diffuser f' <2%
- Peak data hold function
- Backlit LCD display
- High accuracy: ±3%rdg+10dgts
- 3 1/2 digit LCD display with a maximum reading of 1999
- Automatic zero

Photometric formulas	1 footcandles = 10.76 Lux (lumens/meter ²) 1 Lux (lumens/meter ²) = 0.0929 footcandles
Ranges	20Lux, 200Lux, 2,000Lux, 20,000Lux 20fc, 200fc, 2000fc, 20,000fc
Resolution	0.01lux. ; 0.01 fc
Spectral response	CIE photopic
Acceptance angle	f'2<2% cosine corrected (150°)
Total accuracy	for CIE standard illuminate A (2856K):(±3%rdg+10dgts)
Sampling rate	3 Times/per second
General	
Power requirement	4 Pieces 1.5V (AAA size) batteries
Dimension	170x44x40mm (6.7"x1.7"x1.6")
Weight	7.7 oz(220g)
Accessories	Soft carrying case and owners manual

Datalogging Light Meter (RS-232)



DLM-536

- Spectrum of photo sensor meets C.I.E. photopic curve V(l)
- 16000 Records data logging capacity
- RS-232 interface (software included)
- Measurement of luminous intensity (PC software)



Photometric formulas	1 footcandles= 10.76 Lux (lumens/meter ²) 1 Lux (lumens/meter ²)= 0.0929 footcandles
Ranges	20/200/2000/20000 Lux , 20/200/2000/20000 Fc
Resolution	0.01lux. ; 0.01 fc
Record (data logging)	8000 Point data logger
Total accuracy	±(3%rdg + 5dgts) (calibrated to standard incandescent lamp, 2856K)
Sensor	Silicon photo diode, lead approx. 150cm,
Sensor probe	100x60x27mm (3.9"x2.36"x1.06")
Over range display	OL
General	
Power requirement/life	One 9V battery, 50hrs (approx)
Dimensions	146x70x39mm (5.7"x2.8"x1.5") approx.
Weight	10.50 oz(300g)
Accessories	Software, RS-232 cable, 9 pin to 25 pin gender changer, screwdriver

TEPEL Sound Level Meters/ Sound Level Calibrator



Sound Level Meter

- A and C weighted sound levels
- Measurement range 30dB to 130dB
- 4-Digit display with updated cycle 0.5 s
- 0.1 dB resolution
- Max/Min hold function
- The standard fast and slow time weightings
- AC/DC signal output
- Overload condition indication
- Auxiliary output jack
- IEC 651 type II
- Back screw hole for tripod connection

Level range	Lo=30-80dB, Med=50-100dB, Hi=80-130dB
Frequency weighting	A, C
Time weighting	Slow(1 s) & Fast (125 ms)
Accuracy	±1.5dB (under reference condition)
AC output	Voltage 1Vrms(at full scale)
DC output	Voltage 10mVdB
Output impedance	Approx. 600Ω AC; 50Ω DC
Dynamic range	50dB
Frequency range	31.5Hz to 8kHz
General	
Power requirement	One piece 9V battery NEDA 1604
Dimension	275x64x30mm (10.8"x2.5"x1.2")
Weight	9.82 oz(280g)
Accessories	9V Battery, carrying case, calibration screwdriver windscreen and owners manual.



Sound Level Meter+ Calibration

- 35~130dB range
- 0.1dB resolution
- ± 1.5 dB accuracy
- A/C weighting
- Fast/Slow response
- Max hold function
- AC/DC output
- Reset function
- Calibration 94dB
- IEC 651 type2
- Back screw hole for tripod connection

DSL-332	DSL-330
35~130db	30~130db
Calibration	N/A
Slide Switch	Push Switch

Level range	A LO (Low) - Weighting: 35- 90dB A HI (High) - Weighting: 75-130dB C LO (Low) - Weighting: 35- 90dB C HI (High) - Weighting: 75-130dB
Resolution	0.1dB
Frequency range	31.5Hz to 8KHz
Accuracy	± 1.5dB (ref 94dB @1KHz)
Dynamic range	55dB
Frequency weighting	A, C
Time weighting	Slow(1 s) & Fast (125 ms)
Calibration	Electrical calibration by using the internal oscillator (1KHz sine Wave at 94dB)
Auxiliary outputs	AC : 0.55Vrms each range step, impedance: 600Ω DC : 10mV/dB (nominally), impedance: 100Ω
General	
Power requirement	One 9V battery
Dimension	240x68x25mm (9.42"x2.67"x1.0")
Weight	7.54 oz(215g)
Accessories	Instruction manual, 9V battery, carrying case, screwdriver, windscreen



Sound Level Calibrator

- 94dB and 114dB sound calibration at 1KHz
- Accurate and simple to use
- Fits 1", 1/2" or 1/4" diameter microphone

Output sound pressure levels	114dB and 94dB re 20 uPa under reference conditions.
Output frequency	1000Hz ±4%
Reference conditions	Temp. 23°C(73°F), atmospheric pressure 1013mbar (760mm of Hg), RH65%
Accuracy of sound pressure level	Under stated reference environment conditions ±0.5dB
General	
Power	One 9V battery 006P or IEC 6F22 or NEDA 1604.
Battery life	About 50 hours
Dimensions	103x63x54mm (4.05x2.48x2.12")
Weight	7.02 oz(200g)
Accessories	9V Battery, carrying case, instruction manual, 1",1/2" and 1/4" microphone adaptor

TEPEL Sound Level Data Logger / Tachometer



CE
EMC-LVD
DSL-331

RS-232

Programmable Sound Level Data logger

- Auto ranging measurement 30dB to 130dB
- Work with window software
- 32,000 Records data logger
- Bar graph Indication with back light
- RS-232 real time display software for window 95/98/2000/XP
- Frequency weighting: A, C
- 4-Digit display with updated cycle 0.5s
- 0.1dB resolution
- Max/Min hold function
- The standard fast and slow time weightings
- AC/DC signal output
- Overload condition indication
- Auxiliary output jack
- IEC 651 type II, ANSI S1.4 type2
- Calibration potentiometer easy to adjust
- USB cable (option)

Standard applied	IEC651 type 2, ANSI S1.4 type 2
Frequency range	31.5Hz~8KHz
Measuring level range	30~130dB
Frequency weighting	A/C
Microphone	1/2 inch electric condenser microphone
Display	LCD back light function
Digital display	4 Digits, resolution: 0.1dB, display update: 0.5 sec
Analog display	50 segment bar graph, resolution, resolution: 0.1dB, display update: 50mS
Time weighting	Fast (125mS); Slow (1 Sec)
LEVEL range	Lo: 30~80dB; Med: 50~100dB, Hi: 80~130dB; auto range: 30~130dB
Accuracy	±1.5dB (under reference condition at 94dB 1KHz)
Measuring level range	30~130dB
Dynamic range	100dB
Over and under range	"OVER" is displayed, while input is more than upper limit

Indication function	of range. ; " UNDER" is displayed, while input is less than lower limit of range.
MAX/MIN hold	Hold reading the maximum and minimum value
AC output	1V rms at FS (full scale), output impedance: Approx. 100Ω
DC output	10mV/dB, output impedance approx. 1KΩ
Auto power off	30 minutes if no operation
General	
Power requirement	One piece 9V battery NEDA 1604
Power life	About 50 hours (Alkaline battery)
AC adapter (option)	Voltage 9VDC (8~15 VDC Max.); Supply current: >30mADC
Weight	10 oz(285g)
Accessories	9V battery, carrying case, calibration screwdriver, 3.5ø plug, windscreen and owners manual
Tripod connection hole	Able to connect camera tripod stand



RS-232

CE
EMC-LVD

RM-1500/ RM-1501

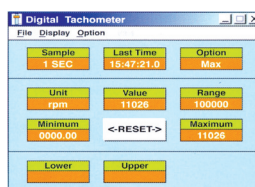
Digital Tachometer

- 5 Digits LCD display
- Light reflex measurement
- Range from 10.00 to 99,999 RPM
- Measuring distance 50 to 300mm
- Event counter elapsed time
- Max/Min hold: true average
- Auto range RPM
- Optical measurement & contact measurement
- Event counter (0~99,999)
- RS-232 interface (RM-1501)
- Contact RPM and circumferential velocity measurement in one simple adaptor (optional RM-1502)

General specification:	
Battery	Four 1.5V battery (AA, UM3)
Time base	4.000MHz quartz crystal
Operating temperature	0°C~50°C (32°F~122°F)
Reflective light	Red LED
Size	6.8"(L)x2.5"(W)x1.4"(H) 175mm(L)x65mm(W)x36mm(H)
Weight	250g (Including battery)
Accessories	Carrying case x 1, reflective tape x 1 Instruction manual x 1, (Software & RS-232 cable for RM-1501)
Option	Contact adaptor (Optional RM-1502)
Ordering information:	
MODEL : RM 1500	Digital optical tachometer (exclude RM 1502)
MODEL : RM 1501	RS-232 interface, software and RS-232 cable
MODEL : RM 1502	Contact adaptor



RM-1502



TECPEL Anemometer meters

Anemometer meter



AVM-702

- ❑ 3 1/2 Digit LCD display (1999 Count)
- ❑ Meter per second, kilometers per hour, knots, & feet per minute measurement units
- ❑ Low friction ball-bearing design ensures precise low and high reading
- ❑ Fast sampling rate of 2.5 times per second

Measurement range	0.8 ~ 30.0 m/s (meter per second) 2.8 ~ 108 km/h (kilometers per hour) 1.6 ~ 58 knots (nautical miles per hour) 160 ~ 5900 ft/min (feet per minute)
Resolution	0.1m/s, 0.1Km/h, 0.1 knots, 10ft/min
Accuracy	Full scale \pm (3%+2 dgts)
General	
Power requirement	9V Battery x1
Dimensions	180x73x23mm (4.3"x2.9"x1.4")
	Round sensor head 2.83 (72mm) diameter
Weight	9.2 oz (260g)
Accessories	Sensor probe, battery and owners manual

Air flow + air temperature, air velocity with RS-232C



AVM-712

RS-232

- ❑ 3 Measurements in one instrument
Air flow: CMM(M3/min) and CFM(FT3/min)
Air velocity: m/s, ft/min, km/h, knots, mile/h
Air temperature: °C and °F
- ❑ 3 Air flow mode: Instant, 2/3rd velocity Max. average
- ❑ Use low friction ball vane wheels to make sure high accuracy in high and low velocities
- ❑ Recall function for maximum and minimum record
- ❑ Data hold function
- ❑ High accuracy and special function built-in microcomputer circuit design
- ❑ Auto power off, low battery indication.
- ❑ Use fast-response-time thermistor sensor for temperature measurement
- ❑ Separate probe for different environment measurement

Memory recall	Records maximum and minimum readings with recall
Sampling time	approx. 0.8 sec.
Data output	RS-232 PC serial interface
Power off	Auto shut off saves battery life or manual off by push button
Power supply	006P DC 9V battery, MN1604 (PP3) or equivalent (alkaline or heavy duty type)
Dimensions	Main instrument: 180x72x32mm (7.1"x2.8"x1.3") Sensor head: round 72mm dia.
Weight	14.2 oz(381g)

Electrical specifications (23°C \pm 5°C)			
Air velocity			
Measurement	Range	Resolution	Accuracy
m/s	0.4 - 25.00 m/s	0.1 m/s	\pm (2% + 2d)
km/h	1.4 - 90.0 km/h	0.1 km/h	
mile/h	0.9 - 55.9 mile/h	0.1 mile/h	
knots	0.8 - 48.8 knots	0.1 knots	
ft/min	80 - 4930 ft/min	1 ft/min	\pm (2% + 20 ft/min)

Air flow			
Measurement	Range	Resolution	Area
CMM (m ³ /min)	0 - 999,900 m ³ /min	0.001 - 100 m ³ /min	0.001 - 9,999 m ³ /min
CFM (ft ³ /min)	0 - 999,900 ft ³ /min	0.001 - 100 ft ³ /min	0.001 - 9,999 ft ³ /min

Air temperature			
Measurement	Range	Resolution	Accuracy
Temperature °C	0°C~50°C	0.1°C	\pm 0.8°C
Temperature °F	32°F~140°F	0.1°F	\pm 1.5°F

Optional	Accessories
UPCB-01	RS-232C cable (optional)
SW-U101-WIN	PC interface software (optional)

TEPEL Anemometer/EMF Field Testers

Hot Wire Anemometer



- ❑ Thermal anemometer, available for very low air velocity measurement.
- ❑ Multi-functions for air flow measurement: m/s, km/h, ft/min, knots, mile/h.
- ❑ Super large LCD with dual function meter display, read the air velocity and temp. at the same time
- ❑ Records maximum and minimum readings with recall function
- ❑ Data hold, auto power off
- ❑ Thermistor sensor for temp. measurement, fast response time

RS-232C



AVM-714



Accessories	
Spare telescope	probe standard accessory
UPCB-01	RS-232C cable (optional)
SW-U101-WIN	PC interface software (optional)

Sensor structure	Air velocity:	Tiny glass bead thermistor
	Temperature:	Precision thermistor
Memory	Maximum and minimum with recall	
Sampling time	approx. 0.8 sec.	
Data output	RS-232 PC serial interface	
Power off	Auto shut off saves battery life or manual off by push button	
Operating environment	0°C to +50°C <80% RH	
Power supply	1.5V AAA (UM-4) battery x6 (alkaline or heavy duty type)	
Power current	approx. DC 30 mA	
Dimensions	Main instrument:	180x72x32mm (7.1"x 2.8"x1.3")
	Telescope	round 12 mm dia.
	probe:	L= 250 to 940 mm
Weight	355 gr. (0.78 LB)	

Electrical specifications (23°C ±5°C)			
Measurement	Range	Resolution	Accuracy
m/s	0.2 to 20 m/s	0.1 m/s	±(5%+1d) reading or
km/h	0.7 to 72 km/h	0.1 km/h	
ft/min.	40 to 3940 ft/min	10 ft/min.	±(1%+1d) full scale (depending on which is larger)
mile/h	0.5 to 44.7 mile/h	0.1 ml/h	
knots	1.0 to 31.1 knots	0.1 knots	
Temperature °C	0°C to +50°C	0.1°C	±0.8°C
Temperature °F	32°F to 122°F	0.1°F	±1.5°F

EMF Field Testers



- ❑ 13mm(0.5"), 3 1/2 Digit LCD display
- ❑ Range in gauss: 0.1m to 199.9m gauss
- ❑ Range in Tesla: 0.01 ~ 19.99µ Tesla
- ❑ Band width: 30Hz to 300Hz
- ❑ A cost effective, handheld meter provides the user with quick, reliable and easy way to measure electromagnetic field (EMF) radiation levels generated by power lines, cables, computer monitors, TV sets, Video equipment and many other similar devices
- ❑ Over range indication
- ❑ Fast sampling rate of 2.5 times per second



EMF-701



EMF-701A

Measurement range	0.1 to 199.9 milligauss 0.01 to 19.99µ tesla
Frequency bandwidth	30 to 300 Hz
Accuracy	±(4% +3 dgts) at 50/60Hz (EMF-701) ±(3% +3 dgts) at 50/60Hz (EMF-701A)
Number of axes	Single axis
General	
Power requirement	9V Battery (EMF-701) x1 AAA (EMF-701A) battery x4
Dimensions	EMF-701: 5.2"™x2.8"™x1.0"™(131x70x25mm) EMF-701A: 4.4"™x 2.5"™x1.3"™(111x64x34mm)
Weight	5.8 Oz(165g)
Accessories	EMF-701: battery and owners manual EMF-701A: battery, soft carrying case and owners manual

Note: EMF-701A

0.1m~1999m gauss

0.01µ~199.9µ tesla



pH-703



Pen Type pH Meter

- ❑ High quality, light weight and compact design
- ❑ Measure water pH fast and easily in many fields such as swimming pools, aquariums, cooling towers, water and wastewater treatments, sanitation plants and laboratory applications.
- ❑ High resolution 0.01pH and high accuracy ± 0.02 pH
- ❑ Comes complete with protective carry case and standard pH7 buffer solution
- ❑ ATC: Auto temperature compensation

Measurement ranges	0.00 ~ 14.00pH
Resolution	0.01pH
Accuracy	± 0.02 pH
ATC	0~50°C
General	
Power requirement	9V Battery x1
Dimensions	158x40x34mm (6.2"x1.6"x1.3")
Weight	3.15 Oz(90g)
Accessories	pH7 buffer solution can, batteries and manual, protective carrying case

pH Meter + Temperature



pH-705



RS-232

- ❑ 3 1/2 Digit, Large LCD display, Max display 1999
- ❑ Measuring range: pH 0.01~14.00 pH
- ❑ Temperature: 0.1°C~65°C
Millivolt: 1mV 0~1999mV
- ❑ Accuracy: pH value ± 0.03 pH+2d
- ❑ Temperature: $\pm 0.8\%$, millivolt: $\pm 0.5\%$
- ❑ Dual display, reading hold function
- ❑ Manual/ automatic temperature compensation
- ❑ Auto power off, RS-232 Interface....and etc.

Electrical specifications (23°C $\pm 5^\circ$ C)				
Measurement	pH	mV	Temp. °C	Temp. °F
Range	0~14 pH	0~1999 mV	0~100°C	32~212°F
Resolution	0.01 pH	1 mV	0.1 °C	0.1 °F
Accuracy	± 0.03 pH +2d	$\pm 0.5\%$ + 1 d	$\pm 1^\circ$ C < 50 °C	$\pm 1.8^\circ$ F < 122°F

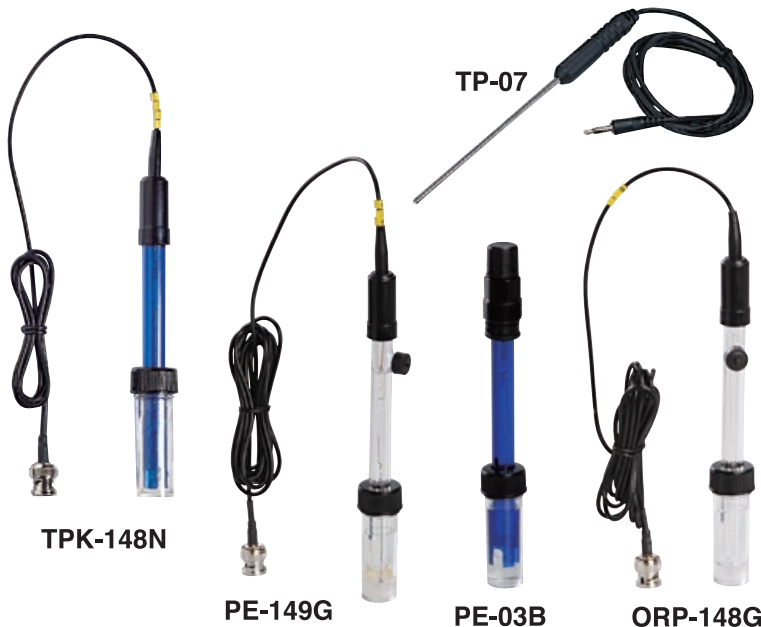


pH-04



pH-07

General							
Circuit	custom one-chip of microprocessor LSI circuit						
Display	Dual function meter's display, 13mm super large LCD display with contrast adjustment for best viewing angle						
Measurement	<table border="1"> <tr> <td>PH</td> <td>0 to 14 pH</td> </tr> <tr> <td>Temperature</td> <td>0 to 65°C (32 to 150°F)</td> </tr> <tr> <td>mV</td> <td>0 to 1999 mV</td> </tr> </table>	PH	0 to 14 pH	Temperature	0 to 65°C (32 to 150°F)	mV	0 to 1999 mV
PH	0 to 14 pH						
Temperature	0 to 65°C (32 to 150°F)						
mV	0 to 1999 mV						
Input impedance	10-12Ω						
Weight	250g (including battery)						
Temp. compensation for pH range	<table border="1"> <tr> <td>Manual:</td> <td>0°C to 100°C adjusting by push button on front panel</td> </tr> <tr> <td>Automatic:</td> <td>with the optional temp. probe, 0°C to 65°C</td> </tr> </table>	Manual:	0°C to 100°C adjusting by push button on front panel	Automatic:	with the optional temp. probe, 0°C to 65°C		
Manual:	0°C to 100°C adjusting by push button on front panel						
Automatic:	with the optional temp. probe, 0°C to 65°C						
Calibration for pH range	Built-in SLOPE (PH-04) & CAL (PH-07) calibration VR (multi-turns potentiometer) on front panel, high reliability						
Data output	RS-232C PC serial interface						
Over input indication	indication of "----"						
Operating environment	0°C to 50°C (32°F to 122°F), < 80% RH						
Power supply	Heavy duty type, 006P DC 9V battery MN1604 (PP3)						
Dimension	180x72x32mm						
Weight	9.45 oz (270g)						
Optional accessories							
CA-03	Carrying soft case						
UPCB-01	RS-232C cable						
SW-U101-WIN	Windows software 95/98 2000/XP						
PE-148	pH electrode 0~14pH, 0~80°C, PC 165x12 mm						
PE-149G	pH electrode 0~14pH, 0~90°C refillable, glass 155x12mm						
ORP-148G	pH electrode ± 150 mV, 0~80°C AgCl refillable, glass 160x12 mm						
PE-03B	pH electrode 0~14pH, 0~80°C, PC 165x12mm, W/BNC plug						
TP-07	Temperature probe (0-65°C)						



TPK-148N

PE-149G

PE-03B

ORP-148G

pH/mV/Temp Meter



pH-706

- Microprocessor based with splash proof housing
- Simultaneous display pH and temperature
- Automatic or manual temperature compensation. °C/°F switchable
- Simple to calibrate by one keyboard for 3 points buffer
- Calibration value can be adjusted as needed.
- Indicate percentage of slope (PTS) after calibration
- Low battery and consumption indicator
- Auto power off after 10 minutes of non use
- Rubber protective holster with magnetic

Function	pH	mV	Temp.
Range	0-14.00	±1999.0	0-100°C
Accuracy	± 0.02	± 2	± 0.5°C
Resolution	0.01	1	0.1°C
Compensation	ATC 0- 100°C		
Calibration	pH 4.00, 7.00, 10.00		
Battery	9V		
Dimension	108x75x30mm (4.25"x2.95"x1.18")		
Weight	4.72 oz(135g) (with battery)		
Accessories	pH7 buffer solution can, batteries and manual, protective carrying case		

Micro Processor Base pH/mV/Temperature meter

- Hand-held lightweight design
- Dual display pH(mV) & temperature
- pH (pH4, pH7, pH10) and Temp. (25°C and 70°C) calibration for highly accuracy
- HOLD, MAX, MIN, MAX-MIN, AVG functions
- Temperature compensation
- Auto (0°C~80°C) / manual (0°C~100°C) user selectable
- RS232 Interface with Windows software
- Suitable for ion selective with "mV" range
- 3 1/2 digital 2000 counts
- Low battery indication
- CE-Mark approval



pH-870

Temperature specifications	
Sensor	Thermistor (NTC, 3.5mm phone jack/1cm)
Range	0°C to 80°C (32°F to 176°F)
Resolution	0.1°C / 0.1°F
Accuracy	± 1.0°C (2°F)
Ph specifications	
Range	0.00 to 14.00pH at 0°C to 80°C
Resolution	0.01pH
Accuracy	± 3dpts (not include pH sensor)
Input impedance	1012 Ω
mV specifications	
Range	0mV to 1999mV (auto range)
Resolution	0.1/1 mV
Accuracy	±(0.5% rdg+2dpts)
General	
Power requirement	1.5V (AAA battery) x 3 included
Accessories	pH electrode, pH 4, 7, 10 buffer solutions RS232 cable, soft carrying bag
Dimension	167x48x24mm (6.5"x1.9"x0.9")
Weight	3.3 oz(94g)

Micro Processor Base Salinity Meter

- Portability and simplicity one-hand operation
- Dual display salinity and temperature
- Automatic temperature compensation
- Average calculation, interval measuring, gram-conversion
- Use highly accurate NTC temperature sensor
- Auto power off function
- Low battery indication, the "Battery symbol" is displayed when the battery voltage drops below the operating level
- CE-Mark approval

Application:

- Water monitoring



SM-850

Temperature	
Sensor	Thermistor temperature sensor
Range	-20°C to 60°C, -4°F to 140°F
Resolution	0.1°C / 0.1°F
Accuracy	± 0.5°C: 0°C to 45°C; ± 1°C: -20°C to 0°C, 45°C to 60°C; ± 1°F: 32°F to 113°F ± 2°F: -4°F to 32°F, 113°F to 140°F
Relative salinity	
Range	0.1% to 10%
Temperature compensation	-5°C to 60°C,
Automatic accuracy	0% to 0.9% (± 0.1), 1.0% to 1.9% (± 0.2) 2.0% to 2.9% (± 0.3), 3.0% to 4.9% (± 0.5) 5.0% to 7.9% (± 1.0), 8.0% to 10.0% (± 1.5, depend on the way of measuring)
General	
Power requirement	1.5V (AAA battery) x 3
Accessories	Battery x 3 and owners manual
Dimension	167x48x24mm (6.5"x1.9"x0.9")
Weight	11.5 oz(330g) (including probe and battery)

Microproceser based pH meter



CE
EMC-LVD
pH-709

- Microprocessor based for fast and accurate measurements
- Special viewing angle designed of waterproof housing IP 67 rated
- Large LCD display pH or conductivity and temperature simultaneously
- Simple to calibrate by one keyboard automatic temperature compensation
- Multi-functions with Data-hold, Max/Min and shows PTS after calibration
- Low battery and consumption indicator
- Auto power shut off after 10 minutes of non use

Measurement	
pH	0~14.00 ± 0.01 + 1digit
Temp.	0~90deg C. ± 0.2 + 1digit
mV	-1000~1000 ±2 + 1digit
Resolution	0.01pH; 1mV; 0.1
ATC	0~90°C (auto compensation)
Calibration	pH4.00, pH7.00, pH10.00
General	
Power	DC1.5Vx4 battery size: AAA/UM-4
Dimension	195x40x36mm (7.7"x1.6"x 1.4")
Weight	4.72 oz(135g) with battery
Accessories	Sensor installed, pH4 & pH7 solution, soaking solution, battery and owners manual
Optional	ORP electrode

UVA Light Meter



CE
EMC-LVD
UVA-830

- 3/12 LCD display, Max.1999
- Portability and simplicity one-hand operation
- Three ranges: 199.9 $\mu\text{W}/\text{cm}^2$, 1.999 mW/cm^2 , 19.99 mW/cm^2
- Automatic zero
- Low battery indication
- With MAX/DATA HOLD function
- With pocket hook
- Ultra-violet irradiance measurement for UVA
- UV detector spectrum from 320nm to 400nm
- CE-Mark approval

Measurement	
UVA sensor	UV photo diode
Range	199.9 $\mu\text{W}/\text{cm}^2$, 1.999 mW/cm^2 , 19.99 mW/cm^2
Accuracy	± (4% full scale ± 2 digits)
UV sensor spectrum	Band pass 320~400 nm Stated accuracy at 23 ±5°C, <75%RH
General	
Power requirement	1.5V x 3 pcs AAA size
Dimension	155x48x24cm (6.1"x1.9"x0.9")
Weight	2.9 oz(81.2g)
Accessories	Battery and owners manual

Coating Thickness Gauge



CE
EMC-LVD
TG-900

- 3/12 LCD display, Max. 1999
- Automatically hold reading, when sensor leaves the surface
- Automatically measure thickness, when you place sensor onto the surface
- 2-Point calibration
- Auto power off 10 seconds
- One hand operaiton- simple and easy to be used
- Back light display
- $\mu\text{m}/\text{mils}$ user-selective
- Low battery indication
- Auto power off
- CE-approval

Measurement range	0 to 40.0mils (0 to 1000 μm)
Resolution	0.1 mils/ 1 μm
Response time	1 second
Accuracy	± 4 digits on 0 to 7.8mils ± 7 digits on 0 to 199 μm . ± (3% + 4 digits) on 7.9mils to 40mils (200 μm to 1000 μm) specified at 23°C ±5°C, <75% relative humidity
General	
Power requirement	9V Battery x 1
Dimension	148x105x42mm (5.8"x4.1"x1.7")
Weight	5.2 oz(145g)
Accessories	One battery 9V, standard thickness plate 3.9 mils (100 μm) soft carrying bag and owners manual

TECPEL Thermometers/ Thermo Data logger



Pocket Thermometer

- Hand-Held lightweight design
- With pocket hook
- Highly accurate thermometer
- With MAX/DATA HOLD function
- Auto-power off function
- °C or °F user-selective

CE
EMC-LVD
DTM-800

Measurement range	-100°C to 850°C (-148°F to 1562°F)
Accuracy	
-100°C to 850°C	±(0.3%rdg +1°C)
-148°F to 1562°F	±(0.3%rdg +2°F)
Temperature scale	Celsius or fahrenheit user-selectable
Resolution	0.1°C: -59.9°C to 199.9°C; others 1°C 0.1°F: -59.9°F to 199.9°F; others 1°F
Sensor	K type thermocouple
Sampling rage	2.5 Times/per second
General	
Power requirement	1.5Vx3pcs AAA size
Dimension	148x48x24mm (5.8"x1.9"x0.9")
Weight	2.6 oz(74g)
Accessories	TPK-01 x 1 bead thermocouple and owners manual

Single Input Thermometer



CE
EMC-LVD
DTM-305C

- Thermocouple range
K-type -200°C-1370°C
- Highly accurate thermometer with
0.1% basic accuracy
- Large display for easy read
- Thermocouple offset adjust
- Robust protective holster
- °C or °F user-selective
- MAX/MIN, HOLD function
- Auto-power off
- Display back-light
- Auto range 0.1°/1°
- Wide measuring ranges suit versatile
application

Measurement range	
Accuracy	
-50°C to 1370°C	±(0.05%rdg + 0.3°C)
-50°C to -200°C	±(0.05%rdg + 0.7°C)
-58°F to 2498°F	±(0.05%rdg + 0.6°F)
-58°F to -328°F	±(0.05%rdg + 1.4°F)
Temperature scale	Celsius or fahrenheit user-selectable
Resolution	0.1°C or 1°C (0.1°F or 1°F) auto select
Sensor	K type thermocouple
Sampling rage	1 Times/per second
General	
Power requirement	1.5V x 4 pcs AAA size
Dimension	160x83x38mm (6.3"x3.3"x1.5")
Weight	9.9 oz(270g)
Accessories	TPK-01 x 1 Bead thermocouple, holster and owners manual

Temperatue Data Logger



CE
EMC-LVD
DTM-507

- T1, T2 for various thermocouple
- Triply display with set-able backlight
- Data logger function
- Save data: 128 samples with real-time data
- Data logger: 16 sets, Maximum 1024
data capacity
- T/C Offset adjust
- REC, MAX, MIN, MAX-MIN, AVG, REL,
HOLD functions
- T1, T2, T1-T2, time and memory No
- Resolution: 0.1/1°C to 0.1/1°F
- Warning beeper with Hi/Lo setting
- TIME, REL, record interval,
APO time setting

Measurement range	K-TYPE (0.1°) -200°C to 1372°C, -328°F to 2501°F J-TYPE (0.1°) -210°C to 1200°C, -346°F to 2192°F T-TYPE(0.1°) -200°C to 400°C, -328°F to 752°F E-TYPE(0.1°) -210°C to 1000°C, -346°F to 1832°F R-TYPE(1°) 0°C to 1767°C, 32°F to 3212°F S-TYPE(1°) 0°C to 1767°C, 32°F to 3212°F N-TYPE (0.1°) -50°C to 1300°C, -58°F to 2372°F K, J, N, 1° for above 2000°F
Accuracy	
-100°C to 850°C	±(0.05% rdg + 0.3°C) typical
- 58°F to 2501°F	±(0.05% rdg + 0.6°F) typical
Temperature scale	Celsius or fahrenheit user-selectable
Resolution	0.1°C or 1°C (0.1°F or 1°F) Except R, S t ype
Sensor	K/J/T/E/R/S/N- type thermocouple
Sampling rage	1 Time/per second
General	
Power requirement	1.5V x 4pcs AAA size
Dimension	148x48x24mm (5.8"x1.9"x0.9")
Weight	2.6 oz(74g)
Accessories	TPK-01 x 2 bead thermocouple, USB cable, software disk, owners manual

TECPEL Thermometer / Anemometer

Stem Thermometer



- On/Off, Max/Min (°F/°C) memory recalling
- Temperature unit (°F/°C) selectable
- Data Hold/Test function selectable
- 1 Sec. normal temperature sensing time
- Low battery indicator
- One hour auto shut off
- 133mm stainless steel sensor probe
- Protective plastic sleeve with clip
- Rubber coated housing

Measurement range	-50°C~+150°C (-58°F~+302°F)
Accuracy	Others not specified
-30°C to 150°C	±1°
-22°F to 302°F	±1.8°F
Temperature scale	Celsius or Fahrenheit user-selectable
Resolution	0.1°C: -19.9°C to 199.9°C; others 1°C
Sampling range	1 Time/per second
General	
Power requirement	1.5V x G13 size
Dimension	235x36x20mm (9.6"x1.4"x0.8")
Weight	1.4 oz(40g)
Accessories	Battery and owners manual
Ambient Temp.	-10°C~+50°C for plastic case

Pocket Thermometer



- One hour auto shut off
- 102mm Stainless steel sensor probe
- Protective plastic cap for stainless steel
- With stand on back unit and sensor wire compartment
- MAX/MIN (°F/°C) memory recalling
- Alarm beep sound at the high or low temperature limited
- Temperature unit °F/°C selectable
- DATA HOLD/Test function selectable
- Low battery indicator
- 1 Sec. normal temperature sensing time

Measurement range	50°C~+150°C (-58°F~+302°F)
Accuracy	Others not specified
-30°C to 150°C	±1°
-22°F to 302°F	±1.8°F
Temperature scale	Celsius or fahrenheit user-selectable
Resolution	0.1°C: -19.9°C to 199.9°C; others 1°C
Sampling range	1 Time/per second
General	
Power requirement	1.5V x A76 size (LR44, G13)
Sensor	Stainless pipe 3.2ø, 102mm
Dimension	115x68x15mm (4.5"x1.4"x0.6")
Weight	2.6 oz(75g)
Accessories	Battery and owners manual
Ambient Temp.	-10°C~+50°C for plastic case

Anemometer



- Instant display of the air velocity and temperature
- Maximum, minimum and average value calculation
- 10 Memories data storage/recalling/clearing
- Easy air flow volume calculation (CMF/CMM)
- Data HOLD/TEST function
- Low battery indication
- One hour auto shut off function

Electrical specifications (23°C ±5°C)			
Air velocity			
Measurement	Range	Resolution	Accuracy
m/s	0.5~0.45 m/s	0.1 m/s	±(2% + 2d)
km/h	1.8~140 km/h	0.1 km/h	
mile/h	1.1~100.4 mile/h	0.1 mile/h	
knots	1.0~88.0 knots	0.1 knots	
ft/min	100~8880 ft/min	10 ft/min	±(2% + 20 ft/min)
Air temperature			
Measurement	Range	Resolution	Accuracy
Temperature °C	0°C~50°C	0.1°C	± 0.8°C
Temperature °F	32°F~122°F	0.1°F	± 1.5°C
Accessories	3x1.5V "AAA" size, hard carrying case and owners manual		

Oscilloscope Probe LF-190E 60MHz



CAT.II

Item	10 : 1	1 : 1
Bandwidth	DC~40MHz (±1dB)	DC~3MHz (±1dB)
	DC~60MHz (±3dB)	DC~6MHz (±3dB)
Input R	10MΩ	1MΩ (Oscilloscope)
	22pF	180pF
Input C	at oscilloscope input 20pF	
ATT ratio	1/10	1/1
MAX input voltage	DC 600V	

Oscilloscope Probe LF-210E 100MHz



CAT.II

Item	10 : 1	1 : 1
Bandwidth	DC~60MHz (±1dB)	DC~6MHz (±3dB)
	DC~100MHz (±3dB)	
Input R	10MΩ	1MΩ (Oscilloscope)
	14pF	150pF
Input C	at oscilloscope input 20pF	
ATT ratio	1/10	1/1
MAX input voltage	DC 600V	

Oscilloscope Probe LF-250 250MHz



CAT.II

Item	10 : 1	1 : 1
Bandwidth	DC~250MHz (±3dB)	DC~6MHz (±3dB)
Input R	10MΩ	1MΩ (Oscilloscope)
Input C	14pF	150pF
	at oscilloscope input 20pF	
ATT ratio	1/10	1/1
MAX input voltage	DC 600V	

Differential Probe HP-025 25MHz



- Make floating measurements simply and safely
- Compatible with analog or digital storage oscilloscopes
- In compliance with IEC-1010.1, IEC-1010.2-031 CAT.III, Pollution degree 2

Bandwidth	DC to 25MHz (-3dB)
Attenuation Ratio	1/20 & 1/200
Accuracy	±2%
Input impedance	4MΩ / 10pF each side to ground
Differential input range	±1400V (DC+ AC peak) or 1000V rms for 1/200 ±140V (DC+AC peak) or 100V rms for 1/20
Common mode range	±1400V (DC+AC peak) or 1000V rms
Output offset	<±5mV, -10°C to 40°C
Cable length	95cm(RG58/U)
Power requirements	4 x AA cells or 6VDC/60mA mains adapter (not supplied)
Dimension	168x62x20mm (6.6"x2.4"x0.8")
Weight	285g (0.583 lbs)



DP-25
EMC-LVD

Differential Probes

- converts the high voltage differential input signal to a low voltage ground referenced signal for display on any oscilloscope.
- 3 Range attenuator.
- 1000V input CAT III.
- Low battery indication, auto power off.
- Meet CE, IEC 1010, EN 61010, UL 3111.

Band width (-3dB, 50Ω load)	DC-25MHz. (x 20: DC~15MHz)
Accuracy	± 2% at 20-30°C 70%RH after 20 minutes warm up.
Attenuation	x 20, x 50, x 200 (into 1MΩ scope); x 40, x 10, x 400 (into 50Ω load)
Maximum operation voltage (DC + peak AC)	± 140V at x 20 ± 350V at x 50 ± 1300V at x 200
Maximum input differential Voltage	1300V (DC+peak AC) or 1000V RMS
Maximum input voltage to Ground	1000V (DC+peak AC) or 600V RMS

Common mode rejection ratio (CMRR)	60Hz : >10,000 : 1 100Hz : >1,000 : 1 1MHz : > 300 : 1 Noise : 2 mV rms (into 50Ω load)
Input impedance	2MΩ, 2.3 PF between inputs and ground. 4MΩ, 1.2 PF between inputs.
Power requirement	One internal 9V alkaline battery or external 6V-9
Dimensions	180x50x30mm (7.1"x1.9"x1.2")
Weight	9 oz (250g)



HVP-15HF
EMC-LVD

(1000:1 , 50MHz , low noise HV probe)

- Max. voltage: 15KV DC
- Bandwidth: DC~50MHz
- Division Ratio: X1000
- Signal/Noise: >60dB(1KHz)
- Connect with PL-10, HVP-15HF can be used for DMM



PL-10

Max. working voltage	DC: 0~ 15KV DC, AC : Pulse 30KV p-p AC: since wave 10KV rms
Signal/Noise	60dB (1KHz), 50 dB(1MHz)
Bandwidth	DC ~50MHz (-3dB)
Division ration	1: 1000
Rise time	7nS
Input resistance	100MΩ ±0.5 %
Input capacitance	3.0PF ±0.5PF
Compensation coefficient	200PPM/°C
DC accuracy	0.7%
Weidht/Dimension	250g (340mmLx75ø)

High Voltage Meter



HVP-40M
EMC-LVD

- DC 40KV CAT II pollution 2
- 600MΩ impedance
- 25KV ±2%, 40KV ±3%
- T.C. 200 ppm/oC
- Positive polarity only
- Resolution 1KV
- Need not power
- Meet CE, TUV GS, UL, CUL, IEC1010

SPECIFICATIONS	(20 ± 5°C, RH< 80%)
Input impedance	600MΩ
Maximum operation voltage	40KV DC, CAT II, pollution 2
Polarity	Positive only
Display	Analog indicate
Accuracy	Factory calibrator 25KV ±2%
	FULL scale 40KV ±3 %
Temperature coefficient	200ppm/°C
Maximum loading current	70μA

Maximum loading power	3 Watt
Voltage range	40KV/ 1 range
Voltage resolution	1KV
Power source	Need not power
Operating temperature	0°C~+50°C
Storage temperature	-20°C~+70°C
Ground lead length	90cm (35")
Dimension	420 mmLx 80ø
Weight	12.6 oz (360g)

Bead Probe

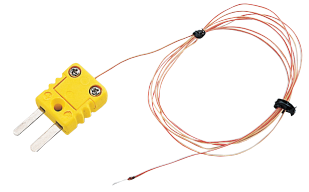


TPK-01

-50°C~200°C/-58°F~392°F, for measuring surface of air temperatures. 4ft. wire (122cm) with an industry standard miniature connector plug.

Tiny Bead Probe

- ❑ -50°C~180°C/-58°F ~356°F for measuring surface of tiny objects
- ❑ 4ft. wire (122cm) with an industry standard miniature connector plug
40 gauge wire: 0.079mm (0.0031")



TPK-01-40G

TPT-01 T type Thermocouple

- ❑ -199°C~200°C/-58°F~392°F
- ❑ For air, water, and oil
- ❑ Length :122cm
- ❑ Flat wire 1.1mmx1.6mm



TPT-01

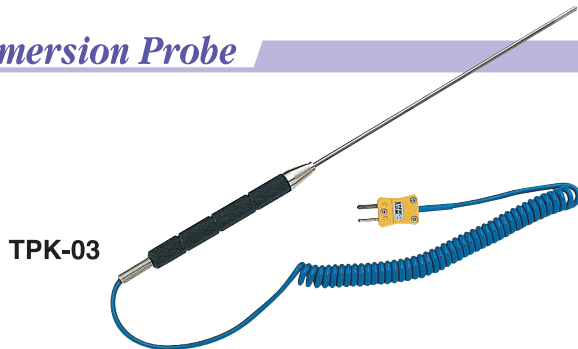
Glass Fiber Bead Probe

- ❑ Bead probe TPK-01G
- ❑ -50°C~450°C/-58 °F~392°F, for measuring of air, water, oil temperatures. 4ft. (122cm)
- ❑ Wire with an industry standard miniature connector plug



TPK-01G

Immersion Probe

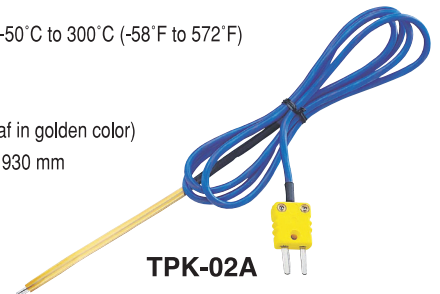


TPK-03

- ❑ -50°C~800°C/58°F~1472°F general purpose needle type with stainless round head. for measuring liquid or gel.
- ❑ pipe: 19.5cm, handler 12cm, wire 70cm

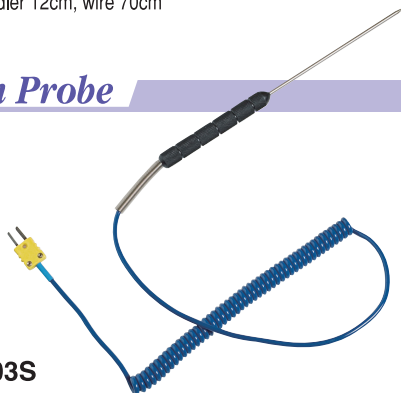
Flat-Leaf Surface Probe

- ❑ Measurement range: -50°C to 300°C (-58°F to 572°F)
- ❑ Thickness: 1.0mm
- ❑ Width: 2.0mm
- ❑ Length: 84mm (flat leaf in golden color)
- ❑ Straight cable length: 930 mm



TPK-02A

Immersion Probe



TPK-03S

- ❑ -50°C~800°C/58°F~1472°F, general purpose needle type with stainless point head. for measuring internal temperatures of liquids, semi-solids such as oils, rubbers, plastics, powers, clays, meats, fruits, frozen foodstuffs,
- ❑ pipe: 9.8cm, handler 5.5cm, wire 70cm

Immersion Probe

- ❑ -50°C~300°C/-58°F~572°F
- ❑ Pipe 12 cm, handler 10cm
- ❑ General purpose needle type with stainless point head for measuring internal temperature of liquids, semi-solids such as oils, rubbers, plastics, powders, clays, meats, fruits, frozen foodstuffs
- ❑ Curling wire 70cm extendable to 170 cm

TPK-03A



TECPEL Thermocouple Probes / Test Leads

Surface Probe

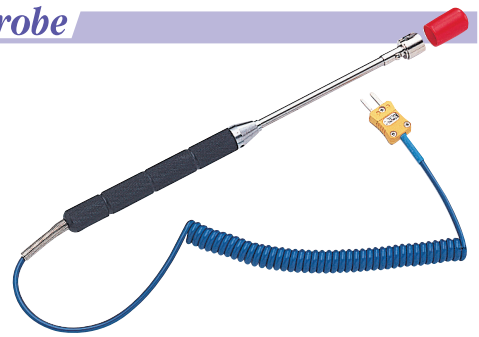
TPK-04S



-50°C to 500°C (-58°F to 932°F), fast response probe
Ideal for measuring the surface temperature of small electronic parts

Surface Probe

TPK-04



-50°C to 500°C (-58°F to 932°F), fast response probe. Ideal for measuring the surface temperature of small electronic parts

90° Angle Surface Probe

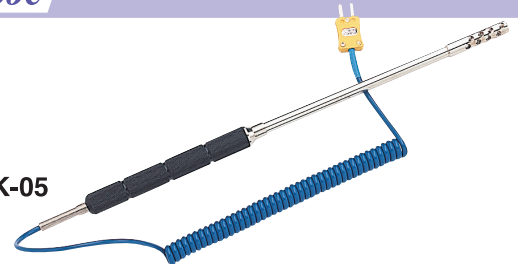
- ❑ Measurement range: -50°C to 500°C (-58°F to 932°F)
- ❑ Diameter: 14mm
- ❑ Length: 185mm (stainless steel)
- ❑ Hand holder: 120mm
- ❑ Coiled cable: 1500mm



TPK-04L

Air Probe

TPK-05



-50°C~600°C (-58°F~1120°F), fast response probe. Ideal for measuring air, gases, freezers, ovens, fans and its drilled sheath protects element and assures airflow permeability

Roller Probe

TPK-06



-50°C~250°C (-58°F~482°F), fast response probe. Ideal for measuring moving rotating, stationary surfaces or moving conveyors for molds, textiles, prints, PC boards, papers, textiles

Safety Alligator Clips

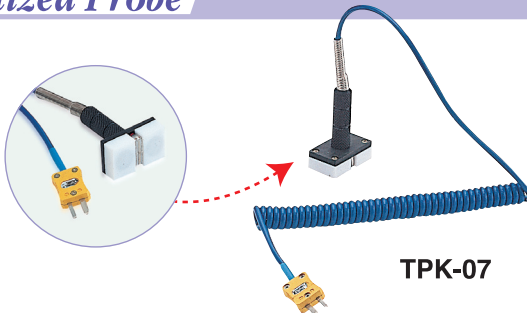
- ❑ Wide grip crocodile clips with integral finger guard, large 35mm high tension spring mouth. double insulated silicone wire 1M. safety straight
- ❑ Input plug, comply with IEC 1010, 1000V, CAT III.

AL-03



Magnetized Probe

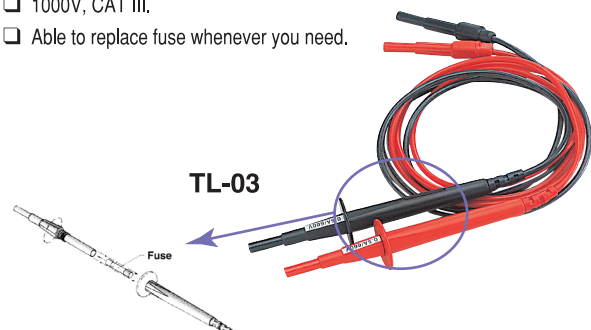
TPK-07



-50°C~250°C (-58°F~482°F), fast response probe. Ideal for measuring magnetic surface such as motors, transformers, dryers, blast furnaces, heating elements

Fused Test Leads TL-03

- ❑ The spring-shrouded 4mm brass caged banana probe tip, double insulated
- ❑ Silicone wire 1M, safety straight input plug, comply with IEC 1010,
- ❑ 1000V, CAT III.
- ❑ Able to replace fuse whenever you need.



TL-03