



PRODUCT CATALOGUE

2019 - 2020



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Electro Meter Bangladesh Limited is a Wholly Owned Subsidiary of Electro Meter Corporation, India and had incorporated itself in the heart of Bangladesh under Registrar of Joint Stock Companies, Government of Bangladesh vide incorporation no C-141734 / 2017.

Being a pioneer Calibration Laboratory (Electro Meter Corporation) with ISO 17025: 2005 accreditation under the aegis of National Accreditation Board of Testing and Calibration Laboratory (NABL) since 2001 in multiple disciplines v.i.z. Electro – Technical, Thermal and Mechanical sub grouped as Dimension, Pressure, Force, Mass – Volume & Viscosity, Electro Meter Corporation had widened its scope of service in the territorial jurisdiction of Bangladesh considering the market potential. However the market survey had made us aware that the clients are of the requirement to get the portable instruments from the same body from whom they undertake the calibration service.

Clients priority had always remained the primary area of prominence of Electro Meter Corporation thereby leading into an idea of becoming a One Stop solution in the field of Supply and Calibration of instruments.

Our Scope of supply includes different measuring electrical and electronic parameters, from simple Voltmeters & Ammeters to Oscilloscopes and Spectrum Analyzers to High Voltage Testing equipment.

Our range of instruments offers you highest accuracy, ruggedness and utmost reliability, having met and exceeded the toughest quality standards set by the industry as well as users.

When dealing with us, be rest assured of high quality, prompt deliveries and quick response for all after sales services. Our associates constantly check and test the instruments prior to sale and delivery. Almost all products are available in ready stock and off-the-shelf, hence enabling prompt & timely deliveries. High technology service center facilities comprising of an experienced team of technicians, equipped with high quality test equipment and tools and warranties against manufacturing defects are available to back-up the quality & excellence promised when you invest in any product of Electro Meter Bangladesh Ltd.



Acidity Testing Kit

Used to measure Acidity content of Transformer Oil

Portable equipment with test tubes to conduct the tests

A set of chemical reactions need to be conducted to evaluate acidity of transformer oil

Test Set consists of Ethyl Alcohol, Sodium Carbonate Solution, Universal Indicator, Test Tubes, Graduated Dropper

Color chart calibrated with neutralization number values and instruction manual is also provided.



A.C. High Voltage Test Set

These sets are suitable for applied voltage tests on transformer, motors, gloves bushing and many other electrical equipment and insulating material and components.

The sets are capable of giving continuously variable control of high Voltage from zero to maximum rated output voltage and of maintaining pressure at the desired level with supplying the charging current necessary for the capacity of the equipment under test

Input: 230V or 415V AC 50Hz (Any One) (generally 230V is provided for sets up to 15KVA Capacity)

Output: Continuously variable between 0 to maximum rated output voltage

Max Capacity: AC HV unit are spread over a wide voltage and current range from 2kV to 200kV having capacity from several VA to several hundred KVA.

However the kV rating might go beyond 200kV if required by the customer

Duty Cycle: Unless specified the test sets are made for intermittent duty cycle of 10 mins ON and 15 mins OFF

AC and DC combined high voltage sets are also available



Analogue Clamp Meter

It conforms to the prescriptions of the European directive on low voltage 73/23/EEC and to EMC directive 89/336/EEC, amended by 93/68/EEC.

Confirms to CAT II 600V, IEC1010-1 (EN-61010-1).

Clamp Jaw Dia	34mm
DC Voltage	0 - 75V
Accuracy	± 3%
AC Voltage	0 - 150/300/750V
Accuracy	± 3%
AC Current	0 - 6/15/60/150/600V
Accuracy	± 3%
Resistance	0 - 2k/200k.Ohms
Accuracy	± 3%
Temperature	-20°C to 150°C
Accuracy	± 3% of arc

Pointer Lock Facility



It conforms to the prescriptions of the European directive on low voltage 73/23/EEC and to EMC directive 89/336/EEC, amended by 93/68/EEC.

Clamp Jaw Dia	34mm
DC Voltage	0 - 60V
Accuracy	± 3%
AC Voltage	0 - 150/300/600V
Accuracy	± 3%
AC Current	0 - 6/15/60/150/300V
Accuracy	± 3%
Resistance	0 - 2k/200k^
Accuracy	± 4%
Temperature up to	150°C / 300°F
Accuracy	5°C

Confirms to IEC-61010, CAT II 600V

Fuse Protection

Pointer Lock Facility



Easy Range Selection by Rotary Scale System

Pointer lock knob

Automatic Zero Ohm Adjustment

Jaw Clamp Dia 60mm

AC Voltage 0 - 150/300/600V

Accuracy ± 3% F.S.

AC Current 0 - 15/60/150/300/600/1200A

Accuracy ± 3% F.S.

Resistance 0 - 20k.Ohms

Accuracy ± 3% F.S.

Fuse Protection



Analogue Multimeter

Hand Held Multimeter

DC Voltage	0 - 2.5/10/50/250/1000V
Accuracy	± 5%
AC Voltage	0 - 10/50/250/1000V
Accuracy	± 5%
Resistance	0 - 20k/2M \wedge
Accuracy	± 5%
Battery Test	1.5/9V
Accuracy	± 5%
Decibel	-22 to 20 dB

Confirms to IEC 61010, CAT II 300V



Confirms to CAT II 1000V, CAT III 500V

DC Voltage	0 - 0.05/0.5/2.5/10/50/250/1000V
Accuracy	3%
AC Voltage	0 - 0.05/0.5/2.5/10/50/250/1000V
Accuracy	± 4%
DC Current	0 - 0.01/0.05/0.25/2.5/25mA/250mA/10A
Accuracy	± 3%
AC Current	0 - 0.01/0.05/0.25/2.5/25mA/250mA/10A
Accuracy	± 4%
Resistance	0 - 2k/20k/200k/2M/20M/200M/2000M \wedge
Accuracy	± 2%
Audible Continuity Test	
Fuse Protection	



Hand Held Multimeter

DC Voltage	0 - 2.5/10/50/250/1000V
Accuracy	± 3%
AC Voltage	0 - 10/50/250/1000V
Accuracy	± 4%
DC Current	0 - 2.5m/25m/250m/10A
Accuracy	± 3%
Resistance	0 - 2k/20k/2M/20M \wedge
Accuracy	± 3%
dB Test	-10dB to +62dB

Transistor Polarity Test and Audible Continuity Test

Fuse Protection

Confirms to IEC 61010, CAT III 600V



Confirms to EN 61010 - 1:2001, CE 1010-1, EN61010 NF-C 42020 VDE 0411

Confirms EMC Directive EN 61326-1

DC Voltage	0 - 2.5/10/25/100/250/500/1000/2500V
Accuracy	± 1.5%
AC Voltage	0 - 2.5/10/25/100/250/500/1000/2500V
Accuracy	± 2.5%
DC Current	0 - 1m/10m/50m/100m/250m/1000m/10A
Accuracy	± 1.5%
AC Current	0 - 100m/1000m/2500m/10A
Accuracy	± 2.5%
Resistance	0 - 2/20/200/2k \wedge
Accuracy	± 10%
Audible Continuity Test	



Battery Impedance Tester

Confirms to IEC61010-1, CAT II 1,000V, CAT III 500V to ground potential

DC Voltage	0-0.1/0.5/2.5/10/50/250/1000V
Accuracy	± 3%
AC Voltage	0-0.1/0.5/2.5/10/50/250/1000V
Accuracy	± 4%
DC Current	0-0.05/0.25/2.5/25/250mA/10A
Accuracy	± 3%
AC Current	0-0.05/0.25/2.5/25/250mA/10A
Accuracy	± 4%
Resistance	0 - 2k/20k/200k/2M/20M \wedge
Accuracy	± 3%
Battery Test	1.5V/9V

Transistor Test, Diode Test and Continuity Test Facility



Measuring Internal Impedance and Open Circuit Voltage of the secondary battery including Nickel-metal hydride battery (NiMH), Nickel-Cadmium Battery (NiCd)

AC Four terminal method to measure internal impedance by eliminating lead impedance and contact impedance to get the accurate results

Multi display LCD to display internal impedance, voltage and clock

99Sets of composite comparator function

Pin type leads, for easy contact of battery electrode.

Large Backlit LCD Display

Data Logging up to 9999 sets

Resistance Measurement from 10 μ \wedge to 40 \wedge

Voltage Measurement from 1mV to 40V

Temperature Measurement from -20 to 60°C

DC Current Measurement from 0.6A to 700A DC

PC Interface cable and software



Bench Type Multimeter

High Performance Bench type T-RMS Digital Multimeter

AC Frequency response : 50kHz

Display	4-1/2 Digits 19999 Counts Backlit LCD
DC Voltage	0 - 200m/2V/20V/200V/1000V
Accuracy	±0.05%
AC Voltage	0 - 200m/2V/20V/200V/750V
Accuracy	±0.8%

DC Current	0 - 20m/200m/ 2/20A
Accuracy	±0.35%
AC Current	0 - 200m/2/20A
Accuracy	±0.8%
Resistance	0 - 200/2k/20k/200k/2M/20M \wedge
Accuracy	±0.1%
Capacitance	0 - 20n /2u /200uF
Accuracy	±3.5%
Frequency	0 - 20k /200kHz
Accuracy	±1.0%

Transistor Test, Diode Test and Audible continuity test facility



Most Stable bench top 6-1/2 Digits Digital Multimeter

Has high accuracy and has USB PC Interface facility.
 High sampling rate and data rate of 2000 readings/Sec
 AC measurement range 3Hz to 300kHz
 Two Wire and Four Wire Resistance measurement
 Period, Temperature measurements
 It can store up to 2000 readings in memory
 11 measurements and 8 math function

Display	unique 5x7 dot matrix VFD Dual displays with three color annunciators
DC Voltage	0 - 100mV/1/10/100/1000V
Accuracy	±0.003%
AC Voltage	0 - 100m/1/10/100/750V
Accuracy	±0.04%
DC Current	10m/100m/1/3A
Accuracy	±0.005%

AC Current	0 - 1 /3A
Accuracy	± 0.3%
Resistance	0 - 100/1k/10k/100k/1M/10M/ 100M \wedge
Accuracy	±0.003%

Diode and continuity test
 Limit, Ratio MX+B, %, dBm, dB, Min /Max, Null functions
 Trigger function available
 Thermal measurement function supports two types of measurements, Thermocouple and RTDs, For thermocouples E, J, K, N, R, S and T types can be used.
 Multi-Point Scan option can be used that supports upto 10 Channels (optional)
 Free MatLab and Labview applications that allows user to do a variety of tasks. Also features the PT-Tool that can acquire data directly from the measurement into MS Word and Excel even without MS Word or Excel. User can chose PT-Link which is a stand-alone application.



Most Cost Effective 6-1/2 Digit Multimeter

Dual Displays & Dual Measurements
 Wide Range Current Measurement
 Basic DC Voltage Accuracy of 0.009%
 Free Software PT-TOOL (SCPI Commands) & PT-LINK

DC Voltage	0 - 100m/1/10/100/1000V
Accuracy	±0.009%
AC Voltage	0 - 100m/1V/10/100/1000V
Accuracy	±0.12%
DC Current	0 - 10m/100m/1/3A/10A
Accuracy	±0.05%
AC Current	0 - 1/3A/10A

Accuracy	±0.2%
Frequency	up to 300kHz
Accuracy	±0.03%
Capacitance	0 - 1n 10n/100n/1u/10u/ 100u/1000u/10000uF
Accuracy	± 1%

Thermocouple Measurement
 High Speed Sampling and Measurements
 Diode & Continuity Test Facility
 Confirms to EN61326.
 Is provided with USB Interface and optionally GPIB and RS-232 Interface can also be provided.



Most Cost Effective 6-1/2 Digit Multimeter

Dual Displays & Dual Measurements
 Wide Range Current Measurement
 Basic DC Voltage Accuracy of 0.009%
 Free Software PT-TOOL (SCPI Commands) & PT-LINK

DC Voltage	0 - 100m/1/10/100/1000V
Accuracy	±0.009%
AC Voltage	0 - 100m/1V/10/100/1000V
Accuracy	±0.12%
DC Current	0 - 10m/100m/1/10A
Accuracy	±0.05%

AC Current	0 - 1 /10A
Accuracy	±0.2%
Frequency	up to 300kHz
Accuracy	±0.03%
Capacitance	0 - 1n/ 0n/100n/1u/10u/100u/ 1000u/10000uF
Accuracy	± 1%

Diode & Continuity Test Facility
 Confirms to EN61326.
 Is provided with USB Interface and optionally GPIB and RS-232 Interface can also be provided



Cable Fault Locator

Used to locate short faults, earth faults including high resistance faults and open faults in all type of LT & HT Armoured cables from 400V to 11kV & 33kV.

Faults could be found from a minimum 50m to maximum 10kms.

Can be used for all kind of insulations.

It can be used for buried, underground, aerial and cable drum wound.

Works on potential distribution technique to locate short, earth & high resistance faults. Capacitance measurement method is adopted to locate open faults.

3-1/2 Digit Large LCD Display

Complete with batteries, fault simulating board and leads.



Consists of a transmitter and a receiver

Used to detect or trace conductors and to find short faults in them.

The signal generated by the transmitter is made into a modulated current, generating an electromagnetic field around a conductor. This electro magnetic field induces a voltage within the receiving coil. The induced voltage is amplified, decoded and converted to the original signal by the receiver and finally displayed on screen.

It is used for finding conductors in walls, conductor interruptions, short-circuits in conductors

Conductor tracing in the soil

Detecting fuses and assigning current circuits

Tracing sockets and distribution sockets having accidentally been covered by plastering

Detecting interruptions and short-circuits in floor heating

Tracing metallic water and heating pipes

All application are (both, voltage-free and live) are performed without using any additional instruments

Transmitter display indicates the transmission level, the transmission code, as well as the foreign voltage

Receiver display indicates the reception level, the transmission code, as well as the mains voltage detection

Automatic and manual sensitivity adjustment

Acoustic reception signal may be switched off

Auto-Power-Off function

Backlight Display

Additional lighting function when working under bad lighting conditions

Additional transmitters are available to extend or distinguish several signals



Pin Points Fault in all underground cables.

Useful for Power, Control & Telecom Cables

Maximum Cable Length 5kms

Accuracy : $\pm 5\%$

Faults located can be Medium/High Resistance Faults, Open Circuit and Short Circuit faults

Two Techniques used

Potential Comparison Technique

Capacitance Comparison Technique

Fault Resistance : Upto 1M Ω measure by 1KV Megger



Calibrators

Portable Type

12 Fixed range Selectable Outputs

Outputs available at -200, -100, -50, 000, 50,100, 150, 200, 300, 400,500, 600°C

Accuracy $\pm 0.05\%$ Ohm of FSR

Compensation Long Wire Compensation of 100m. sensor cable



Portable instrument for calibrating process devices and measuring process signals.

Display 3-1/2 Digits Backlit LCD

Data Hold Function

Overload and Low Battery Condition Indicator

Sources Current and DC mV

Measures Current and Power

Current Source Range 0 – 19.99 /24mA

Accuracy $\pm 0.25\%$

DC Milli Volt Source Range -199.9 to +199.9mV

Accuracy $\pm 0.25\%$

DC Current Measurement Range 0 - 19.99 /24mA

Accuracy $\pm 0.25\%$



Hand Held, 9V Battery Operated
4-1/2 Digits 19999 Counts LCD Display

Sources	
DC Voltage	0 - 199.99mV
Accuracy	±0.05%
DC Current	0 - 19.999mA
Accuracy	±0.05%
Measures	
DC Voltage	0 - 199.99mV
Accuracy	±0.05%
DC Current	0 - 19.999mA
Accuracy	±0.05%
Output Adjustable	by 10 Turn POT for COARSE and FINE



R type Thermocouple	-40 to 1760°C
Resolution	1°C Accuracy : ±0.05%
S type Thermocouple	-20 to 1760°C
Resolution	1°C Accuracy : ±0.05%
B type thermocouple	400 to 1800°C
Resolution	1°C Accuracy : ±0.05%
E type thermocouple	-200 to 1000°C
Resolution	0.1°C Accuracy : ±0.05%
K type thermocouple	-200 to 1370°C
Resolution	0.1°C Accuracy : ±0.05%
J type thermocouple	-200 to 1200°C
Resolution	0.1°C Accuracy : ±0.05%
T type thermocouple	-200 to 400°C
Resolution	0.1°C Accuracy : ±0.05%
N type thermocouple	-200 to 1300°C
Resolution	0.1°C Accuracy : ±0.05%
PT-10 385 Sensor	-200 to 850°C
Resolution	0.1°C Accuracy : ±0.05%
PT-100 385 Sensor	-200 to 850°C
Resolution	0.1°C Accuracy : ±0.05%
PT-200 385 Sensor	-200 to 630°C
Resolution	0.1°C Accuracy : ±0.05%
PT-500 385 Sensor	-200 to 630°C
Resolution	0.1°C Accuracy : ±0.05%
PT-1000 385 Sensor	-200 to 630°C
Resolution	0.1°C Accuracy : ±0.05%
Cu10 Sensor	-10 to 250°C
Resolution	0.1°C Accuracy : ±0.05%
Cu50 Sensor	-50 to 150°C
Resolution	0.1°C Accuracy : ±0.05%



Bench top Portable, Mains Operated
Auxiliary Power 230V Single Phase AC 50Hz Supply
Display 4-1/2 Digits 19999 Counts LCD

Sources	
DC Voltage	0 - 199.99m/1.9999/19.999V
Accuracy	±0.05% ± 2 Counts
DC Current	0 - 199.99u/1.9999m/19.999mA
Accuracy	±0.05% ± 2 Counts
Measures	
DC Voltage	0 - 199.99m/1.9999/19.999V
Accuracy	±0.05% ± 2 Counts
DC Current	0 - 199.99u/1.9999m/19.999mA
Accuracy	±0.05% ± 2 Counts
Output Adjustable	by 10 Turn POT for COARSE and FINE



Simulates thermo- resistance and resistance output
Measures thermo-resistance and resistance
°C and °F scales selectable
Suitable for field use
High Accuracy of 0.05%

Outputs provided	
Resistance Range	0 to 400 /4000 Ohms
Resolution	0.1 /1 Ohms Accuracy: ±0.05%
PT-10 385 Sensor	-200 to 850°C
Resolution	0.1°C Accuracy: ±0.05%
PT-100 385 Sensor	-200 to 850°C
Resolution	0.1°C Accuracy: ±0.05%
PT-200 385 Sensor	-200 to 630°C
Resolution	0.1°C Accuracy: ±0.05%
PT-500 385 Sensor	-200 to 630°C
Resolution	0.1°C Accuracy: ±0.05%
PT-1000 385 Sensor	-200 to 630°C
Resolution	0.1°C Accuracy: ±0.05%
Cu10 Sensor	-10 to 250°C
Resolution	0.1°C Accuracy: ±0.05%
Cu50 Sensor	-50 to 150°C
Resolution	0.1°C Accuracy: ±0.05%



Provides analogue output for eight types of thermocouples (R, S, K, E, J, T, B, N), seven types of thermo-resistance (Cu 10 /Cu 50 /PT-10 /PT-100 /PT-200 /PT-500 /PT-1000), DC Voltage and resistance

°C and °F scales selectable

Suitable for field use

High Accuracy of 0.05%

Outputs provided	
Voltage Range	-10mV to 110mV/-1000 to 1100mV
Resolution	0.01mV /0.1mV Accuracy : ±0.05%
Resistance Range	0 to 400/4000 Ohms
Resolution	0.1/1 Accuracy : ±0.05%

Measuring Range	
Resistance Range	0 to 500 /5000 \wedge
Resolution	0.1 /1 Ohms Accuracy : $\pm 0.05\%$
PT-10 385 Sensor	-200 to 850 $^{\circ}$ C
Resolution	0.1 $^{\circ}$ C Accuracy : $\pm 0.05\%$
PT-100 385 Sensor	-200 to 850 $^{\circ}$ C
Resolution	0.1 $^{\circ}$ C Accuracy : $\pm 0.05\%$
PT-200 385 Sensor	-200 to 630 $^{\circ}$ C
Resolution	0.1 $^{\circ}$ C Accuracy : $\pm 0.05\%$
PT-500 385 Sensor	-200 to 630 $^{\circ}$ C
Resolution	0.1 $^{\circ}$ C Accuracy : $\pm 0.05\%$
PT-1000 385 Sensor	-200 to 630 $^{\circ}$ C
Resolution	0.1 $^{\circ}$ C Accuracy : $\pm 0.05\%$
Cu10 Sensor	-10 to 250 $^{\circ}$ C
Resolution	0.1 $^{\circ}$ C Accuracy : $\pm 0.05\%$
Cu50 Sensor	-50 to 150 $^{\circ}$ C
Resolution	0.1 $^{\circ}$ C Accuracy : $\pm 0.05\%$

Provides output and measures DC Voltage and Loop Current	
Simulates the output of analogue transducer	
Can supply 24V DC Loop Power	
Can produce fast and slow auto inclined wave output for 4 - 20mA current	
Auto Power Off can be set by operator	
Can test switch mode and take operation in step from zero to full scale	
Displaying can be done both in mA and %	
Suitable for field use	
High Accuracy of 0.05%	
Display	5 Digits LCD

Outputs provided	
DC Current	0 - 22mA
Resolution	0.001mA, Accuracy : $\pm 0.05\%$
Analogue Transducer	0 to -22mA
Resolution	0.001mA, Accuracy : $\pm 0.05\%$
Loop Power	24V
Accuracy	$\pm 10\%$

Measuring Range	
Voltage	0 to 28V
Resolution	1mV, Accuracy : $\pm 0.05\%$
Current	-1.00 to 20mA
Resolution	0.001mA, Accuracy : $\pm 0.05\%$
Loop Current	0 to 24mA
Resolution	0.001mA, Accuracy : $\pm 0.05\%$

High Accuracy of 0.02% for source, 6 digits display for source.

Source: DC voltage, DC current, resistance, simulating transmitter, temperature(thermocouple/resistance temperature detector), frequency, pulse, contact.

Provides 25% step or 100% step DC current output manually or automatically.



TC source terminals and built-in lead connector of same temperature (RJ compensation with auto-reference joint point); the unit can be converted between $^{\circ}$ C and $^{\circ}$ F.

Outside place temperature detector with high accuracy of $\pm 2^{\circ}$ C.

Big LCD can display the TC/RTD value and voltage/resistance value, mA value and mA% value corresponding simultaneously.

Carefully designed the key layout, each pare of increase/decrease key correspond with the set value on the LCD.

It can be calibrated without open the cover of the calibrator.

White backlight with auto turn off

Sources	
DC Voltage	0 – 100m /1000m /10V
Resolution	1uV, Accuracy : $\pm 0.02\%$
DC Current	0 – 20mA
Resolution	1uA, Accuracy : $\pm 0.02\%$
Resistance	0 – 400 /4k /40k \wedge
Resolution	0.01 \wedge , Accuracy : $\pm 0.02\%$
R type Thermocouple	-0 to 1767 $^{\circ}$ C
Resolution	1 $^{\circ}$ C Accuracy : $\pm 1.2^{\circ}$ C
S type Thermocouple	0 to 1767 $^{\circ}$ C
Resolution	1 $^{\circ}$ C Accuracy : $\pm 1.2^{\circ}$ C
B type thermocouple	600 to 1820 $^{\circ}$ C
Resolution	1 $^{\circ}$ C Accuracy : $\pm 1.1^{\circ}$ C
E type thermocouple	-200 to 1000 $^{\circ}$ C
Resolution	0.1 $^{\circ}$ C Accuracy : $\pm 0.04^{\circ}$ C
K type thermocouple	-200 to 1372 $^{\circ}$ C
Resolution	0.1 $^{\circ}$ C Accuracy : $\pm 0.5^{\circ}$ C
J type thermocouple	-200 to 1200 $^{\circ}$ C
Resolution	0.1 $^{\circ}$ C Accuracy : $\pm 0.5^{\circ}$ C
T type thermocouple	-250 to 400 $^{\circ}$ C
Resolution	0.1 $^{\circ}$ C Accuracy : $\pm 0.6^{\circ}$ C
N type thermocouple	-200 to 1300 $^{\circ}$ C
Resolution	0.1 $^{\circ}$ C Accuracy : $\pm 0.08^{\circ}$ C
L type thermocouple	-200 to 900 $^{\circ}$ C
Resolution	0.1 $^{\circ}$ C Accuracy : $\pm 0.5^{\circ}$ C
U type thermocouple	-200 to 600 $^{\circ}$ C
Resolution	0.1 $^{\circ}$ C Accuracy : $\pm 0.5^{\circ}$ C
PT-100 type sensor	-200 to 800 $^{\circ}$ C
Resolution	0.1 $^{\circ}$ C Accuracy : $\pm 0.3^{\circ}$ C
PT-200 type sensor	-200 to 630 $^{\circ}$ C
Resolution	0.1 $^{\circ}$ C Accuracy : $\pm 0.8^{\circ}$ C
PT-500 type sensor	-200 to 630 $^{\circ}$ C
Resolution	0.1 $^{\circ}$ C Accuracy : $\pm 0.4^{\circ}$ C
PT-1000 type sensor	-200 to 630 $^{\circ}$ C
Resolution	0.1 $^{\circ}$ C Accuracy : $\pm 0.2^{\circ}$ C
Cu10 type sensor	-100 to 260 $^{\circ}$ C
Resolution	0.1 $^{\circ}$ C Accuracy: $\pm 1.8^{\circ}$ C
Cu50 type sensor	-50 to 150 $^{\circ}$ C
Resolution	0.1 $^{\circ}$ C Accuracy: $\pm 0.6^{\circ}$ C
Frequency	1Hz to 110Hz
Resolution	0.01Hz Accuracy: ± 2 counts
Pulse	1 to 100 /1k /10kHz
Resolution	1 Cycle Accuracy: ± 2 counts
Switch	1Hz to 100Hz /1kHz / 10kHz/100kHz
Resolution	0.01Hz Accuracy: ± 2 counts



Hand Held Battery Operated instrument for high accuracy measurements and sourcing

Measure	DC-Voltage, ohm, Tc, RTD, continuity;
Source	DC-Voltage, ohm, Tc, RTD;

2-wire,3-wire,4-wire connection method for ohm and RTD measurement.

Big LCD can display the TC/RTD measurement value and voltage/resistance corresponding simultaneously.

TC measurement/source terminals and built-in lead connector of same temperature (RJ compensation with auto-reference joint point)

Room temperature monitoring under any operation

Measurement wave-filter function

Measurement manual-holding function

6 Digits Backlit LCD Dual Display

Measures

DC Voltage	0 – 50mV/500mV
Resolution	1uV Accuracy : ±0.02%
Resistance	0 – 500/5k Ω
Resolution	0.01 Ω Accuracy : ±0.05%
R type Thermocouple	-0 to 1767°C
Resolution	1°C Accuracy : ±1.5°C
S type Thermocouple	0 to 1767°C
Resolution	1°C Accuracy : ±1.5°C
K type thermocouple	-100 to 1372°C
Resolution	0.1°C Accuracy : ±0.8°C
E type thermocouple	-200 to 850°C
Resolution	0.1°C Accuracy : ±0.9°C
J type thermocouple	-60 to 1120°C
Resolution	0.1°C Accuracy : ±0.7°C
T type thermocouple	-100 to 400°C
Resolution	0.1°C Accuracy : ±0.7°C
N type thermocouple	-200 to 1300°C
Resolution	0.1°C Accuracy : ±0.9°C
B type thermocouple	600 to 1820°C

Resolution	1°C Accuracy : ±1.4°C
L type thermocouple	-60 to 900°C
Resolution	0.1°C Accuracy : ±0.5°C
U type thermocouple	-100 to 600°C
Resolution	0.1°C Accuracy : ±0.5°C
PT-100 type sensor	-200 to 800°C
Resolution	0.1°C Accuracy : ±0.5°C
PT-1000 type sensor	-200 to 630°C
Resolution	0.1°C Accuracy : ±0.8°C
PT-200 type sensor	-200 to 630°C
Resolution	0.1°C Accuracy : ±0.8°C
PT-500 type sensor	-200 to 630°C
Resolution	0.1°C Accuracy : ±0.8°C
Cu10 type sensor	-100 to 260°C
Resolution	0.1°C Accuracy : ±1.8°C
Cu50 type sensor	-50 to 150°C
Resolution	0.1°C Accuracy : ±0.7°C
Continuity	0 – 500 Ω
Resolution	0.01 Ω

Sources

DC Voltage	0 – 100mV /1000mV
Resolution	1uV Accuracy : ±0.02%
Resistance	0 – 400 /4k Ω
Resolution	0.01 Ω Accuracy:±0.02%
R type Thermocouple	-0 to 1767°C
Resolution	1°C Accuracy : ±1.2°C
S type Thermocouple	0 to 1767°C
Resolution	1°C Accuracy : ±1.2°C
K type thermocouple	-200 to 1372°C
Resolution	0.1°C Accuracy : ±0.5°C
E type thermocouple	-200 to 1000°C
Resolution	0.1°C Accuracy : ±0.4°C
J type thermocouple	-200 to 1200°C
Resolution	0.1°C Accuracy : ±0.5°C
T type thermocouple	-250 to 400°C
Resolution	0.1°C Accuracy : ±0.6°C
N type thermocouple	-200 to 1300°C
Resolution	0.1°C Accuracy : ±0.7°C
B type thermocouple	600 to 1820°C

Resolution	1°C Accuracy : ±1.1°C
L type thermocouple	-200 to 900°C
Resolution	0.1°C Accuracy : ±0.5°C
U type thermocouple	-200 to 600°C
Resolution	0.1°C Accuracy : ±0.5°C
PT-100 type sensor	-200 to 800°C
Resolution	0.1°C Accuracy : ±0.3°C
PT-1000 type sensor	-200 to 630°C
Resolution	0.1°C Accuracy : ±0.2°C
PT-200 type sensor	-200 to 630°C
Resolution	0.1°C Accuracy: ±0.8°C
PT-500 type sensor	-200 to 630°C
Resolution	0.1°C Accuracy : ±0.4°C
Cu10 type sensor	-100 to 260°C
Resolution	0.1°C Accuracy : ±1.8°C
Cu50 type sensor	-50 to 150°C
Resolution	0.1°C Accuracy : ±0.6°C



Provides DC Voltage, DC current, simulation transmitter, Frequency & Pulse outputs

Measures DC Voltage, DC current, Frequency and Continuity

Measuring pressure, Calibrating pressure-voltage transmitter, Calibrating 2wire pressure transmitter, Calibrating pressure switch

Most Precise & useful tool in field calibration

Auto Power Off facility

Auto Power Off disable function

Manual Step Source and Auto-Step and Sweeping-Step Source

Measurement /source mA % Display

Measurement Manual-Holding Function

Measurement wave-filter function

Pressure Source Auto-Holding Function

Manual Step Source and Auto-Step and Sweeping-Step Source

High Accuracy of 0.05%

Display	6 Digits LCD
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Outputs

Voltage	0 to 10V
Resolution	10uV Accuracy : ±0.02%
Current	0 to 20mA
Resolution	1uA Accuracy : ±0.02%
Frequency	0 – 100/1k/10kHz
Loop Power	24 V Accuracy : ±10%
Pressure Output	using various Pressure Modules

Measuring Range

Voltage	0 to 50 V
Resolution	10uV Accuracy : ±0.02%
Current	0 to 50mA
Resolution	1uA Accuracy : ±0.02%
Frequency	0 – 500/5k/50kHz
Resolution	0.01Hz Accuracy : ±2Digits

Continuity Test



Measures and Sources various parameters

Display: 50000 Counts Dual, Backlit Display

Source and Measured values can be seen on the same screen together

Source and Measurement can be done at the same time

Confirms to IEC 61010

Data Hold Function to freeze the displayed data

Measures	
DC Voltage	0 - 50mV/500mV/5V/50V DC
Accuracy	±0.02%
DC Current	0 - 50mA
Accuracy	±0.02%
Resistance	0 - 500/5k \wedge
Accuracy	±0.02%
Frequency	0 - 500/5k/50kHz
Accuracy	±2digits
Temperature for PT-100 Sensor	-200°C to 800°C
Accuracy	±0.5°C
Temperature for PT-200 Sensor	-200°C to 630°C
Accuracy	±0.8°C
Temperature for PT-500 Sensor	-200°C to 630°C
Accuracy	±0.4°C
Temperature for PT-1000 Sensor	-200°C to 630°C
Accuracy	±0.3°C
Temperature for Cu-10 Sensor	-100°C to 260°C
Accuracy	±1.8°C
Temperature for Cu-50 Sensor	-50°C to 150°C
Accuracy	±0.7°C
Temperature for R type Sensor	-40°C to 1767°C
Accuracy	±1.5°C
Temperature for S type Sensor	0°C to 1767°C
Accuracy	±1.5°C
Temperature for B type Sensor	600°C to 1820°C
Accuracy	±1.4°C
Temperature for E type Sensor	-50°C to 1000°C
Accuracy	±0.9°C
Temperature for K type Sensor	-100°C to 1372°C
Accuracy	±0.8°C

Temperature for J type Sensor	-60°C to 1200°C
Accuracy	±0.7°C
Temperature for T type Sensor	-100°C to 400°C
Accuracy	±0.7°C
Temperature for N type Sensor	-200°C to 1300°C
Accuracy	±0.9°C
Continuity Test Facility	

Sources	
DC Voltage	0 - 100m/1/10V
Accuracy	±0.02%
DC Current	0 - 20mA
Accuracy	±0.02%
Analog Transducer	-20mA
Accuracy	±0.02%
Resistance	0 - 400/4k/40k \wedge
Accuracy	±0.02%
Frequency	0 - 100/1k/10k/100kHz
Accuracy	±2Counts
Pulse	0 - 100/1k/10kHz
Accuracy	±2 Counts
Loop Power	24V
Accuracy	±10%
Switch	0 - 100/1k/10k/100kHz
Accuracy	±2%
Temperature for Pt-100 Sensor	-200°C to 800°C
Accuracy	±0.3°C
Temperature for Pt-200 Sensor	-200°C to 630°C
Accuracy	±0.2°C
Temperature for Pt-500 Sensor	-200°C to 630°C
Accuracy	±0.2°C
Temperature for Pt-1000 Sensor	-200°C to 630°C
Accuracy	±0.22°C
Temperature for Cu-10 Sensor	-100°C to 260°C
Accuracy	±2°C
Temperature for Cu-50 Sensor	-50°C to 150°C
Accuracy	±0.5°C
Temperature for R type Sensor	-10°C to 1767°C
Accuracy	±1.2°C
Temperature for S type Sensor	0°C to 1767°C
Accuracy	±1.2°C

Temperature for B type Sensor	600°C to 1820°C
Accuracy	±1.1°C
Temperature for E type Sensor	-200°C to 1000°C
Accuracy	±0.4°C
Temperature for K type Sensor	-200°C to 1372°C
Accuracy	±0.5°C
Temperature for J type Sensor	-200°C to 1200°C
Accuracy	±0.5°C
Temperature for T type Sensor	-250°C to 400°C
Accuracy	±0.6°C
Temperature for N type Sensor	-200°C to 1300°C
Accuracy	±0.7°C
Pressure (Source + Measurement)	2.49kPa ~ 70MPa
(Depending on the pressure module used)	



Carbon Mono Oxide Meter

The Carbon Monoxide Meter detects the presence of carbon monoxide (CO) and measures concentrations between 1-1000 parts per million (PPM).

The Meter indicates the presence of carbon monoxide in two ways:

1. By a reading on the LCD in PPM.
2. By a beeper tone.
3. The beeper functions much like clicking of a Geigercounter: Above 200 PPM, the beeper sounds continuously with the concentration of CO. From 35 PPM to 200 PPM, the beeper sounds discontinuously with the Concentration of CO.

Measuring range	0 to 1000 PPM
Measurement Resolution	1PPM
Accuracy	±5% or ±10 PPM
Auto power off	
Warm up period	<2 seconds
Sensor type	Stabilized electrochemical Gas-specific (CO)
Max recording, Recall of stored data,	
Measuring Time Mode	



Detects the presence of carbon monoxide (CO) and measures concentrations between 1-1000 parts per million (PPM)

The Meter indicates the presence of carbon monoxide in two ways:

1. By a reading on the LCD in PPM.
2. By a beeper tone.
3. Above 200 PPM, the beeper sounds continuously with the concentration of CO.
4. From 35 PPM to 200 PPM, the beeper sounds discontinuously with the concentration of CO.

Max Hold and Data Hold Facility

Display	Backlit LCD
Range	0 to 1000PPM
Resolution	1PPM
Accuracy	±5% or ±10 PPM
Warm up period	<2 seconds
Auto Power Off	



Clamp Earth Resistance Tester can measure the ground fault which can not be measured by traditional method, can apply in the applications where traditional methods are unworkable.

The latest updated series Clamp Earth Resistance Testers have better performance: Boot up instantly, avoid boot up errors; More reliable battery cover, convenient to change battery; Wider range, larger memory; Optional RS232 interface, available to transfer data to PC and generate report files, easy to analyse or backup data.

Clamp Jaw	32 x 65 mm
Display	4 digit Backlit LCD
Resistance Range	0.01 to 1200 Ohms
Resolution	0.01 Ohms
Storage of Measured Data	99 Data
Setting of Resistance Alarm Critical Value	1 – 199 Ohms
Data Hold, Auto Power Off	



Clamp On Ground Resistance Tester

Widely applied in ground resistance measurement, loop resistance measurement in fields such as electric power, telecommunications, meteorology, oil field, architecture and industrial electrical equipment .

When measuring ground system with loop, there is no need to disconnect the ground wire without auxiliary electrode, which means safer and faster.

Clamp Earth Resistance Tester can measure the ground fault which can not be measured by traditional method, can apply in the applications where traditional methods are unworkable.

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Clamp Jaw	32mm
Display	4 digit Backlit LCD
Resistance Range	0.01 to 1200 Ohms
Resolution	0.01 Ohms
Storage of Measured Data	99 Data
Setting of Resistance Alarm Critical	Value 1 – 199 Ohms
Data Hold, Auto Power Off	



Widely applied in ground resistance measurement, loop resistance measurement in fields such as electric power, telecommunications, meteorology, oil field, architecture and industrial electrical equipment.

Can measure the leakage current of ground wire. Clamp Earth Resistance Tester measures the integrated value of ground resistance and resistance lead.

When measuring ground system with loop, there is no need to disconnect the ground wire without auxiliary electrode, which means safer and faster.

Clamp Earth Resistance Tester can measure the ground fault which can not be measured by traditional method, can apply in the applications where traditional methods are unworkable.

The latest updated series Clamp Earth Resistance Testers have better performance: Boot up instantly, avoid boot up errors; More reliable battery cover, convenient to change battery; Wider range, larger memory; Optional RS232 interface, available to transfer data to PC and generate report files, easy to analyse or backup data.

Clamp Jaw	32 x 65 mm
Display	4 digit Backlit LCD
Resistance Range	0.01 to 1200 Ohms
Resolution	0.01 Ohms
Current range	0.00-20.00A
Resolution	0.05mA
Storage of Measured Data	99 Data
Setting of Resistance Alarm Critical Value	1 – 199 Ohms
Setting Range of Current Alarm Critical Value	1-499mA
Data Hold, Auto Power Off	



Widely applied in ground resistance measurement, loop resistance measurement in fields such as electric power, telecommunications, meteorology, oil field, architecture and industrial electrical equipment .

When measuring ground system with loop, there is no need to disconnect the ground wire without auxiliary electrode, which means safer and faster.

Widely applied in ground resistance measurement, loop resistance measurement in fields such as electric power, telecommunications, meteorology, oil field, architecture and industrial electrical equipment.

Can measure the leakage current of ground wire. Clamp Earth Resistance Tester measures the integrated value of ground resistance and resistance lead.

When measuring ground system with loop, there is no need to disconnect the ground wire without auxiliary electrode, which means safer and faster.

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Clamp Jaw	32mm
Display	4 digit Backlit LCD
Resistance Range	0.01 to 1200 \wedge
Resolution	0.01 Ohms
Current range	0.00-20.00A
Resolution	0.05mA
Storage of Measured Data	99 Data
Setting of Resistance Alarm Critical Value	1 – 199 \wedge
Setting Range of Current Alarm Critical Value	1-499mA
Data Hold, Auto Power Off	

Coatmeter

Measures coating Thickness on both Ferrous and Non Ferrous materials with interface cable & S/W

The CTG-01 coating thickness gauges work either on the magnetic induction or on the eddy current principle, depending on the type of probe used.

You can select the type of probe via MENU system or it will work automatically.

Operating with MENU Easily.

Zero Calibrating Easily.

Low Battery , error indication.

USB Interface for PC analysis software.

Disable Auto Power Off function via MENU setting.

Measuring Ranges	
Ferrous	0 ~ 1250um 0 ~ 49.21mils
Non Ferrous	0 ~ 1250um 0 ~ 49.21mils
Guaranteed Tolerance	
Ferrous	$\pm 3\% \pm 1\mu\text{m}$ $\pm 3\% \pm 0.039\text{mils}$
Non Ferrous	$\pm 3\% \pm 1.5\mu\text{m}$ $\pm 3\% \pm 0.059\text{mils}$
Precision	
Ferrous	0.1um /0.001 mils
Non Ferrous	0.1um /0.001 mils
Minimum Curvature radius	
Ferrous : 1.5mm /Non-Ferrous : 3mm	
Diameter of Minimum Area	
Ferrous :7 mm /Non ferrous : 5 mm	
Basic critical thickness	
Ferrous : 0.5mm / Non Ferrous : 0.3mm	



Combustible Gas Leakage Detector

16" inch gooseneck detector makes it possible to reach "hard reached" areas

Highly sensitive and reliable

Easy to use: One hand operation with thumb controlled tick adjust knob. Tick accelerates when sensor tip approaches leak.

Use in contaminated environments: Eliminates background gas concentration with fully adjustable tick rate.

Pinpoints small leaks: Detects all combustible gas leaks even tiny leaks.

Pump Driven field calibrate-able Range: 10ppm

Sensor Type: Solid State

Alarm: Visible & Audible at 10% LEL for Methane. Can be calibrated for other concentrations or gases

Warm up - Approx 1min.

Response time < 2 secs

Battery Operated.

Gas Detected: Natural Gas, Propane, Butane, Methane, Acetone, Alcohol, Ammonia, Steam, Carbon Monoxide (not to quantify), Gasoline, Jet Fuel, Hydrogen Sulfide, Smoke, Industrial Solvents, Lacquer Thinner, Naphtha



Current Transducer

Input and outputs are Isolated

Type	DIN RAIL Mounting
AC Input	0-5A (Direct), 0-1A (Direct), CTR/5A, CTR/1A for Higher Currents
DC Output	Current(mA) : 4-20 Voltage (V) : 0-10 (Other Voltage and current outputs available on request)
Single Output is standard Dual Output available on request	
Auxiliary	110/230V AC $\pm 10\%$ (Any One)
DC Auxiliary Power Supply available on request	
Accuracy	Standard : $\pm 0.5\%$ of Span Optional On Request



Data Logger for Sound Level

This unit conforms to the IEC61672-1 CLASS2 for Sound Level Meter.

NORM (Normal) & PEAK mode

Data manage : STORE, REAL TIME

Over range indication

A & C Weighting

FAST & SLOW response

Software Calibration

Manual & Automatic Start Modes

Measurement Range	30dB to 130dB
Accuracy	$\pm 1.4\text{dB}$
Frequency Range	31.5Hz to 8kHz
Data Memory	12920 Data
Sampling Rate	Settable from 1 Sec. to 24 Hours.

With USB PC Interface Cable and Software



Data Logger for Temperature & Humidity

Designed with high accuracy sensor for temperature & humidity

Fast Response and Highly Stable

Used for Monitoring and collecting data of environmental temperature and humidity

Memory for 32700 values

LCD to show logging information easily;

Freely selectable measurement cycle from 1 sec. to 24h;

Download collected data through PC's USB;

Alarm display if user-defined maximum/minimum values are exceeded;

Analysis software used to view graph for logging data

Relative Humidity Range 0 to 100% RH

Accuracy $\pm 3.0\%$

Temperature -40 to 70°C

Accuracy $\pm 1^\circ\text{C}$

Sampling Rate Settable from 1 Sec. to 24 Hours.

With USB PC Interface Cable and Software



Data Logger for Voltage and Current

Single Channel Input

Measures and records virtual value of Voltage and Current of AC Signal

Stores 100,096 Data

AC Voltage Range 10V ~ 600V (40Hz ~ 1kHz)

Accuracy $\pm 2\%$

AC Current Range 10A ~ 200A (50 /60Hz)

Accuracy $\pm 2\%$

Wave Record Function Records the wave which exceeds the set Voltage /Current.

Real Time Display, Calibrated with software

Max /Min Reading Hold

Peak Hold Function

USB PC Interface with software



DC High Voltage Test Set

These are suitable for testing electrical insulation of condensers, plastic line tanks, electric cables, PIV of diodes and many other items and particularly motors, transformers, switch gears etc and particularly applicable for testing electrical equipment at site where portability is vital

Generally available in one unit and sets for higher output voltage are available in two units.

However, in case if required, sets in more than two units can also be manufactured.

Input: 230V, 50Hz AC (Sets with other voltage and frequency can also be made)



Output: Continuously variable from zero to max. rated output voltage

Sets with 3kV to 300kV output voltage can be made with current capacities of 100mA and 500mA

Max. capacity: Available in different standard current capacities of 3mA, 5mA, 10mA, 20mA, 30mA, 50mA, 100mA and 300mA can be made

AC and DC combined high voltage sets are also available

Complete with power chord, instruction manual and test certificate

DC Regulated Power Supply

Utilizes SMT Technology

Green LED Display

Voltage and Current displayed together

Multi-turn variable device to provide high precision voltage setting.

Auto-tracking on PARALLEL and SERIAL working condition

Presetting the voltage and current

DC Output Switch

Extended output terminals

Continuous working under full load condition

Constant Current and Constant Voltage Protection

Short Circuit protection

Input 220 /110V $\pm 10\%$ 50~60Hz

Variable Output Voltage 0 - 30V DC

Variable Output Current 0 - 2A



Utilizes SMT Technology

Green LED Display

Voltage and Current displayed together

Multi-turn variable device to provide high precision voltage setting.

Auto-tracking on PARALLEL and SERIAL working condition

Presetting the voltage and current

DC Output Switch

Extended output terminals

Continuous working under full load condition

Constant Current and Constant Voltage Protection

Short Circuit protection

Input 220 /110V $\pm 10\%$ 50~60Hz

Variable Output Voltage 0 - 30V DC

Variable Output Current 0 - 5A



Presetting the voltage and current	
DC Output Switch	
Extended output terminals	
Continuous working under full load condition	
Constant Current and Constant Voltage Protection	
Short Circuit protection	
Input	220 /110V ±10% 50~60Hz
Variable Output Voltage	0 - 60V DC
Variable Output Current	0 - 2A



Utilizes SMT Technology	
Red LED Display	
Voltage and Current displayed together	
Voltage and Current adjustment by COARSE and FINEControls	
Multi-turn variable device to provide high precision-voltage setting.	
Continuous working under full load condition	
Constant Current and Constant Voltage Protection	
Short Circuit protection	
Input	220 /110V ±10% 50~60Hz
Variable Output Voltage	0 - 30V DC
Variable Output Current	0 - 30A
Working hours	8 hours continuous working



Utilizes SMT Technology	
Attractive Digital Display showing Voltage and Current	
High Precision Voltage Regulation	
Progressive Current Regulation	
Dual Terminal System: Safety test style or expanded screw terminals.	
Overload and Short Circuit Protection	
Rugged Reinforced Metal Frame Construction.	
Output Polarity	Positive and Negative
Input	230V AC 50Hz
Variable Output Voltage	0 – 60V DC
Variable Output Current	0 – 5A DC



Utilizes SMT Technology	
Attractive Digital Display showing Voltage and Current	
High Precision Voltage Regulation	
Progressive Current Regulation	
Dual Terminal System: Safety test style or expanded screw terminals.	
Overload and Short Circuit Protection	
Rugged Reinforced Metal Frame Construction.	
Output Polarity	Positive and Negative
Input	230V AC 50Hz
Variable Output Voltage	0 – 60V DC
Variable Output Current	0 – 10A DC



Utilizes SMT Technology	
Attractive Digital Display showing Voltage and Current	
High Precision Voltage Regulation	
Progressive Current Regulation	
Dual Terminal System: Safety test style or expanded screw terminals.	
Overload and Short Circuit Protection	
Rugged Reinforced Metal Frame Construction.	
Output Polarity	Positive and Negative
Input	230V AC 50Hz
Variable Output Voltage	0 – 30V DC
Variable Output Current	0 – 10A DC



Utilizes SMT Technology	
Red LED Display	
Voltage and Current displayed together	
Voltage and Current adjustment by COARSE and FINE Controls	
Multi-turn variable device to provide high precision voltage setting.	
Continuous working under full load condition	
Constant Current and Constant Voltage Protection	
Short Circuit protection	
Input	220 /110V ±10% 50~60Hz
Variable Output Voltage	0 - 60V DC
Variable Output Current	0 - 20A
Working hours	8 hours continuous working



Utilizes SMT Technology	
Attractive Digital Display showing Voltage and Current	
High Precision Voltage Regulation	
Progressive Current Regulation	
Dual Terminal System: Safety test style or expanded screw terminals.	
Overload and Short Circuit Protection	
Rugged Reinforced Metal Frame Construction.	
Output Polarity	Positive and Negative
Input	230V AC 50Hz
Variable Output Voltage	0 – 30V DC
Variable Output Current	0 – 20A DC



Utilizes SMT Technology

Red LED Display

Voltage and Current displayed together

Voltage and Current adjustment by COARSE and FINE Controls

Multi-turn variable device to provide high precision voltage setting.

Continuous working under full load condition

Constant Current and Constant Voltage Protection

Short Circuit protection

Input	220 / 110V ±10% 50~60Hz
Variable Output Voltage	0 - 60V DC
Variable Output Current	0 - 30A
Working hours	8 hours continuous working



Dual Channel Variable output

Single Channel Fixed output

Dual Red LED Display

Voltage and Current displayed together

Multi-turn variable device to provide high precision voltage setting.

Continuous working under full load condition

Constant Current and Constant Voltage Protection

Short Circuit protection

Input	220V ±10% 50~60Hz
Variable Output Voltage	2 x 0 - 30V DC
Variable Output Current	2 x 0 - 5A
Fixed Output	5V /3A



Dual Channel output

Dual Red LED Display

Voltage and Current displayed together

Multi-turn variable device to provide high precision voltage setting.

Continuous working under full load condition

Constant Current and Constant Voltage Protection

Short Circuit protection

Input	220V ±10% 50~60Hz
Variable Output Voltage	2 x 0 - 30V DC
Variable Output Current	2 x 0 - 2A



DDS Function Generator

Bandwidth : 5MHz

Applies DDS Technology, provides dual channel output, phase adjustments.

125MSa/Sec sampling rate, 14 bit vertical resolution, 16kpts wavelength

5 types of standard waveforms, built-in 48 types of arbitrary waveforms

Abundant modulation functions, sweep-frequency output, burst output

Built-in high precision frequency counter, frequency up to 200MHz

Standard interfaces: USB Device, USB Host

USB-GPIB adapter optional

Seamlessly interconnect with Digital Storage Oscilloscope and support remote command control

Maximum Output Frequency : 5MHz

Optional USB-GPIB Interface

Dual Channel output

Dual Red LED Display

Voltage and Current displayed together

Multi-turn variable device to provide high precision voltage setting.

Continuous working under full load condition

Constant Current and Constant Voltage Protection

Short Circuit protection

Input	220V ±10% 50~60Hz
Variable Output Voltage	2 x 0 - 30V DC
Variable Output Current	2 x 0 - 5A



Bandwidth : 10MHz

Applies DDS Technology, provides dual channel output, phase adjustments.

125MSa/Sec sampling rate, 14 bit vertical resolution, 16kpts wavelength

5 types of standard waveforms, built-in 48 types of arbitrary waveforms

Abundant modulation functions, sweep-frequency output, burst output

Built-in high precision frequency counter, frequency up to 200MHz

Standard interfaces: USB Device, USB Host

USB-GPIB adapter optional

Seamlessly interconnect with Digital Storage Oscilloscope and support remote command control

Maximum Output Frequency : 10MHz

Optional USB-GPIB Interface

Dual Channel Variable output

Single Channel Fixed output

Dual Red LED Display

Voltage and Current displayed together

Multi-turn variable device to provide high precision voltage setting.

Continuous working under full load condition

Constant Current and Constant Voltage Protection

Short Circuit protection

Input	220V ±10% 50~60Hz
Variable Output Voltage	2 x 0 - 30V DC
Variable Output Current	2 x 0 - 2A
Fixed Output	5V /3A



Bandwidth : 25MHz
 Applies DDS Technology, provides dual channel output, phase adjustments.
 125MSa/Sec sampling rate, 14 bit vertical resolution, 16kpts wavelength
 5 types of standard waveforms, built-in 48 types of arbitrary waveforms
 Abundant modulation functions, sweep-frequency output, burst output
 Built-in high precision frequency counter, frequency up to 200MHz
 Standard interfaces: USB Device, USB Host
 USB-GPIB adapter optional
 Seamlessly interconnect with Digital Storage Oscilloscope and support remote command control
 Maximum Output Frequency : 25MHz
 Optional USB-GPIB Interface



Bandwidth : 50MHz
 Applies DDS Technology, provides dual channel output, phase adjustments.
 125MSa/Sec sampling rate, 14 bit vertical resolution, 16kpts wavelength
 5 types of standard waveforms, built-in 48 types of arbitrary waveforms
 Abundant modulation functions, sweep-frequency output, burst output
 Built-in high precision frequency counter, frequency up to 200MHz
 Standard interfaces: USB Device, USB Host
 USB-GPIB adapter optional
 Seamlessly interconnect with Digital Storage Oscilloscope and support remote command control
 Maximum Output Frequency : 50MHz
 Optional USB-GPIB Interface



Digital AC/DC Clamp Meter

Data Hold Facility
 Built-in Non Contact Voltage Detector
 Fully Protected up to 600V DC/AC RMS in all ranges including Frequency, Resistance, Capacitance and Continuity test
 Low Battery and Over Range Indication
 Display 3-3/4 Digits 3999 Counts Backlit LCD
 Confirms to CAT III 600V
 Clamp Jaw Dia 30mm
 DC Voltage 0 - 400mV/4/40/400/600V.
 Accuracy ±0.8%

AC Voltage	0 - 400mV/4/40/400/600V.
Accuracy	±1.5%
DC Current	0 - 40/400A.
Accuracy	±2.5%
AC Current	0 - 40/400A.
Accuracy	±2.5%
Resistance	0 -400/4k/40k/400k/4M/40M \wedge
Accuracy	±1.0%
Temperature	-20°C to 760°C / -4°F to 1400°F
Accuracy	±3.0%
Frequency	10 ~ 10KHz
Accuracy	±1.5%
Capacitance	0 - 40n/400n/4u/40u/100uF
Accuracy	±3.0%
Diode Test and Continuity Test	
Confirms to CE, IEC 61010, CAT-III 600V	



Data Hold Facility	
Built-in Non Contact Voltage Detector	
Low Battery and Over Range Indication	
Display	3-3/4 Digits 3999 Counts Backlit LCD
Confirms to CAT III 600V	
Clamp Jaw Dia	30mm
DC Voltage	0 - 400mV/4/40/400/600V.
Accuracy	±0.8%
AC Voltage	0 - 400mV/4/40/400/600V.
Accuracy	±1.5%
DC Current	0 - 40/400A.
Accuracy	±2.5%
AC Current	0 - 40/400A.
Accuracy	±2.5%
Resistance	0 - 400/4k/40k/400k/4M/40M \wedge
Accuracy	±1.0%
Temperature	-20°C to 760°C / -4°F to 1400°F
Accuracy	±3.0%
Frequency	10 ~ 10KHz
Accuracy	±1.5%
Capacitance	0 - 40n/400n/4u/40u/100uF
Accuracy	±3.0%
Diode Test and Continuity Test	
Confirms to CE, IEC 61010, CAT-III 600V	



Auto-ranging AC/DC Clamp Meter	
Display: 3-3/4 Digits 3999 Counts	
Clamp Jaw Dia: 30mm / 41mm x 30mm (Bus Bar)	
Low Battery and Over range indication	
Data Hold function	
DC Voltage	0 - 400mV/4/40/400/1000V
Accuracy	±1%
AC Voltage	0 - 4/40/400/750V
Accuracy	±1.5%
DC Current	0 - 40/400/1000A
Accuracy	±2.5%
AC Current	0 - 40/400/1000A
Accuracy	±3.0%



Resistance	0 – 400/4k/40k/400k/4M/40M \wedge
Accuracy	$\pm 2.5\%$
Frequency	Upto 10MHz
Accuracy	$\pm 0.5\%$
Duty Cycle	0.1 to 99.9%
Accuracy:	$\pm 1\%$

Diode and Continuity Test Facility

Clamp Jaw Dia: 51mm	
Display	3-3/4 Digits 3999 Counts LCD
Low Battery and Over-range indication	
Data Hold Function	
DC Voltage	0 – 1000V
Accuracy	$\pm 0.8\%$
AC Voltage	0 – 750V
Accuracy	$\pm 1.5\%$
DC Current	0 – 400/1000A
Accuracy	$\pm 2.5\%$
AC Current	0 – 400/1000A
Accuracy	$\pm 2.5\%$
Resistance	0 – 400/4k/40k/400k/4M \wedge
Accuracy	$\pm 1.2\%$
Frequency	0 – 10/100/1k/10k/100k/1MHz
Accuracy	$\pm 0.1\%$
Duty Cycle	10 to 90%
Accuracy	$\pm 0.5\%$

Diode and Continuity Test Facility

Auto-ranging AC/DC Clamp meter	
Auto Power Off	
Peak Hold and Data Hold facility	
Display	3-3/4 Digits 3999 Counts Backlit LCD with analogue bargraph
Frequency Measurement while measuring current through clamp	
Relative Measurement facility	
DC Voltage	0 - 400m/4/40/400/1000V.
Accuracy	$\pm 1.0\%$
AC Voltage	0 - 400m/4/40/400/1000V.
Accuracy	$\pm 1.2\%$
DC Current	0 - 400/1000A.
Accuracy	$\pm 2.0\%$
AC Current	0 - 400/1000A.
Accuracy	$\pm 2.0\%$
Resistance	0 - 400/4k/40k/400k/4M/40M \wedge
Accuracy	$\pm 1.0\%$
Temperature	-20°C to 1000°C / -4°F to 1832°F
Accuracy	$\pm 3.0\%$
Frequency	10 - 100KHz
Accuracy	$\pm 1.0\%$
Capacitance	0 - 4n/40n/400n/4u/40u/400uF
Accuracy	$\pm 3.0\%$
Duty Cycle	0.5 - 99.9%
Accuracy	$\pm 1.2\%$

Diode Test and Continuity Test
Confirms to CE, IEC 61010, CAT-III 1000V, CAT-IV 600V



Data Hold Facility	
Double molded body with rubber coating	
Clamp Jaw Size	30mm
Display	3-3/4 Digital 3999 Counts Backlit LCD
DC Voltage	0 - 400m/4/40/400/600V.
Accuracy	$\pm 0.8\%$
AC Voltage	0 - 400m/4/40/400/600V.
Accuracy	$\pm 1.0\%$
DC Current	0 - 40/400/1000A.
Accuracy	$\pm 2.5\%$
AC Current	0 - 40/400/1000A.
Accuracy	$\pm 3.0\%$
Resistance	0 - 400/4k/40k/400k/4M/40M \wedge
Accuracy	$\pm 1.0\%$
Temperature	-20°C to 1000°C / -4°F to 1832°F
Accuracy	$\pm 3.0\%$
Frequency	0 - 5/50/500/5k/50k/100KHz
Accuracy	$\pm 1.2\%$
Capacitance	0 - 40n/400n/4u/40u/100uF
Accuracy	$\pm 3.0\%$
Duty Cycle	0.5 - 99.9%
Accuracy	$\pm 1.2\%$

Diode Test and Continuity Test
Confirms to CE, IEC 61010, CAT-III 600V



T-RMS Clamp Meter	
Auto Power Off	
Data Hold Facility	
Clamp Jaw Size	30mm
Display	3-3/4 Digital 3999 Counts Backlit LCD
DC Voltage	0 - 400m/4/40/400/600V.
Accuracy	$\pm 0.8\%$
AC Voltage	0 - 400m/4/40/400/600V T-RMS.
Accuracy	$\pm 1.0\%$
AC Current	0 - 40/400/1000A T-RMS.
Accuracy	$\pm 2.8\%$
DC Current	0 - 40/400/1000A
Accuracy	$\pm 2.8\%$
Resistance	0 - 400/4k/40k/400k/4M/40M \wedge
Accuracy	$\pm 1.0\%$
Temperature	-40°C to 1000°C / -40°F to 1832°F
Accuracy	$\pm 2.5\%$
Frequency	0 - 4KHz
Accuracy	$\pm 1.5\%$
Capacitance	0 - 4n/40n/400n/4u/40u/400u/4m/40mF
Accuracy	$\pm 3.0\%$

Diode Test and Continuity Test
Confirms to CE, IEC 61010, CAT-III 600V



Auto-ranging DC/AC T-RMS Clamp meter	
Auto Power Off	
Peak Hold and Data Hold facility	
Display	3-3/4 Digits 3999 Counts Backlit LCD with analogue bargraph
Frequency Measurement while measuring current through clamp	
Relative Measurement facility	
DC Voltage	0 - 400m/4/40/400/1000V.
Accuracy	±1.0%
AC Voltage	0 - 400m/4/40/400/1000V T-RMS
Accuracy	±1.2%
DC Current	0 - 400/1200A.
Accuracy	±2.0%
AC Current	0 - 400/1200A. T-RMS
Accuracy	±2.0%
Resistance	0 - 400/4k/40k/400k/4M/40M \wedge
Accuracy	±1.0%
Temperature	-20°C to 1000°C /-4°F to 1832°F
Accuracy	±3.0%
Frequency	10 - 100KHz
Accuracy	±1.0%
Capacitance	0 - 4n/40n/400n/4u/40u/400uF
Accuracy	±3.0%
Duty Cycle	0.5 - 99.9%
Accuracy	±1.2%
Diode Test and Continuity Test	
Confirms to CE, IEC 61010, CAT-III 1000V, CAT-IV 600V	
600V DC/AC Protection on all ranges	



Auto-ranging DC/AC T-RMS Clamp meter	
Auto Power Off	
Peak Hold and Data Hold facility	
Display	3-3/4 Digits 3999 Counts Backlit LCD with analogue bargraph
Frequency Measurement while measuring current through clamp	
Relative Measurement facility	
DC Voltage	0 - 400m/4/40/400/1000V.
Accuracy	±1.0%
AC Voltage	0 - 400m/4/40/400/1000V T-RMS
Accuracy	±1.2%
DC Current	0 - 400/2000A.
Accuracy	±2.0%
AC Current	0 - 400/2000A T-RMS
Accuracy	±2.0%
Resistance	0 - 400/4k/40k/400k/4M/40M \wedge
Accuracy	±1.0%
Temperature	-20°C to 1000°C/-4°F to 1832°F
Accuracy	±3.0%
Frequency	10 - 100KHz
Accuracy	±1.0%
Capacitance	0 - 4n/40n/400n/4u/40u/400uF
Accuracy	±3.0%
Duty Cycle	0.5 - 99.9%
Accuracy	±1.2%
Diode Test and Continuity Test	
Confirms to CE, IEC 61010, CAT-III 1000V, CAT-IV 600V	
600V DC/AC Protection on all ranges	



Auto-ranging AC/DC Clamp meter	
Auto Power Off	
Peak Hold and Data Hold facility	
Display	3-3/4 Digits 3999 Counts Backlit LCD with analogue bargraph
Frequency Measurement while measuring current through clamp	
Relative Measurement facility	
DC Voltage	0 - 400m/4/40/400/1000V.
Accuracy	±1.0%
AC Voltage	0 - 400m/4/40/400/1000V.
Accuracy	±1.2%
DC Current	0 - 400/2000A.
Accuracy	±2.0%
AC Current	0 - 400/2000A.
Accuracy	±2.0%
Resistance	0 - 400/4k/40k/400k/4M/40M \wedge
Accuracy	±1.0%
Temperature	-20°C to 1000°C/-4°F to 1832°F
Accuracy	±3.0%
Frequency	10 - 100KHz
Accuracy	±1.0%
Capacitance	0 - 4n/40n/400n/4u/40u/400uF
Accuracy	±3.0%
Duty Cycle	0.5 - 99.9%
Accuracy	±1.2%
Diode Test and Continuity Test	
Confirms to CE, IEC 61010, CAT-III 1000V, CAT-IV 600V	
600V DC/AC Protection on all ranges	



For the First Time in INDIA, 40,000 Counts, 4-3/4 Digits LCD Dual Display with Analogue Bargraph	
Provides higher Resolution and Accuracy	
Fully protected DC/AC T-RMS Clamp Meter	
500V AC/DC Protection on all ranges	
1000V AC/DC Protection in Voltage range.	
Clamp Jaw Dia	52 mm
Low Battery and Over-range indication	
Data Hold & Peak Hold	
In-Rush Current Measurement	
Max / Min Record Facility	
Double Moulded Injection Body	
Auto Power Off	
In-Built Non Contact Voltage Detection	
DC Voltage	0 - 400m/4/40/400/1000V.
Accuracy	±0.1%
AC Voltage	0 - 400m/4/40/400/750V T-RMS.
Accuracy	±0.8%
AC Current	0 - 400/1500A T-RMS.
Accuracy	±2.5%
DC Current	0 - 400/1500A
Accuracy	±3%
Resistance	0 - 400/4k/40k/400k/4M/40M \wedge
Accuracy	±0.5%
Temperature	-100°C to 1000°C /-148°F to 1832°F



Accuracy	±1.0%
Frequency	0 – 40/400/4k/40k/4M/40MHz
Accuracy	±0.3%
Duty Cycle	10.0 to 95.0%
Accuracy	±0.5%
Capacitance	0 - 400n/4000n/40u/400u/4m/40mF
Accuracy	±3.0%
Diode Test and Continuity Test	
Confirms to CAT-IV 600V and CAT-III 1000V	

Digital Ammeter

Size - 96 x 96 mm. sq. 'or' 96 x 48 mm. sq. 'or' 72 x 72 mm. sq.

Display: 3-1/2 Digits 'or' 4-1/2 Digits LED Display

Ammeters for measuring AC and DC currents are available

Range: Any Single Range up to 2000A for 3-1/2 DigitMeters and any single range up to 20,000A for 4-1/2Digits

For currents above 20A either a CT (for AC Currentmeasurements) or Shunt (for DC Current measurements) is to be used

Auxiliary Power Supply : 230V AC 50Hz / 110V AC 50Hz/ DC Auxiliary inputs also available (any one)

At the time of placing the order, please inform thecurrent range, Shunt or CT value, auxiliary power supply,size, 3-1/2 digits /4-1/2 digits display needs to bementioned.



Digital Ammeter Controller

Metravi CE-0102AC2SP

Size - 96 x 96 mm. sq.

Display: 3-1/2 Digits

Would measure AC Current.

Range: Any Single Range up to 2000A for direct inputto the meter via a CT 'or' KA rating through a CT input can bemade available.

Can set single set point to activate a relay.

Potential free 1 NO+ 1NC Contact

Auxiliary Power Supply : 230V AC 50Hz / 110V AC 50Hz/ DC Auxiliary inputs also available (any one)



Digital Anemometer

Hand Held Pocket type Anemometer

Measures Air Speed, Air Flow (CMM/CFM)

Low Battery and Over range indication

Data Hold, Max /Min record function

4 Digits Backlit LCD Display with analogue bargraph

Range of Wind Speed:

0.8 to 40m/s ; accuracy ± 2%

0.8 to 77.70 knots ; accuracy ± 2%

1.4 to 144.0 km/hr ; accuracy ± 2%

1.3-131.20 ft/s ; accuracy ± 2%

0.90-90.00 mil/h ; accuracy ± 2%

78-7874 ft/min ; accuracy ± 2%

Range of Air Flow : 0 – 99990 CFM /CMM /9999 CMS



Hand Held Pocket type Thermo-Anemometer with Dew Point, Humidity measurements

USB PC Interface

Measures Air Speed, Air Flow (CMM/CFM) along with its temperature. Dew point, Wet Bulb, Relative Humidity

Low Battery and Over range indication

Data Hold, Max /Min record function

4 Digits Backlit LCD Display with analogue bargraph

Range of Wind Speed:

0.8 to 40m/s ; accuracy ± 2%

0.8 to 77.70 ; accuracy ± 2%

1.4 to 144.0 km/hr ; accuracy ± 2%

1.3-131.20 ft/s ; accuracy ± 2%

0.90-90.00 mil/h ; accuracy ± 2%

78-7874 ft/min ; accuracy ± 2%

Range of Air Flow : 0 – 99990 CFM /CMM /9999 CMS

Ambient Temperature, Dew Point and Wet Bulb

Temperature : -10 to 60°C / 14.0° to 140.0°F

Relative Humidity : 20 to 80%RH



Metravi AVM-04

Displays Air Velocity and Temperature at the same time

Highly Sensitive and accurate

Temperature sensor built-in with anemometer fan

Low Power Consumption

Data /Max. /Min. Hold facility

Auto Power Off

Low Friction Ball bearing vane wheel for high accuracy

Extra Large Dual LCD Display

Range of Wind Speed :

0.3 to 45m/s accuracy ± 3%

0.6 to 88.0 knots accuracy ± 3%

1.0 to 140.0 km/hr accuracy ± 3%

0 - 8800ft/min accuracy ± 3%

Range of Temperature : 0° to 60.0°C / 32.0° to 140.0°F

Accuracy : ± 1.5°C / ± 2°F



Displays Air Velocity and Temperature together

Has facility to measure wind flow also

Highly Sensitive and accurate

Temperature sensor built-in with anemometer fan

Low Power Consumption

Data Hold and Max /Min record facility

Auto Power Off

Low Friction Ball bearing vane wheel for high accuracy

20 point averaging is done for airflow measurement

Extra Large Dual LCD Display

Range of Wind Speed :

0.4 to 30m/s; accuracy $\pm 3\%$

0.8 to 58.0 knots; accuracy $\pm 3\%$

1.4 to 108.0 km/hr; accuracy $\pm 3\%$

80 - 5900ft/min; accuracy $\pm 3\%$

0.9 to 67 MPH accuracy $\pm 3\%$

Range of Air Flow:

0 to 9999 CFM; accuracy $\pm 3\%$

0 to 9999 CMM; accuracy $\pm 3\%$

Range of Temperature :

-10° to 60.0°C /14.0° to 140.0°F

Accuracy : $\pm 1.5^{\circ}\text{C} / \pm 2^{\circ}\text{F}$



20 Point average for air flow

Super Large Backlit LCD Display

3% velocity accuracy via low friction 2.83" Dia ballbearing vane wheel on 3.9 ft (120cm) cable

Range of Wind Speed:

0.4 to 30m/s; accuracy $\pm 3\%$

0.8 to 58.0 knots; accuracy $\pm 3\%$

1.4 to 108.0 km/hr; accuracy $\pm 3\%$

80 - 5900ft/min; accuracy $\pm 3\%$

0.9 to 67 MPH; accuracy $\pm 3\%$

Range of Air Flow:

0 to 9999 CFM; accuracy $\pm 3\%$

0 to 9999 CMM; accuracy $\pm 3\%$

Range of Temperature:

-10° to 60.0°C/14.0° to 140.0°F

Accuracy : $\pm 1.5^{\circ}\text{C} / \pm 2^{\circ}\text{F}$

Infra Red Temperature : -50 to 260°C

Distance to sighting ratio : 8:1

Metallic Fan Blade

Highly sensitive and accurate instrument with easy-to-use design

In-built type K sensor for temperature measurement

Low Power Consumption with Low battery indication

Data Hold and Max./Min. Hold facility

Selectable °C /°F Scales

Auto Power Off

Auto Power Off Disability Function

Range of Wind Speed : 0.6 to 30m/s; accuracy of $\pm 3\%$

1.2 to 58.0 knots; accuracy $\pm 3\%$

2.2 to 108.0 km/hr; accuracy $\pm 3\%$

1.4 to 67.0 MPH; accuracy $\pm 3\%$

119 to 5900 ft/min; accuracy $\pm 3\%$

Range of Temperature : -10° to 60.0°C /14.0° to 140.0°F

Accuracy : $\pm 0.8^{\circ}\text{C} / \pm 1.5^{\circ}\text{F}$

Confirms to CE



Displays Air Velocity and Temperature at the same time

With In-Built Manometer to measure differential pressure

Has facility to measure wind flow also

Temperature sensor built-in with anemometer fan

Low Power Consumption

Data Hold and Max /Min record facility

Low Friction Ball bearing vane wheel for high accuracy

20 point averaging is done for airflow measurement

Extra Large Dual Backlit LCD Display

Range of Wind Speed:

0.4 to 30m/s; accuracy $\pm 3\%$

0.8 to 58.0 knots; accuracy $\pm 3\%$

1.4 to 108.0 km/hr; accuracy $\pm 3\%$

80 - 5900ft/min; accuracy $\pm 3\%$

0.9 to 67 MPH; accuracy $\pm 3\%$

Range of Air Flow:

0 to 9999 CFM; accuracy $\pm 3\%$

0 to 9999 CMM; accuracy $\pm 3\%$

Range of Temperature:

-10° to 60.0°C /14.0° to 140.0°F

Accuracy : $\pm 1.5^{\circ}\text{C} / \pm 2^{\circ}\text{F}$

Unit of measurement of pressure: psi, inH₂O, bar, mbar, kPa, inHg, mmHg, ozin, ftH₂O, cmH₂O, kgcm

Max /Min /Avg value recording

Range in Manometer mode : inH₂O : 0 - 138.3
psi : 0 - 5
mbar : 0 - 344.7; kPa : 0 - 34.47
inHg : 0 - 1.018; mmHg : 0 - 258.5
ozin : 0 - 80; ftH₂O : 0 - 11.53
cmH₂O : 0 - 351.5; kgcm : 0 - 0.351
bar : 0 - 0.344; Accuracy : $\pm 0.3\%$ FSO
Repeatability : $\pm 0.2\%$ (Max.+/- 0.5% FSO)
Linearity/Hysteresis : $\pm 0.29\%$ FSO

Complete with carrying case, instruction manual and battery.



Digital Anemometer with Air flow and Infra red temperature measurement facility

Simultaneous display of Air temperature and velocity

CFM /CMM Thermo-Anemometer + Infra Red Thermometer

Max /Min /Avg value measurement with time stamp

Low battery indication and Auto Power Off

Simultaneous display of air flow or air velocity with temperature

Easy to set Area dimensions



Measures Low velocity of Air	
Display: Dual LCD Display	
Measures Air velocity and Temperature	
Air Velocity is measured using Glass Bead Thermistor	
Temperature is measured using Precision Thermistor	
Data Hold to freeze displayed data	
MAX /MIN /AVG Recording facility	
USB PC Interface Facility	
Auto Power Off	
in m/s	0.1 to 25.0 m/s
in km/h	0.3 to 90.0km/h
in mph	0.2 to 55.8 mile/h
in knots	0.2 to 48.5 knots
in ft.min	20 to 4925 ft/min
Accuracy	± 5%
Temperature Range	0°C to 50°C / 32°F to 122°F
Accuracy	± 1%



Auto and Manual Ranging	
Display	3-1/2 Digits 1999 Counts Backlit LCD
Low Battery and Overload Indication	
Data Hold and Max Hold Function	
In Built Flash Light to access Dark Areas	
Clamp Jaw Dia	30mm
DC Voltage	0 – 200m/2/20/200/600V
Accuracy	±0.8%
AC Voltage	0 – 2/20/200/600V
Accuracy	±1.0%
AC Current	0 – 2/20/200/600A
Accuracy	±1.5%
Resistance	0 – 200/2k/20k/200k/2M/20M^
Accuracy	±1.2%
Diode and Continuity Test	
Confirms to CAT-III 600V	



Digital Capacitance Meter

Easy to read LCD Display 3-1/2 Digits 1999 Counts	
High measuring Accuracy	
Measurements possible even under strong magnetic field	
LSI Circuit Provides high reliability and durability	
Light Weight and compact construction	
Range	0 – 200p/2n/20n/200n/2u/20u/200u/2000u/20000uF
Accuracy	± 0.5%



Auto and Manual Ranging	
Display	3-1/2 Digits 1999 Counts Backlit LCD
Low Battery and Overload Indication	
Data Hold	
Non Contact type Voltage Detector	
Clamp Jaw Dia	30mm
DC Voltage	0 – 200m/2/20/200/600V
Accuracy	±0.8%
AC Voltage	0 – 200m/2/20/200/600V
Accuracy	±1.5%
AC Current	0 – 2/20/200/400A
Accuracy	±2.5%
Resistance	0 – 200/2k/20k/200k/2M/20M^
Accuracy	±1.0%
Diode and Continuity Test	
Confirms to CAT-III 600V	



Digital Clamp Meter

Single Switch Operation	
Auto Power Off	
Data Hold	
Auto-ranging	
Clamp Jaw Size	33 mm.
Display	3-3/4 Digits 3999 Counts LCD
DC Voltage	0 - 400m/4/40/400/600V.
Accuracy	±0.8%
AC Voltage	0 - 400m/4/40/400/600V.
Accuracy	±1.5%
AC Current	0 - 40 /400A.
Accuracy	±2.5%
Resistance	0 - 400/4k/40k/400k/4M/40M^
Accuracy	±1.0%
Temperature	-20 to 400°C
Accuracy	±2.0%
Capacitance	0 - 40n/400n/4u/40u/100uF
Accuracy	±2.0%
Frequency	10Hz ~ 5MHz
Accuracy	±0.2%
Diode test and Continuity Test	



Auto and Manual Ranging	
Display	3-3/4 Digits 3999 Counts Backlit LCD
Low Battery and Overload Indication	
Data Hold, Relative Measurement	
Non Contact type Voltage Detector	
600V AC/DC Protection on all ranges	
Clamp Jaw Dia	30mm
DC Voltage	0 – 400m/4/40/400/600V
Accuracy	±0.8%
AC Voltage	0 – 4/40/400/600V
Accuracy	±1.8%
AC Current	0 – 40/400A
Accuracy	±2.5%
Resistance	0 – 400/4k/40k/400k/4M/40M^
Accuracy	±1.0%
Capacitance	0 – 40n/400n/4u/40u/100uF
Accuracy	±3%
Frequency	10 – 10kHz



Accuracy	±1.5%
Temperature	-20 - 760°C / -40°F to 1400°F
Accuracy	±3%
Diode and Continuity Test	
Confirms to CAT-III 600V	

Peak Hold Facility	
Low Battery and Over Load Indication	
Display	3-1/2 Digits 1999 Counts LCD
Clamp Jaw Dia	40mm
DC Voltage	0 - 200m/2/20/200/1000V.
Accuracy	±0.8%
AC Voltage	0 - 200/750V.
Accuracy	±1.5%
AC Current	0 - 20/200/100A.
Accuracy	±3%
Resistance	0 - 200/2k/20k/200k/2M/20M \wedge
Accuracy	±1.5%
Diode Test and Continuity Test	
Hard Carrying Case	



Auto Power Off	
Data Hold and Maximum Hold Facility	
Double molded body with rubber coating	
Clamp Jaw Size	30mm
Display	3-1/2 Digital 1999 Counts Backlit LCD
DC Voltage	0 - 200m/2/20/200/600V.
Accuracy	±0.8%
AC Voltage	0 - 200m/2/20/200/600V.
Accuracy	±1.5%
AC Current	0 - 20/200/100A.
Accuracy	±2.5%
Resistance	0 - 200/2k/20k/200k/2M/20M \wedge
Accuracy	±1.0%
Diode Test and Continuity Test	
Confirms to CE, IEC 61010, CAT-III 600V	
Overload Protection : upto 500V DC / AC RMS in all ranges	



Auto Power Off	
Data Hold and Relative Measurement	
Auto-ranging	
Clamp Jaw Size	55mm
Display	3-3/4 Digits 3999 Counts Backlit LCD
DC Voltage	0 - 4/40/400/1000V.
Accuracy	±0.5%
AC Voltage	0 - 400m /4/40/400/750V.
Accuracy	±1.0%
AC Current	0 - 400 / 1000A.
Accuracy	±2.5%
Resistance	0 - 400/4k/40k/400k/4M/40M \wedge
Accuracy	±1.0%
Frequency	0 - 5/50/500/5k/50k/500k/5M/10MHz



Accuracy	±1.2%
Duty Cycle	0.5 to 99.0%
Accuracy	±1.2%
Diode test and Continuity Test	
Confirms to CAT III 1000, CAT IV 600V IEC 1010-1 and UL 3111-IStandards	
Overload Protection of 1000V DC/AC RMS in Resistance, Frequency, Diode and Continuity Test Ranges.	

Auto Power Off	
Data Hold, Relative Measurement	
Auto-ranging	
Non Contact Voltage Detector	
Clamp Jaw Size	55mm
Display	3-3/4 Digits 3999 Counts Backlit LCD
DC Voltage	0 - 400m/4/40/400/1000V.
Accuracy	±0.8%
AC Voltage	0 - 4/40/400/1000V.
Accuracy	±1.5%
AC Current	0 - 40/400/1000A.
Accuracy	±2.2%
Resistance	0 - 400/4k/40k/400k/4M/40M \wedge
Accuracy	±1.0%
Frequency	0 - 9.999/99.99/999.9/9.999K/99.99 K/999.9K/9.999MHz
Accuracy	±1.2%
Duty Cycle	0.1 to 99.9%
Accuracy	±1.2%
Capacitance	0 - 40n/400n/4u/40u/100uF
Accuracy	±3%
Diode test and Continuity Test	
Confirms to CAT III 1000, CAT IV 600V, IEC 1010-1 and UL 3111-IStandards	
Overload Protection of 600V DC/AC RMS in Resistance, Frequency, Diode and Continuity Test Ranges.	



Auto Power Off	
Data Hold	
Auto-ranging	
Clamp Jaw Size	57mm
Display	3-3/4 Digits 3999 Counts LCD
DC Voltage	0 - 4/40/400/1000V.
Accuracy	±1.0%
AC Voltage	0 - 4/40/400/750V.
Accuracy	±1.5%
AC Current	0 - 400 / 2000A.
Accuracy	±2.5%
Resistance	0 - 400/40k/400k/4M/40M \wedge
Accuracy	±1.0%
Frequency	0 - 99.99/999.9/9.999k/99.99k/99.9kHz
Accuracy	±1.0%
Diode test and Continuity Test	
Confirms to CAT III 600, IEC 1010-1 and UL 3111-I Standards	
Overload Protection of 500V DC/AC RMS in Resistance, Frequency, Diode and Continuity Test Ranges.	



Digital Clamp On Power Meter

T-RMS Clamp Meter	
Auto Power Off	
Data Hold & Peak Hold Facility	
Clamp Jaw Size	30mm
Display	3-3/4 Digital 3999 Counts Backlit LCD
DC Voltage	0 - 400m/4/40/400/600V.
Accuracy	±0.8%
AC Voltage	0 - 400m/4/40/400/600V T-RMS.
Accuracy	±1.0%
AC Current	0 - 40/400/1000A T-RMS.
Accuracy	±2.8%
Resistance	0 - 400/4k/40k/400k/4M/40M \wedge
Accuracy	±1.0%
Temperature	-40°C to 1000°C / -40°F to 1832°F
Accuracy	±2.5%
Frequency	0 - 4KHz
Accuracy	±1.5%
Capacitance	0 -4n/40n/400n/4u/40u/400u/4m/40mF
Accuracy	±3.0%
Diode Test and Continuity Test	
Confirms to CE, IEC 61010, CAT-III 600V	



10000 Count digital Backlit LCD display
Auto Backlit, Large scale display
VoltSense™ (None Contact Voltage)
Analog Bar graph
True RMS reading on AC and AC+DC mode
Torch lighting when clamping
Auto AC/DC 1000 Amps capability and selection
Auto AC/DC 1000 Volts capability and selection
Auto Ohms/Continuity/Diode selection
Power and Power factor Measurement
Total Harmonics Distortion and Harmonics DC, 1 to 25
Phase Rotation Indication
AC Current via Flexible Current Probe upto 3000A
100K Ohms Resistance capability
Continuity Beeper
Frequency Counter
Capacitance capability
°C/°F Temperature Function
Smart Data Hold
Peak Hold
Inrush Current
DCA Auto-Zeroing Key
Min Max Hold
Low Pass Filter
Auto Power Off
Up to 42mm dia. (1000MCM) Conductor
Bus bar size 62mm x 12mm
4 feet Drop Proof
Temp. Adaptor bead probe included
Deluxe Carrying Case
Hand Guard & Stream Line Designed
Convenient Battery Door
CAT IV 600V /CAT III 1000V Safety Standard



Auto /Manual Ranging	
T-RMS AC/DC Clamp Meter with Wireless PC Interface	
Data Hold and Peak Hold facility	
Auto Power Off	
Clamp Jaw Dia	30mm
Overload and Low Battery Indication	
Display	3-3/4 Digits 3999 Counts Backlit LCD
DC Voltage	0 - 400m / 4 / 40 / 400 / 600V
Accuracy	±0.8%
AC Voltage	0 - 400m / 4 / 40 / 400 / 600V T-RMS
Accuracy	±1.0%
DC Current	0 - 40 / 400 / 1000A
Accuracy	±2.8%
AC Current	0 - 40 / 400 / 1000A T-RMS
Accuracy	±2.8%
Resistance	0 - 400 / 4k / 40k / 400k / 4M / 40M \wedge
Accuracy	±1.0%
Capacitance	0 - 4n / 40n / 400n / 4u / 40u / 400u / 4m / 40mF
Accuracy	±3.0%
Frequency	0 - 4kHz
Accuracy	±1.5%
Temperature	-40 - 1000°C / -40°F to 1832°F
Accuracy	±3.0%
Continuity Buzzer and Diode Test	
Confirms to IEC 61010 CAT III 600V /CAT II 1000V	



T-RMSAC Clamp On Power Clamp	
Auto Power Off	
Live Wire Detection	
Min /Max and Average Recording Facility	
Phase Sequence Indication	
Data Hold, Peak Hold & Relative Measuring Facility	
Electronic Overload Protection	
Measures KW, KVA, KVAR, PF, Energy for Single Phase Loads	
Measures Active Power and Power Factor for Three-Phase Loads	
Clamp Jaw Size	56mm
Display	6000 Counts Backlit LCD
AC Voltage	0 - 60/600V. T-RMS
Accuracy	±1.0%
AC Current	0 - 600/1500A. T-RMS
Accuracy	±2.5%
Frequency	0 - 200 /2kHz
Accuracy	±1%



Active Power	10W ~ 600kW
Accuracy	±2.5%
Horse Power	0.01HP ~ 600HP
Accuracy	±2.5%
Apparent Power	10VA ~ 600kVA
Accuracy	±2.5%
Reactive Power	10VAR ~ 600kVAR
Accuracy	±2.5%
Electrical Energy	0.01 ~ 9999kWh
Accuracy	±2.5%
Power Factor	0.3 ~ 1.00
Accuracy	±2.5%
Total Harmonic Distortion	0.00 ~ 0.99
Accuracy	±2.5%
Complies with EN 61010-1 (2000 Version), CAT III 600V	

Measures Power and Energy for single phase and three phase loads

Auto-ranging

Data Logging up to 99 Data

Sleep Mode

Clamp Jaw Dia 56mm

Confirms to CAT III 600V, IEC 61010, CAT IV 300V

Non Contact Voltage Detector

Data Hold, Max / Min record

USB PC Interface

Display	4 digits Triple Backlit LCD Display with analogue bargraph
AC Voltage	0 – 100 / 400 / 750V T-RMS
Accuracy	±1.2%
AC Current	0 – 40 / 100 / 400 / 1000A T-RMS
Accuracy	±2.0%
Active Power	0.01kW – 750kW
Accuracy	±3.0%
Apparent Power	0.01kVA – 750kVA
Accuracy	±3.0%
Reactive Power	0.01kVAR – 750kVAR
Accuracy	±3.0%
Power Factor	0.3 – 1 (Capacitive / Inductive)
Accuracy	±4.0%
Phase Angle	0° - 90°
Accuracy	±2°
Frequency	50Hz – 200Hz
Active Energy	0.001 – 9999kWh
Accuracy	±3.0%
Temperature	-50° - 1300°C

T-RMS Three phase and single phase Power and Harmonic Analyzer

Auto Power Off

Max / Min / Peak Hold facilities

Overload Protection

Clamp Jaw Size 55mm

Display	4 + 4 Digits 9999 Counts LCD Dual Display
AC Voltage	4.0 - 600V T-RMS.



Accuracy	±0.5%
AC Current	4.0 - 1500A T-RMS.
Accuracy	±0.5%
Resistance	7 - 1200 Ω
Accuracy	±5 Ohms
Crest Factor	1.00 - 99.99
Accuracy	±5%
Active Power	10W - 9999kW
Accuracy	±1%
Apparent Power	10VA - 9999kVA
Accuracy	±1%
Reactive Power	10VAR - 9999kVAR
Accuracy	±2%
Power Factor	0.000 - 1.000
Accuracy	±0.04
Phase Angle	-180° ~ 0° ~ +180° / 0° to 360°
Accuracy	±1°
Active Energy	0WH to 999,999KWh
Harmonic Analysis up to 99th Harmonic can be done	
THD can be done from 0 to 999.9%	
C.T. Ratio can be programmed from 1 to 250	
H.P. Can also be measured.	
Diode and Continuity Test	
Confirms to CE, IEC 61010, CAT-III 600V	



Power Quality Analysis for Single and Balanced Three Phase System.

Harmonic Analysis of Voltage and Current (1 to 50th order).

True RMS measurement of V with 0.5% of reading basic accuracy.

True RMS measurement of A with 1% of reading basic accuracy

Graphic Waveform of Voltage and Current

Graphic Phasor Diagram

Transient Detection and Logging of Swell, Dip, and Outage.

Fast peak function (39µs for 50 Hz, 33µs for 60Hz).

Active (W, KW, HP), reactive (VAR, KVAR) and apparent (VA, KVA) power

Power factor (PF), phase angle (φ), and energy (WH, KWH).

Measurement of balanced 3 φ Power Quality.

Programmable PT ratio from 1 to 3000

Hold functions.

Auto power off function in 15 minutes.

True RMS Value (V & I)

Maximum Demand (MD in W, KW, MW) with programmable Period

Harmonic Analysis (V and I) to 50th Order

Display of 25 Harmonics in one screen

Optically isolated RS-232C Interface

Smart Datalogging

Graphic Phasor Diagram Capture 129

Transient Events

Clamp Jaw Dia 55mm

Realtime Output of Waveform Power Parameters and Harmonics at command Large Dot Matrix LCD Display with Backlit.



AC Current	4.0 – 1500.0A
Accuracy	±0.5%
AC Voltage	4.0 – 600.0V
Accuracy	±0.5%
Power Factor	0.000 – 1.000
Accuracy	±0.04
Phase Angle	-180 to +180°
Accuracy	±1°
Crest Factor	1.00 to 99.99
Accuracy	±5%
kW /kVA /kVAR	10.00 – 9999k
Accuracy	±1%

Digital Earth Resistance Tester

Data Hold facility	
Displays test result and battery voltage on the same screen	
LOCK Button for continuous HANDS FREE measurement	
Both Earth Resistance and Earth Resistivity can be measured	
Can be used in 4 Terminal and 3 Terminal configurations	
Display	4 Digits EXTRA LARGE Backlit Dual LCD Display
Earth Resistance Range	0 - 10/100/1000 Ohms
Accuracy	±2%
Low Resistance Range	0 - 200 k.Ohms
Accuracy	±2%
DC Voltage	0 - 1000V
Accuracy	±0.8%
AC Voltage	0 - 750V
Accuracy	±1.2%
Complies with CE, CAT-III 1000V	
Complete with Testing Kit	
Re-Chargeable Battery and Battery Charger can be provided at extra cost	



Data Hold facility	
Displays test result and battery voltage on the same screen	
LOCK Button for continuous HANDS FREE measurement	
Both Earth Resistance and Earth Resistivity can be measured	
Can be used in 4 Terminal and 3 Terminal configurations	
Display	4 Digits EXTRA LARGE Backlit Dual LCD Display
Earth Resistance Range	0 - 20/200/2000 Ohms
Accuracy	±2%
Low Resistance Range	0 - 200 k.Ohms
Accuracy	±2%
DC Voltage	0 - 1000V
Accuracy	±0.8%
AC Voltage	0 - 750V
Accuracy	±1.2%
Complies with CE, CAT-III 1000V	
Complete with Testing Kit	
Re-Chargeable Battery and Battery Charger can be provided at extra cost	



Digital Frequency Counter

Bench Type	
8 Digit RED LED Display	
Dual Channel Input	
Range	up to 2.7GHz
Resolution	100Hz
Accuracy	±1%
Sensitivity: 20mV rms up to 8MHz / 30mV rms up to 10MHz / 20mV rms up to 80Hz/ 30mV rms up to 2.7GHz	
Auxiliary Power Supply	220V AC 50Hz



Digital Frequency Meter

Microprocessor based 4 digit display.	
Available for ranges: 99.99Hz, 999.9 Hz, 10KHz and 100KHz ranges.	
Available in 96 * 96 and 96*48 mm Bezel sizes.	
Auxiliary Power Supply: 230V AC 50Hz / 110V AC 50Hz / DC Auxiliary inputs also available	



Digital IC Tester

Self Diagnosis	
Identifies Unknown model number of Devices	
Measures more than 2000 kinds of devices	
Tests 54 /74 series TTL	
Tests 4000 and 4500 series CMOS	
40 Pin capability	
Control	16 key tact switch keypad with dual tone sound indication
Display	6 Digit LED Display
Test Socket	40 pin ZIF Socket
Library of ICs	TTL54 Series, TTL55 Series, TTL74 Series, TTL75 Series, CMOS14 Series, CMOS40 Series, Optical Coupler Series, LED Display Series, RAM Series, SCM Series, CPU Peripheral Series
Auxiliary Power Supply	220V AC 50Hz



Digital Insulation Resistance Tester

Hand Held Easy to use instrument	
Extra Large Backlit LCD Display 3-1/2 Digits	
Data Hold Function	
Battery cum Mains Operated	
Over-range and Low Battery Indication	
Test Voltage	250V /500V /1000V
Measuring Range	200M \wedge @250V
	200M \wedge @500V
	2000M \wedge @1000V
Accuracy	\pm 4%
Measures DC Voltage	0 – 1000V
Accuracy	\pm 0.5%
Measures AC Voltage	0 – 750V
Accuracy	\pm 1%
Low Resistance	0 – 2k \wedge
Accuracy	\pm 0.8%
Continuity Test	



Display	3-1/2 Digits 1999 Counts Dual Extra Large Backlit Display
Displays test voltage and insulation resistance being measured, Battery Voltage and Voltage being measured, at the same time.	
Data Hold Facility	
Double Injection Moulded Body	
Anti-Slip Splash proof body	
Locking Facility that locks the output voltage while continuous Insulation Resistance test For Hands Free Operation	
Insulation Resistance	200M \wedge at 250V
	200M \wedge at 500V
	2000M \wedge at 1000V
Accuracy	\pm 3%
Low Resistance	0 - 200 \wedge /200k \wedge
Accuracy	\pm 1%
DC Voltage	0 - 1000V
Accuracy	\pm 0.8%
AC Voltage	0 - 750V
Accuracy	\pm 1.2%
Audible Continuity Test Facility	
Confirms to CE, EN 61010-1	



Low power consumed CMOS double integral A/D transforming IC, auto-checking to zero, auto-displaying polarity, displaying when low or over battery.

LCD	3.5 digits big screen display, the max show value is 1999.
Has function of holding data and displaying signal.	
Can use rotating switch to change testing voltage.	
High voltage is on the rails when LED is on.	
Low Battery Indication.	



Scale	0-20G \wedge . Transforming scale automatically
Test Voltage	250V /500V /1000 /2500V
Insulation Resistance Range:	2000M \wedge @ 250V
	20G \wedge @500V
	20G \wedge @1000V
	20G \wedge @2500V
Accuracy	\pm 3%

Designed to following safety standards:IEC 61010-1 (CAT IV 600V Pollution degree 2) IEC 61010-031 (Requirements for hand-held probes)

Insulation test range	0.1M \wedge to 60G \wedge
Insulation test voltages	500V,1000V, 2500V, 5000V
AC/DC voltage	0.5 V to 600 V

Continuity Test Facility

Resistance	0.1 \wedge to 6k \wedge
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Battery Cum Mains Operated

With auto-discharge function & voltage output warning function

Backlight levels selector function to facilitate working at dimly illuminated location or at nighttime work.

LIVE circuit warning symbols plus audible warning.

Live circuit detection prevents insulation test if voltage > 30 V is detected for added user protection

With Auto-power off function & battery check.

With Timer measurement function : Automatically performs a measurement at the set time.

With Polarization index measurement (PI)

With Dielectric absorption ratio measurement (DAR)

Auto ranging with larger 6000 counts LCD display with bargraph

MAX/MIN, PEAK,Relative value & Data hold functions for DC/AC voltage measurements.

Accuracy	\pm 2.5%
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Four ranges	500V, 1000V, 2500V, 5000V
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High voltage output testing auto extends for 30 seconds.

Autorange insulation resistance testing

2seconds high voltage output interval with warning beeper

AC voltage /Continuity/Low resistance measuring

White backlight to view the test results in dimly lit areas.

Display	LCD : 75*35mm,
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Max reading	1999
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Low battery indication

Battery Cum Mains Operated

Test Voltage	500V/1000V/2500V/5000V
Insulation Resistance Range	2000M \wedge @500V
	2000M \wedge @1000V
	20G \wedge @2500V
	200G \wedge @5000V

Accuracy	\pm 5.0%
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AC Voltage Measurement	0 – 750V
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Accuracy	\pm 1.0%
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Low Resistance	0 – 200 \wedge
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Accuracy	\pm 0.8%
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Micro-processor Controlled	
Auto-ranging insulation Resistance Range	
Warning and Display of external voltage presence	
Bargraph Indicates test voltage rise and decay can be observed during tests	
Low Battery Indication	
Data Hold	
Auto Power Off	
Body Sealed with gasket	
Display	2 lines x 16 Characters Large LCD
Confirms to IEC-1010 CAT III	
Test Voltage	1000V / 2500V / 5000V / 10,000V
Measuring Range	0 - 60G \wedge @ 1000V
	0 - 150G \wedge @ 2500V
	0 - 300G \wedge @ 5000V
	0 - 600G \wedge @ 10,000V



Battery Cum Mains Operated	
Data Hold Function	
Fault Protection, Buzzer Alarms if short circuit	
Display	3-1/2 Digits 1999 Counts LCD
Low Battery Indication	
Test Voltage	1000V
Insulation Resistance Range	2000M \wedge
Accuracy	\pm 4%



Digital KWH Meter

Microprocessor based Three phase and single phase KWH meters

16 x 2 Lines Backlit LCD .

Options of RUN HOUR or REAL TIME CLOCK DISPLAY .

1% accuracy.

Available in 96 * 96 mm Bexel size.

User Programmable CT/ PT ratios to Give a Direct Reading .

Password Protected for CT/PT ratios.

Available for 415V(LT) and 110 V(HT) systems and for 1 Amp and 5 Amp CT secondary.

Auxiliary Power Supply : 230V AC 50Hz / 110V AC 50Hz



Battery Cum Mains Operated	
Data Hold Function	
Fault Protection, Buzzer Alarms if short circuit	
Display	3-1/2 Digits 1999 Counts LCD
Low Battery Indication	
Test Voltage	100V
Insulation Resistance Range	200M \wedge
Accuracy	\pm 4%



Digital LCR Meter

Data Hold Facility to freeze the displayed data

MAX/MIN Data Record

Relative Measurement

Display	11,000 Counts Backlit LCD
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Inductance	0 - 2m/20m/200m/2/20H
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Confirms to EN61010-1, Insulation Class 2

Low Battery and Over-range indication

Auto Power Off

Inductance	0 - 11m/110m/11/20H
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Accuracy	\pm 2.0%
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Capacitance	0 - 11n/110n/1.1u/11u/110u/ 1.1m/110m/110mF
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Accuracy	\pm 5.0%
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Resistance	0 - 110/1.1k/11k/110k/1.1M/11M/ 110M \wedge
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Accuracy	\pm 1.2%
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Diode Test, Audible Continuity Test, Transistor Test Facility



Battery Cum Mains Operated	
Data Hold Function	
Fault Protection, Buzzer Alarms if short circuit	
Display	3-1/2 Digits 1999 Counts LCD
Low Battery Indication	
Test Voltage	250V
Insulation Resistance Range	200M \wedge
Accuracy	\pm 4%



Battery Cum Mains Operated	
Data Hold Function	
Fault Protection, Buzzer Alarms if short circuit	
Display	3-1/2 Digits 1999 Counts LCD
Low Battery Indication	
Test Voltage	500V
Insulation Resistance Range	1000M \wedge
Accuracy	\pm 4%



Dual Backlit LCD display	
Auto LCR smart check and measurement	
Series/Parallel modes are selectable	
Ls/Lp/Cs/Cp with D/Q/θ/ESR parameters	
Support DCR mode 200.00 \wedge ~200.0M \wedge	
Five different test frequency are available	100/120/1k/10k/100k Hz
Test AC signal level	0.6mVRMS typ.
Test range	(ex. F=1kHz)
L	200.00 μ H ~ 2000.0 H
C	2000.0 pF ~ 2.000 Mf
R	20.000 \wedge ~ 200.0 M \wedge
Multi-level battery voltage detector	
Support Backlight & Buzzer sound driver	
Parameters displayed: DC Resistance, Serial Inductance, Parallel Inductance, Serial Capacitance, Parallel Capacitance, Serial Resistance, Parallel Resistance, Phase Angle, Equivalence Serial Resistance, Dissipation Factor, Quality Factor	



True RMS LCR Multimeter With RS-232C PC interface facility
10 Memory Location. Time Mode with alarm, clock and stop watch. MIN., MAX., AVG. and relative modes. Data Hold and Run Modes, 20A Fuse Protection

Display	3-3/4 Digits Backlit 3999 Counts
Dual Extra Large LCD	
DC Voltage	0 - 400mV/4V/40V/400V/1000V
Accuracy	\pm 0.3%
AC Voltage	0 - 400mV/4V/40V/400V/750V T-RMS.
Accuracy	\pm 1.0%
DC Current	0 - 400uA/400mA/20A.
Accuracy	\pm 1.0%
AC Current	0 - 400uA/400mA/20A T-RMS.
Accuracy	\pm 1.5%
Resistance	0 - 400/4k/40k/400k/4M/40M \wedge
Accuracy	\pm 0.5%
Capacitance	0 - 100uF
Accuracy	\pm 3.0%
Frequency	0 - 10 kHz/100kHz/1MHz/10MHz
Accuracy	\pm 0.01%
Inductance	0 - 20/50/100H
Accuracy	\pm 3.0%
Duty Cycle	0.1% ~ 99.9%
Accuracy	\pm 1.2%
Temperature	-20°C~+1200°C /0°F~+2000°F
Accuracy	\pm 3%
dBm	-25dBm to + 59dBm
Accuracy	\pm 0.5dBm

Logic Test, Diode Test, Signal Output and Audible Continuity test facility.

Confirms to UL 1244 AND VDE-0411

Complete with carrying case, instruction manual, test leads, battery, RS-232C PC Interface cable and software.



Digital LCR Multimeter

Peak Hold facility	
Display	3-1/2 Digital 1999 Counts Backlit LCD
Low Battery and Overload Indication	
Confirms to IEC1010 Standards	
Auto Power Off	
DC Voltage	0 - 200mV/2V/20V/200V/1000V
Accuracy	\pm 0.5%
AC Voltage	0 - 200mV/2V/20V/200V/750V
Accuracy	\pm 0.8%
DC Current	0 - 2mA/20mA/200mA/20A.
Accuracy	\pm 0.8%
AC Current	0 - 2mA/20mA/200mA/20A.
Accuracy	\pm 1.0%
Resistance	0 - 200/2k/20k/200k/2M/20M/2000M \wedge
Accuracy	\pm 0.8%
Capacitance	0 - 20nF/200nF/2uF/20uF/200uF
Accuracy	\pm 2.5%
Frequency	0 - 2k/20k/200k/2M/10MHz
Accuracy	\pm 1.0%
Inductance	0 - 2m/20m/200m/2/20H
Accuracy	\pm 2.5%
Temperature	-40°C~+1000°C
Accuracy	\pm 1.0%
Diode Test, Transistor Test and Audible Continuity test facility.	



Auto Power Off	
Display	3-3/4 Digits 3999 Counts LCD
DC Voltage	0 - 400mV/4V/40V/400V/1000V
Accuracy	\pm 0.5%
AC Voltage	0 - 400mV/4V/40V/400V/750V
Accuracy	\pm 1.0%
DC Current	0 - 400u/40mA/400mA/10A
Accuracy	\pm 1.0%
AC Current	0 - 400u/10mA/100mA/10A
Accuracy	\pm 1.5%
Resistance	0 - 400/4k/40k /400k/4M/40M/400M \wedge
Accuracy	\pm 0.8%
Capacitance	0 - 4nF/ 40nF/ 400nF/4uF/400uF
Accuracy	\pm 5.0%
Frequency	0 - 1kHz/10k/100k/1000kHz
Accuracy	\pm 0.5%
Inductance	0 - 4m/40m/400m/4/40H
Accuracy	\pm 5.0%



Temperature	-20 ~750°C
Accuracy	±1°C
Logic Test, Diode Test and Audible Continuity test facility.	
Confirms to CE Standards	
Overload Protection of 500V DC/AC RMS in Resistance, Capacitance, Inductance,	
Logic Test, Diode Test and Continuity Test Ranges.	

Digital Leakage Current Meter

Auto Power Off	
Max /Min recording with Data Hold	
Clamp Jaw Size	30mm
Display	3-3/4 Digits 3999 Counts LCD with 40 Segment analog Bargraph
AC Voltage	0 - 400V
Accuracy	±1.5%
AC Current	0 - 40m/400m/4A/40A/80A/100A
Accuracy	±1.0%
Resistance	40 - 400 Ω
Accuracy	±1.0%
Low Pass Filter for eliminating effect of High Frequency Noise.	



Data Hold Function	
Auto Power Off	
High Precision AC/DC Low Current Measurement	
Low battery and Overload Indication	
Provides Analogue Output for Recording function.	
DC Voltage	0 - 400m/4/40/400/600V
Accuracy	±1.0%
AC Voltage	0 - 400m/4/40/400/600V
Accuracy	±1.0%
DC Current	0 - 4 /80A
Accuracy	±2.8%
AC Current	0 - 4 /80A
Accuracy	±3.0%
Resistance	0 - 400/4k/40k/400k/4M/40M Ω
Accuracy	±1.0%
Capacitance	0 - 40n/400n/4u/40u/100uF
Accuracy	±3.0%
Frequency	0 - 5/50/500/5k/50k/500k/5M/10MHz
Accuracy	±1.2%
Duty Cycle	0.5 to 99.0%
Accuracy	±1.2%
Confirms to CE, CAT-III 600V	



High Resolution up to 100uA	
Display	3-1/2 Digits 1999 Counts Backlit LCD
Auto Power Off	
Max Hold Function	
Clamp Jaw Dia	30mm
Overload and Low Battery Indication	
AC Current	0 - 200m /2 /200A
Accuracy	±2.5%
Confirms to EN61010-1, EN61010-2-032, CAT II 600V	



High Accuracy Leakage Current tester	
Confirms to IEC 61010-1 (2001), IEC 61010-2-032 (2002), Installation Category II 600V Phase to Earth, Category III 300V Phase to Earth.	
Display	3-1/2 Digits LCD Display 3200 Counts
Range	0 - 30m/300m/30A/300A (50/60Hz)
Accuracy	±1.2%
Jaw Size	40mm
Over Range Indication	
Data Hold Function	



Digital Lux Meter

Easy to Use, Pocket Size, light weight	
Over range Indication	
Low Battery Indication	
Long Life Silicon Photo Diode sensor with filter	
Measurement rate	1.5 times /Sec
Display	3-1/2 Digits 1999 Counts LCD
Range	0 - 200/2000/20,000/50,000 Lux
Accuracy	±5%
Resolution	0.1 Lux



Easy to Use, Pocket Size, light weight	
Over range Indication	
Max Hold and Data Hold Facility	
Auto Power Off	
Low Battery Indication	
Displays both in Lux and Foot Candle range	
Long Life Silicon Photo Diode sensor with filter	
Measurement rate	1.5 times /Sec
Display	3-1/2 Digits 1999 Counts LCD
Range	0 - 200/2000/20,000/50,000 Lux 0 - 200/2000/20,000/50,000 Fc
Accuracy	±5%
Resolution	0.1 Lux /Fc



Easy to use, Pocket Size, Light weight	
Over range Indication	
Data hold facility	
Low Battery Indication	
Measuring both in Lux and Foot Candles	
Long life Silicon Photo Diode sensor	
Measurement Rate	2.5 times /Sec
Display	1999 Count, Large LCD display
Range 1	0 – 200/2000/20,000/200,000 Lux
Range 2	0 –20/ 200/2000/20,000 FC
Accuracy	± 3 %



Data hold facility to freeze the displayed data	
Autoranging	
Annunciator display and automatic zero facility	
With USB Interface for PC Connectivity	
The correction factor need not be manually calculated for non standard light sources	
Short rise and fall times	
Peak Hold function for tracing the peak signal of light pulse	
Measures in both Lux and Fc scales	
Meter corrected for spectral relative efficiency	
Auto Power Off Facility	
Max and Min recording facility	
Relative measuring facility	
Display	3-3/4 Digits Backlit Large LCD Displaywith 40 segment analogue bargraph
Range	0 - 400/4000/40,000/4,00,000 Lux & 0 - 40/400/4000/40,000 Fc.



Auto Ranging	
Used to Measure Low Light Intensity	
Zero Adjustment	
Easy to use, Pocket Size, Light weight	
Over range Indication	
Data hold and MAX Hold facility	
Low Battery Indication	
Measuring both in Lux and Foot Candles	
Long life Silicon Photo Diode sensor	
Measurement Rate	2.5 times /Sec
Display	2000 Count, Large LCD display
Range 1	0 – 20/200/2000/20,000/2,00,000 Lux
Range 2	0 –20/ 200/2000/20,000 FC
Accuracy	± 3 %



Digital Micro Ohms Meter

Compact Highly Reliable 3-1/2 Digit Instrument	
Uses 4 Terminal Measurement method	
Has 12.5 mm high 7 segment 3-1/2 Digits LED Display	
Range	0 - 1999u/19.99m/199.9m/ 1.999/19.99/199.9/1999 \wedge
Accuracy	+ 0.3% + 2 dgs
Normal Test Current	1.5 /0.75 /0.75 /75m / 7.5m /0.75m /0.075mA
Warm up Time	30 minutes
Input	230V Single Phase AC 50Hz
Complete with instruction manual, mains chord and test leads	



Easy to Use, High Precision	
Over range Indication	
Peak / Max / Min and Data Hold Facility	
Relative Measurement facility	
Reset Function	
Auto Power Off	
Low Battery Indication	
Displays both in Lux and Foot Candle range	
Long Life Silicon Photo Diode sensor with filter	
Auto /Manual Ranging	
Measurement rate	1.5 times /Sec
Display	3-3/4 Digits 3999 Counts with 40 segment analogue Bargraph BacklitLCD
Range Lux	0 - 40/400/4000/40,000/3,00,000 0 - 400/4000/30,000 Fc
Accuracy	± 5%
Resolution	0.1 Lux /Fc
Meter corrected for spectral relative efficiency	
No need of correction factor for non standard lightsource	



Measures winding resistance of highly inductive transformers of single phase and 3 Phase Star and Delta connections.	
Has four terminal bridge for lead resistance compensation.	
The set will be capable of overcoming high inductance of the transformer and allows fast measurements.	
Test Current - 10m /100m /1 and 10A.	
Duty	Continuous for 10m, 100m and 1A, 30mins ON and 30mins OFF for 10A
Resistance measurement range	0 - 2m/20m/200m/2/20/200 /2000 \wedge
Accuracy	±0.5% or rdg
Auxiliary Power Supply	230V Single Phase AC 50Hz.
Complete with current leads, potential leads, power supply cable and instruction manual	



Used to measure low resistance of switch contacts, SF Switchgears, bus bars, splices, joints, fuses, breaker contacts and low inductive windings
Test Current is 100A selectable in steps of 5, 10, 20,50 and 100A



Resistance measurement range	0 - 199.9u/1999u/19.99m/199.9m \wedge
Accuracy	$\pm 1\%$ or rdg ± 5 dgts
Auxiliary Power Supply	230V Single Phase AC50Hz.
Complete with current leads, potential leads, power supply cable and instruction manual	

Used to measure low resistance of switch contacts, SF Switchgears, bus bars, splices, joints, fuses, breaker contacts and low inductive windings

Test Current is 200A selectable in steps of 5, 10, 20,50 and 200A

Resistance measurement range	0 - 199.9u 1999u 19.99m/199.9m \wedge
Accuracy	$\pm 1\%$ or rdg ± 5 dgts
Auxiliary Power Supply	230V Single Phase AC50Hz.
Complete with current leads, potential leads, power supply cable and instruction manual	



Electrode length	8mm
Electrodes	Integrated and replaceable
Display	Extra Large LCD
Range	Wood, Paper : 6 - 44%
	Hardened Material : 0.2 to 2.0%
Accuracy	Wood : $\pm 1\%$
	Hardened Material : $\pm 0.05\%$

Used to measure moisture content in Wood, Bamboo, Cotton, Tobacco, Paper, Foodstuffs etc

Data Hold Facility	
Low Battery Indication	
Quick Response	
Display	2 Digits Large LCD
Range	5% to 40%
Resolution	1%
Accuracy	$\pm 1\%$
Built in electrodes	



Digital Milli Ohms Meter

Low resistance range	0 ~ 40 \wedge
Display	3-3/4 Digits Large Backlit LCD
Maximum output current	200mA (400m \wedge)
Relative measurement	
Auto Power Off	
Low Battery and Over Range Indication	
4Terminal Measurement with kelvin clip probes	
Overload Protection on all ranges	
Max /Min Recording	
Confirms to CAT-III 600V	
Low Resistance	0 - 400m/4/40 \wedge
Accuracy	$\pm 1\%$
DC Voltage	0 - 400m/4/40/400/1000V
Accuracy	$\pm 1\%$
AC Voltage	0 - 400m/4/40/400/750V
Accuracy	$\pm 1\%$
DC Current	0 - 400u/4000u/40m/400mA
Accuracy	$\pm 1.5\%$
AC Current	0 - 400u/4000u/40m/400mA
Accuracy	$\pm 1.5\%$
Capacitance	0 - 4n/40n/400n/4u/40u/400u/ 4m/40mF
Accuracy	$\pm 3.0\%$
Resistance	0 - 400/4k/40k/400k/4M/40M \wedge
Accuracy	$\pm 1.0\%$



Micro-computer based design for fast and accurate reading
Low Power Consumption
Fast and Easy to operate

Measures moisture content of 3 types of Papers (Carton, Copperplate paper and Writing paper) through spring contact precise measuring

Range	0-40%
Resolution	1%



Specially Designed for Timber Market
Has Eight Calibrating Scales
Accurate Measurement in 150 wood species
Can be used with integral pin electrodes or using the heavy duty moisture probe

Automatic temperature compensation	
Range	6% to 100%
Resolution	0.1
Accuracy	$\pm 1\%$
Temperature Measuring Range	-35°C ~ 80°C
Accuracy	$\pm 2^\circ\text{C}$



Digital Moisture Meter

Hardened Material like Plaster, Concrete and Mortar	
Battery Operated	
Low Battery Indication	
Impact Proof Plastic Housing	
Measuring principle	Electrical Resistance



Pinless Moisture meter is an electronic dampness indicator with a measuring process working on the principle of high frequency measurement.

Used for non-destructive tracing dampness in building materials of all kinds as well as for detecting damp distribution in walls, ceiling and floors.

Suitable for pre-testing the readiness of building materials for covering prior to CM Measurement

Quickly indicates the moisture content of materials	
Depth of penetration about 20 - 40mm	
Low battery Indication, Auto Power Off	
Max /Min Record Function.	
Data Hold	
White Backlit LCD Display	
Measuring Range : 0 to 100%	



Digital Multimeter

Display: 1999 (3 1/2) Count , 15mm Backlit LCD

Auto Power Off

Over Load Protection of 500V DC/AC RMS

DC Voltage 0-200mV/2V/20V/200V/600V

Accuracy ± 0.5%

AC Voltage 0-200V/600V

Accuracy ± 1.2%

DC Current 0-2000µA/20mA/200mA/10A

Accuracy ± 1.0%

Resistance 0-200/2K/20K/200K/2M.ohms

Accuracy ± 1.0%

Battery Test 9V/1.5V

With Diode Test, Continuity Test and Data Hold.

Confirms to CE, CAT-III 600V, IEC 1010-1



Auto Ranging

Data Hold and Max Hold Facility

Auto Power Off

Display 3-1/2 digits 1999 Counts backlit LCD

DC Voltage 0 – 200mV/2V/20V/200V/600V.

Accuracy ± 0.5%

AC Voltage 0-2V/20V/200V/600V

Accuracy ± 0.8%

DC Current 0-200uA/2000uA/20mA/200mA/10A

Accuracy ± 1.5%

AC Current 0-200uA/2000uA/20mA/200mA/10A

Accuracy ± 1.5%

Resistance 0-200∧/2k∧/20k∧/200k∧/2M∧/20M∧

Accuracy ± 0.8%

Frequency 0 – 20kHz

Accuracy ± 1.5%

With Diode test, Audible Continuity test, Data Hold and Max Hold Facility

Confirms to CE, CAT-II 600V, IEC 61010-1



Auto Power Off

Data Hold

Display 3-1/2 digits 1999 counts LCD

DC Voltage 0-200mV/2V/20V/200V/1000V

Accuracy ± 0.5%

AC Voltage 0-2V/20V/200V/ 750V

Accuracy ± 0.8%

DC Current 0-200uA/2mA/20mA/200mA/10A

Accuracy ± 0.8%

AC Current 0-2mA/20mA/200mA/10A

Accuracy ± 1.2%

Resistance 0-200/2K/20K/200K/2M/20M∧

Accuracy ± 1.0%

With Diode test, Transistor test, Audible continuity

Confirms to CE, CAT-III 600V, IEC 1010-1



Display 3-1/2 Digits 1999 Counts LCD

DC Voltage 0-200mV/2V/20V/200V/1000V

Accuracy ± 0.5%

AC Voltage 0-2V/20V/200V/750V

Accuracy ± 0.8%

DC Current 200µA/2mA/20mA/200mA/20A.

Accuracy ± 0.8%

AC Current 2mA/20mA/200mA/20A

Accuracy ± 1.2%

Resistance 0-200∧/2k∧/20k∧/200k∧/2M/20M∧

Accuracy ± 0.8%

With Diode Test, Transistor Test, Audible Continuity Test

Fully Protected: Overload Protected up to 500V DC/AC RMS in all ranges

Confirms to CE, CAT-II 1000V



Auto Ranging

Auto Power Off

Data Hold and Max. Record Function

Display 3-1/2 digits 1999 Counts backlit LCD

DC Voltage 0 – 200mV/2V/20V/200V/600V.

Accuracy ± 0.5%

AC Voltage 0-200mV/2V/20V/200V/600V

Accuracy ± 0.9%

DC Current 0-200uA/2000uA/20mA/200mA/10A

Accuracy ± 1.5%

AC Current 0-200uA/2000uA/20mA/200mA/10A

Accuracy ± 1.5%

Resistance 0-200∧/2k∧/20k∧/200k∧/2M∧/20M∧

Accuracy ± 0.8%

Temperature -20°C to 1000°C /0°F to 1832°F

Accuracy ± 2.0%

With Diode test, Audible Continuity test

Confirms to CE, CAT-II 600V



Auto Power Off

Data Hold to freeze the displayed reading

Display 3-1/2 digits 1999 Counts Backlit Extra Large LCD

DC Voltage 0-200mV/2V/20V/200V/1000V

Accuracy ± 0.5%

AC Voltage 0-2V/20V/200V/750V

Accuracy ± 0.8%

DC Current 0-20mA/200mA/20A

Accuracy ± 0.8%

AC Current 0-20mA/200mA/20A

Accuracy ± 1.0%

Resistance 0-200∧/2k∧/20k∧/200k∧/2M∧/200M∧

Accuracy ± 0.8%

Capacitance 0-20nF/2uF/200uF

Accuracy ± 2.5%

Temperature -20°C to 1000°C

Accuracy ± 1.0%

Frequency 0-2KHz/200KHz

Accuracy ± 3.0%

With Diode Test, Transistor Test, Hot wire Test and Audible Continuity Test Facility.

Confirms to IEC1010. CE, CAT II 1000V



Auto Ranging	
Auto Power Off	
Data Hold Facility to freeze the displayed Data	
Double Insulation class 2 Double Injection Molded Housing.	
Overload Protection of 500V DC/AC RMS in the resistance, Temperature, Diode test and continuity test ranges.	
Has 10A Fuse Protection.	
Display	3-1/2 Digits 2000 Counts LCD with Function Indicator
DC Voltage	0-200mV/2V/20V/200V/1000V
Accuracy	± 0.5%
AC Voltage	0.200mA/2V/20V/200V/1000V
Accuracy	± 1.2%
DC Current	0-200uA/2000uA/20mA/200mA/10A
Accuracy	± 1.0%
AC Current	0-200uA/2000uA/20mA/200mA/10A
Accuracy	± 1.5%
Resistance	0-200 Ω /2K Ω /20K Ω /200K Ω /2M Ω /20M Ω
Accuracy	1.0%
Temperature	-50°C to +1000°C/-58°F to +1832°F
Accuracy	±3%
Clamp-On AC/DC Current adaptor can be used to measure 0-200/2000A AC/DC.	
Accuracy shall be ± 1.5% for AC Measurement and ± 1.0% for DC current Measurement.	
Confirms to EN61010-1, CAT III 600V,CE.	



Data Hold to Freeze Displayed data	
Auto Power Off	
Relative Measurement Facility	
Display	3-3/4 Digits 4000 Counts LCD
DC Voltage	0-400mV/4V/40V/400V/600V
Accuracy	± 0.5%
AC Voltage	0-400mV/4V/40V/400V/600V
Accuracy	± 1.2%
DC Current	0-400uA/4000uA/40mA/400mA/10A
Accuracy	± 1.0%
AC Current	0-400uA/4000uA/40mA/400mA/10A
Accuracy	± 1.5%
Resistance	0-400 Ω /4K Ω /40K Ω /400K Ω /4M Ω /40M Ω
Accuracy	± 1.0%
Capacitance	0-4nF/40nF/400nF/4uF/40uF/200uF
Accuracy	± 3.0%
Frequency	0-9.999Hz/99.99Hz/999.9Hz/9.999KHz/99.99KHz/999.9KHz/9.999MHz
Accuracy	± 1.2%
Duty Cycle	0-0.1% - 99.9%
Accuracy	± 1.2%
Temperature	-20°C to +760°C /-4°F to +1400°F
Accuracy	± 3.0%
Diode Test and Audible Continuity Test	
Confirms to CAT-III 600V,EN61010-1, CE	



Data Hold to freeze displayed data	
Auto power Off	
Auto-ranging	
Relative Measurement facility	
Display	3-3/4 Digits 3999 counts LCD
DC Voltage	0-400mV/4V/40V/400V/1000V
Accuracy	0.5%
AC Voltage	0-400mV/4V/40V/400V/750V
Accuracy	0.8%
DC Current	0-400uA/4000uA/40mA/400mA/4A/20A
Accuracy	1.0%
AC Current	0-400uA/4000uA/40mA/400mA/4A/20A
Accuracy	1.5%
Resistance	0-400 Ω /4K Ω /40K Ω /400K Ω /4M Ω /40M Ω
Accuracy	0.8%
Capacitance	0-4nF/40nF/400nF/ 4uF/40uF/200uF
Accuracy	±0.5%
Frequency	0-10Hz/100Hz/1000Hz/10KHz/100KHz/1MHz/30MHz
Accuracy	±0.5%
Temperature	-40°C to +1000°C
Accuracy	± 0.8%
Duty Cycle, Diode test, Transistor test and audible Continuity Test.	
Confirms to CE, EMC/LVD, IEC1010.	



Data Hold to Freeze Displayed data	
Auto Power Off	
Relative Measurement facility	
Display	6000 Counts LCD Backlit display with analogue bargraph
DC Voltage	0-600mV/6V/60V/600V/1000V
Accuracy	± 0.5%
AC Voltage	0-6V/60V/600V/1000V
Accuracy	± 1.2%
DC Current	0-6A/10A
Accuracy	± 2.5%
AC Current	0-6A/10A
Accuracy	± 3.0%
Resistance	0-600 Ω /6K Ω /60K Ω /600K Ω /6M Ω /60M Ω
Accuracy	± 1.0%
Capacitance	0-40nF/400nF/4uF/40uF/400uF/4000uF
Accuracy	± 3.0%
Frequency	0-9.999Hz/99.99Hz/999.9Hz/9.999KHz/99.99KHz/999.9KHz/20MHz
Accuracy	± 1.2%
Duty Cycle	0-0.1% - 99.9%
Accuracy	± 1.2%
Temperature	-20°C to +760°C /-4°F to +1400°F
Accuracy	± 3.0%
Diode Test and Audible Continuity Test	
Confirms to CAT-III 600V, EN61010-1, CE.	
Overload protection upto 600V AC/DC on all range	



Data Hold to Freeze Displayed data	
Auto Power Off	
True RMS	
Display	6000 Counts Backlit LCD with analogue bargraph
DC Voltage	0-600mV/6V/60V/600V/1000V
Accuracy	± 0.5%
AC Voltage	0-6V/60V/600V/1000V
Accuracy	± 1.5%
DC Current	0-6A/10A
Accuracy	± 2.5%
AC Current	0-6A/10A
Accuracy	± 3.0%
Resistance	0-600 Ω /6K Ω /60K Ω /600K Ω /6M Ω /60M Ω
Accuracy	± 1.0%
Capacitance	0-40nF/400nF/4uF/40uF/400uF/4000uF
Accuracy	± 3.0%
Frequency	0-9.999Hz/99.99Hz/999.9Hz/9.999KHz/99.99KHz /999.9KHz/20MHz
Accuracy	± 1.2%
Duty Cycle	0 -0.1% - 99.9%
Accuracy	± 1.2%
Temperature	-20°C to +760°C /-4°F to +1400°F
Accuracy	± 3.0%
Diode Test and Audible Continuity Test	
Confirms to CAT-III 600V, CAT-II 1000V EN61010-1, Class2 Double Insulation	
Overload protection of 600V DC/AC on all range	



Terminal Blocking Facility to prevent wrong connection.	
Overload Protection of 500V DC/AC RMS in the Resistance, Capacitance, Frequency, Temperature, Duty Cycle, Battery Test, Diode Test and Continuity Test Facilities.	
20A AC/DC Fuse Protected	
Double Molded Housing.	
Data Hold to freeze the displayed data	
Auto Power Off	
Display	3- $\frac{1}{2}$ Digits 4000 Counts Extra Large Backlit LCD
DC Voltage	0 – 400mV/4V/40V/400V/1000V
Accuracy	± 0.5%
AC Voltage	0 – 4V/40V/400V/1000V
Accuracy	± 1.2%
DC Current	0 - 400uA/4000uA/40mA/400mA/4A/20A
Accuracy	± 1.0%
AC Current	0 – 400uA/4000uA/40mA/400mA/4A/20A
Accuracy	± 1.5%
Resistance	400 Ω /4k Ω /40K Ω /400K Ω /4M Ω /40M Ω
Accuracy	± 1.0%
Capacitance	0 – 40nF/400nF/4uF/40uF/100uF
Accuracy	± 3.0%
Frequency	0 – 9.999Hz/99.99Hz/999.9Hz/9.999KHz/99.99kHz/999.9kHz/9.999MHz
Accuracy	± 1.2%
Duty Cycle	0.1% to 99.9%
Accuracy	± 1.2%
Temperature	-20°C to +760°C /-4°F to +1400°F
Accuracy	± 3%
Battery Test	9V range
Accuracy	± 1%
Clamp-On AC/DC Current Adaptor can be used to measure 0 – 400A AC/DC	
Accuracy shall be ± 1.5% for AC Measurement and ± 1.0% for DC Measurement.	
Diode Test and Audible Continuity Test	
Confirms to CAT-II 1000V, EN61010-1, CE.	



Peak Hold to freeze the peak value	
Auto Power Off	
Display	3- $\frac{1}{2}$ Digits 3999 counts LCD
DC Voltage	0-400mV/4V/40V/400V/1000V
Accuracy	± 0.5%
AC Voltage	0 - 400mV/4V/40V/400V/750V
Accuracy	± 1.0%
DC Current	0 – 40mA/400mA/20A
Accuracy	± 1.0%
AC Current	0 – 40mA/400mA/20A
Accuracy	± 1.5%
Resistance	0 - 400 Ω /4K Ω /40K Ω /400K Ω /4M Ω /40M Ω /400M Ω
Accuracy	± 0.8%
Capacitance	0 – 4nF/40nF/400nF/4uF/40uF
Accuracy	± 5%
Frequency	0 – 4kHz/40KHz/400KHz/4000kHz
Accuracy	± 0.1%
Logic Test, Diode Test, and Audible Continuity Test Facility	
Has Overload Protection of 500V DC /AC RMS in Resistance, Capacitance, Logic Test, Frequency, Diode Test and Audible Continuity Test Ranges	



Data Hold	
Auto Power Off	
Live Wire Detection	
Display	4- $\frac{1}{2}$ Digits 19999 Counts Backlit LCD
DC Voltage	0 – 200mV/2V/20V/200V/1000V
Accuracy	± 0.1%
AC Voltage	0 – 2V/20V/200V/750V
Accuracy	± 0.8%
DC Current	0 – 200uA/2mA/200mA/20A
Accuracy	± 0.5%
AC Current	0 - 20mA/200mA/20A
Accuracy	± 1.5%
Resistance	0 - 200 Ω /2K Ω /20K Ω /200K Ω /2M Ω /200M Ω
Accuracy	± 0.4%
Capacitance	0 - 20nF/2uF/200uF
Accuracy	± 3.5%
Frequency	0 – 20kHz/200kHz
Accuracy	± 3%
Temperature	-40°C ~ +1000°C
Accuracy	± 0.8%
Diode Test and Audible Continuity Test	
Confirms to IEC 1010-1 Standards	



T-RMS Measurement	
Data Hold	
Auto Power Off	
Display	4 ½ Digits 19999 Counts Large LCD
DC Voltage	0 – 200mV/2V/200V/1000V
Accuracy	± 0.5%
AC Voltage	0 – 200mV/2V/20V/200V/1000V T-RMS
Accuracy	± 0.1%
DC Current	0 - 20mA/200mA/10A
Accuracy	± 0.5%
AC Current	0 – 20mA/200mA/10A T-RMS
Accuracy	± 1.0%
Resistance	0 - 200 Ω /2K Ω /20K Ω /200K Ω /2M Ω /20M Ω
Accuracy	± 0.1%
Capacitance	0 – 20nF/200nF/2 μ F/20 μ F
Accuracy	± 2.0%
Frequency	0 – 20KHz/200KHz
Accuracy	± 1.0%
Diode Test and Audible Continuity Test	



The instrument has overload protection up to 20A DC/AC RMS in the Voltage Range and 1000V DC/AC RMS in the Current Range.

Surge Protection of 8 kV peak IEC 61010

“O” Ring Seal Body

The instrument has IP-67 Protection making the body water proof, even if dipped in 1m. deep water for 30 mins.

Double molded injection body with rubber lining to provide insulation against electrical shocks and anti-slip grip.

Confirms to EN61010-1, CAT IV 600V, CAT III 1000V.

Two Years’ Warranty against any manufacturing defects

Fully Protected DMM

1200V DC/AC RMS Protection in Voltage Ranges

20A DC/AC RMS Protection in Ampere Ranges

600V DC/AC RMS Protection in Resistance, Capacitance, Frequency, Continuity and Diode Test Range

Surge Protection of 8kV peak IEC61010

“O” Ring Seal Body

IP-67 Protection

Data Hold to freeze displayed reading

Relative Measuring facility

Auto Power Off

Display 3-½ Digits 4000 Counts Backlit LCD

DC Voltage 0 - 400mV/4V/40V/400V/1000V

Accuracy ± 0.5%

AC Voltage 0 - 400mV/4V/40V/400V/1000V

Accuracy ± 1.2%

DC Current 0 – 400uA/4000uA/40mA/400mA/20A

Accuracy ± 1.0%

DC Current 0 – 400uA/4000uA/40mA/400mA/20A

Accuracy ± 1.5%

Resistance 0 - 400 Ω /4k Ω /40K Ω /400k Ω /4M Ω /40M Ω

Accuracy ± 1.0%

Capacitance 0 – 4nF/40nF/400nF/4uF/40uF/200uF

Accuracy ± 3.0%

Frequency 0 – 9.999Hz/99.99Hz/999.9Hz/9.999KHz/99.99kHz/999.9kHz/9.999MHz

Accuracy ± 1.2%

Duty Cycle 0.1% - 99.9%

Accuracy ± 1.2%

Diode Test and Audible Continuity Test

Confirms to CAT-III 1000V, CAT IV 600V, EN61010-1, CE.



T-RMS Measurement	
Data Hold to Freeze the displayed data	
Auto Power Off	
Double Molded Body	
Display	4-½ Digits 19999 Counts LCD
DC Voltage	0 – 200mV/2V/20V/200V/1000V
Accuracy	± 0.5%
AC Voltage	0 – 200mV/2V/20V/200V/750V T-RMS
Accuracy	± 1.0%
DC Current	0 – 200uA/2mA/20mA/200mA/20A
Accuracy	± 0.5%
AC Current	0 – 200uA/2mA/20mA/200mA/20A T-RMS
Accuracy	± 1.2%
Resistance	0 - 200 Ω /2K Ω /20K Ω /200K Ω /2M Ω /20M Ω
Accuracy	± 0.15%
Frequency	0 – 2KHz/20KHz/200KHz
Accuracy	± 0.5%
Duty Cycle	0 – 99.9%
Accuracy	± 0.1%
Diode Test, Logic Test and Audible Continuity Test	



Safest Instrument with full protection	
Overload protection up to 1200V DC / AC RMS in the AC/DC Voltage range.	
Overload protection up to 20A DC/AC RMS by fast blow fuse in the AC/DC Current range.	
Overload protection up to 600V DC / AC RMS in the capacitance, Frequency, Temperature, Resistance, Continuity and Diode Test Range (For METRASAFE 13 & METRASAFE 14)	
Overload protection up to 1000V DC / AC RMS in the capacitance, Frequency, Temperature, Resistance, Continuity and Diode Test Range (For METRASAFE 15, METRASAFE 16 & METRASAFE 18)	

Fully Protected DMM

1200V DC/AC RMS Protection in Voltage Ranges

20A DC/AC RMS Protection in Ampere Ranges

600V DC/AC RMS Protection in Resistance, Capacitance, Temperature, Frequency, Diode Test and Continuity Test Range

Surge Protection of 8kV peak IEC61010

“O” Ring Seal Body

IP-67 Protection

Data Hold to freeze displayed reading

Relative Measuring facility

Auto Power Off

Display	3-½ digits 3999 Counts Backlit LCD
DC Voltage	0 - 400mV/4V/40V/400V/1000V
Accuracy	± 0.5%
AC Voltage	0 - 400mV/4V/40V/400V/1000V
Accuracy	± 1.2%
DC Current	0 - 400uA/4000uA/40mA/400mA/20A
Accuracy	± 1.0%
AC Current	0 - 400uA/4000uA/40mA/400mA/20A
Accuracy	± 1.5%
Resistance	0 - 400 Ω /4K Ω /40K Ω /400K Ω /4M Ω /40M Ω
Accuracy	± 1.0%
Capacitance	0 - 4nF/40nF/400nF/4uF/40uF/200uF
Accuracy	± 3%
Frequency	0 - 9.999Hz/99.99Hz/999.9Hz/9.999kHz/99.99kHz/999.9kHz/9.999MHz
Accuracy	± 1.2%
Duty Cycle	0.1% ~ 99.9%
Accuracy	± 1.2%
Temperature	-20°C to +760°C/-4°F to +1400°F
Accuracy	± 3%
Diode Test & Audible Continuity Test	
Confirms to CAT-III 1000V, CAT IV 600V, EN61010-1, CE.	



Fully Protected DMM	
1200V DC/AC RMS Protection in Voltage Ranges	
20A DC/AC RMS Protection in Ampere Ranges	
600V DC/AC RMS Protection in Resistance, Capacitance, Frequency, Temperature, Continuity and Diode Test Ranges	
Surge Protection of 8kV Peak IEC61010	
"O" Ring Seal Body	
T-RMS measurement, Peak Hold, Relative Measuring	
MAX /MIN Recording	



Auto Power Off	
Display	3-½ Digits 4000 Counts Backlit LCD with Analog Bargraph
DC Voltage	0 - 400mV/4V/40V/400V/1000V
Accuracy	± 0.5%
AC Voltage	0 - 400mV/4V/40V/400V/1000V T-RMS
Accuracy	± 0.8%
DC Current	0 - 400uA/4000uA/40mA/400mA/20A
Accuracy	± 1.2%
AC Current	0 - 400uA/4000uA/40mA/400mA/20A T-RMS
Accuracy	± 1.5%
Capacitance	0 - 4nF/40nF/400nF/4uF/40uF/400uF/4mF/40mF
Accuracy	± 3%
Frequency	0 - 4kHz/40kHz/400kHz/40MHz
Accuracy	± 1.2%
Temperature	-20°C to +760°C /-4°F to +1400°F
Accuracy	± 3%
Diode Test and Audible Continuity Test	
Confirms to CAT-III 1000V, CAT-IV 600V, EN61010-1, CE	

Fully Protected DMM	
1200V DC/AC RMS Protection in Voltage Ranges	
20A DC/AC RMS Protection in Ampere Ranges	
600V DC/AC RMS Protection in Resistance, Capacitance, Frequency, Temperature, Continuity and Diode Test Ranges	

Surge Protection of 8kV Peak IEC61010	
"O" Ring Seal Body	
IP-67 Protection	
Peak Hold	
Max /MIN Recording	
Auto Power Off	

Display	3-½ Digits 4000 Counts Backlit LCD with Analogue Bargraph
DC Voltage	0 - 400mV/4V/40V/400V/1000V
Accuracy	± 0.5%
AC Voltage	0 - 400mV/4V/40V/400V/1000V
Accuracy	± 0.8%
DC Current	0 - 400uA /4000uA/40mA/400mA/20A
Accuracy	± 1.2%
AC Current	0 - 400uA/4000uA/40mA/400mA/20A
Accuracy	± 1.5%
Resistance	0 - 400 Ω /4k Ω /40K Ω /400K Ω /4M Ω /40M Ω
Accuracy	± 0.8%
Capacitance	0 - 4nF/40nF/400nF/4uF/40uF/400uF/4mF/40mF
Accuracy	± 3%
Frequency	0 - 4KHz/40KHz/400KHz/40MHz
Accuracy	± 1.2%
Temperature	-20°C to +760°C /-4°F to 1400°F
Accuracy	± 3%
Diode Test and Audible Continuity Test	
Confirm to CAT-III 1000V, CAT IV 600V, EN61010-1, CE	



Fully Protected DMM	
1200V DC/AC RMS Protection in Voltage Ranges.	
20A DC/AC RMS Protection in Ampere Ranges.	
1000V DC/AC RMS Protection in Resistance, Capacitance, Frequency, Temperature, IR Temp. measurement, Diode and Continuity Test.	
"O" Ring Seal Body	
IP-67 Protection	
Surge Protection of 8kV peak IEC-61010	
T-RMS measurement	
Relative Measurement	
Data Hold and Peak Hold Facility	
MAX /MIN recording facility.	
Auto Power Off	



Display	4-½ Digits 40,000 Count Backlit LCD with Analog Bargraph
DC Voltage	0 - 400mV/4V/40V/400V/1000V
Accuracy	± 0.06%
AC Voltage	0 - 400mV/4V/40V/400V/1000V T-RMS
Accuracy	± 1.0%
DC Current	0 - 400uA/4000uA/40mA/400mA/10A
Accuracy	± 1.0%
AC Current	0 - 400uA/4000uA/40mA/400mA/10A T-RMS
Accuracy	± 1.5%
Resistance	0 - 400 Ω /4K Ω /40K Ω /400K Ω /4M Ω /40M Ω

Accuracy	± 0.3%
Capacitance	0 - 40nF/400nF/4uF/40uF/400uF/4000uF/40mF
Accuracy	± 3.5%
Frequency	40Hz/400Hz/4KHz/40KHz/400KHz/4MHz/40MHz/100MHz
Accuracy	± 0.1%
Duty Cycle	0.1 to 99.90%
Accuracy	± 1.2%
Temperature	-58°F to 1832°F / -50°C to 1000°C
Infra Red Non Contact Temperature measuring Range : -30°C ~ -500°C / -22°F to 1022°F (Optional)	
Process Display 4-20mA = 0 - 100%	
Diode Test and Audible Continuity Test	
Confirms to CAT-III 1000V, CAT-IV 600V, EN61010-I,CE.	

Fully Protected DMM	
1200V DC/AC RMS Protection in Voltage Ranges	
20A DC/AC RMS Protection in Ampere Ranges	
1000V DC/AC RMS Protection in Resistance, Capacitance, Frequency, Temperature, Diode and Continuity Test	
Surge Protection 8kV Peak IEC-61010	
"O" Ring Seal Body	
IP-67 Protection	
Wireless USB PC Interface	
T-RMS Measurements	
Peak Hold, Relative Measuring Facility,	
MAX /MIN Recording, Auto Power Off	
Display	4-½ Digits 40,000 Counts Backlit LCD
DC Voltage	0 - 400mV/4V/40V/400V/1000V
Accuracy	± 0.06%
AC Voltage	0 - 400mV/4V/40V/400V/1000V T-RMS
Accuracy	± 1.0%
DC Current	0 - 400µA/4000µA/40mA/400mA/10A
Accuracy	± 1.0%
AC Current	0 - 400µA/4000µA/40mA/400mA/10A T-RMS
Accuracy	± 1.0%
Resistance	0 - 400√4K√40K√400K√4M√40M√
Accuracy	± 0.3%
Capacitance	0 - 40nF/400nF/4µF/40µF/400µF/4000µF/40mF
Accuracy	± 3.5%
Frequency	40Hz/400Hz/4KHz/40KHz/400KHz/4MHz/40MHz/100MHz
Accuracy	± 0.1%
Duty Cycle	0.1% to 99.90%
Accuracy	± 1.2%
Temperature	-58°F to 2192°F / -50°C to 1200°C
Accuracy	± 1.0%
Diode Test and Audible Continuity Test Facility	
Confirms to EN61010-1, CAT-III 1000V, CAT-IV 600V, UL 61010B-2-031	



Accessories For Digital Multimeters

Can be used with any Digital Multimeter with 200mV /400mV /600mV DC range	
Can measure AC Current up to 200A.	
Provides output of 1mV/A	
Sensitivity	1A/mV AC
Accuracy	± 2%
Clamp Jaw Size	16mm Dia.



Clamp Jaw Size - 30mm	
Low Battery Indication	
Provides output of 1mV/A for 600A Range, to be used with any DMM with 400mV or 600mV range	
Also provides 0.1mV/A output for 1000A range to be used with 600mV range	
Can be used to measure AC/DC Current up to 1000A.	
Can be used with any Digital Multimeter with 200m / 400m /600m /2 /4 /6V DC range.	
Confirms to CAT-II 600V of the EN-61010-1 and EN-61010-2-032 Standards	



Measures temperature in the range of -30 to 550°C	
Measures in Fahrenheit scale also	
Distance to Sighting Ratio	8:1
Emissivity	0.95 Fixed
Auto Power Off	
Low Battery Indication	
Provides an output for 1mV/Degree C.	
Can be used with any Digital Multimeter with 200m /400m /600m /2 /4 /6 V DC range.	
Spectral Response	6 to 14um (wavelength)
Has Laser Pointer	



High Voltage Probe to measure AC/DC High Voltage	
Measures upto 40kV DC and 28kV AC	
Accuracy	± 1%
Cable Length 1m	



Digital Non Contact Infra Red Thermometer

Gun type Infra Red Thermometer

Laser pointer Indication to indicate the target under test.

Data Hold & Auto Power Off

MAX/Min Temperature Display

Backlit LCD Display

Trigger Lock

Over range Indication

Measuring Range -30°C to 260°C /-22°F to 500°F

Resolution 0.1°C /°F

Accuracy ± 2%

Distance to Sighting 8:1

Emissivity 0.95 fixed Value

Special Response 6 ~ 14um



Gun type Infra Red Thermometer

Anti-Slip Splash proof body

Dual Laser sighting to indicate the diameter of area whose temperature is being measured

Automatic Data Hold

MAX Temperature record

Set High and Low alarm

Fast Response Time

Selectable °C /°F Scales

Trigger Lock facility for continuous measurement

Backlight LCD Display

Temperature Range -50°C to 600°C (-58°F to 1112°F)

Distance to sighting 12:1

Display Resolution 0.1°C/°F

Accuracy ± 1.0%

Response Time 150ms

Spectral Response 8 ~ 14um

Emissivity Digitally Adjustable from 0.10 to 1.0

Safety "CE" Comply with EMC



Gun type Infra Red Thermometer

Anti-Slip Splash Proof body

Dual Laser sighting to indicate the diameter of area whose temperature is being measured

Fast Response 150ms

Automatic Data Hold

Max record facility

Hi - Low Alarm facility

Trigger Lock facility for continuous temperature measurement

Auto Power Off

Selectable °C /°F Scales

Over Range /Low Battery Indication

Display 4 Digits White Backlit LCD

Range -50°C to 800°C /-58°F to 1472°F



Accuracy	± 1.0%
Resolution	0.1°C /0.1°F
Distance to Sighting	12:1
Spectral Response	8 ~ 14um
Emissivity	Digitally adjustable from 0.10 to 1.0
Safety	"CE" Comply with EMC

Gun Type Infra Red Thermometer

Laser Pointer indication to Indicate the target under test

Data Hold Facility

Auto Power Off

Max / Min record facility

Hi - Lo Alarm setting facility

Selectable °C /°F Scales

Over Range /Low Battery Indication

Display 3 ½ Digits backlit Liquid Crystal Display

Range -30°C to 550°C /-22°F to 1022°F

Resolution 0.5/1°C, 1°F

Accuracy ± 2%

Sighting 1-beam laser marker < 1mW (Class 2)

Emissivity: Adjustable from 0.1 to 1.0

Spectral Response: 6 to 14um nominal



Gun type Infra Red Thermometer

Anti-Slip Splash proof body

Dual Laser pointer Indication to indicate the diameter of the area whose temperature in being measured

Fast Response Time: 150ms

Automatic Data Hold

Max Record Facility

Hi-Lo Alarm Facility

Trigger Lock facility for continuous temperature measurement without pressing the trigger

Auto Power Off

Selectable °C /°F Scales

Over range /Low Battery Indication

Display 4 Digit White Backlit LCD

Range -50°C to 1000°C /-58°F to 1832°F

Resolution 0.1°C /0.1°F

Accuracy ± 1.0%

Distance to Sighting 20:1

Emissivity Digitally Adjustable from 0.10 - 1.00

Spectral Response 8 - 14um

Safety "CE" Comply with EMC



Gun type Infra Red Thermometer

Anti-Slip Splash Proof Body

Laser Pointer Indication to Indicate the target under test

Automatic Data Hold & Power Off facility	
Selectable °C / °F Scales	
Over range / Low Battery Indication	
Display	3 ½ Digits 1999 Counts LCD with Backlit
Range	-50°C to 1000°C / -58°F to 1832°F
Resolution	0.1°C / °F (up to 200°) else 1°C / °F
Accuracy	± 1.5%
Distance to Sighting	50:1
Response Time	Less than 1 Sec
Emissivity	0.95 fixed value
Spectral Response	8 ~ 14µm
Safety	"CE" Comply with EMC



Selectable °C / °F Scales	
IR Measurement Range	-50°C to 1300°C / -58°F to 2372°F
Resolution	0.1°C / °F
Emissivity	Digitally Adjustable from 0.10 to 1.0
Distance to Sighting Ratio	30:1
TK Measurement Range	-50°C to 1370°C / -58°F to 2498°F
Resolution	0.1°C / °F
Accuracy	± 1.5%
Provides analogue output of 1mV / °F for control action and data recording	
Mains and Battery Operated	
Facility for Offline Data Recording up to 20 Readings	
Safety	"CE" Comply with EMC

Wireless USB Interface (RF 433MHz) for PC Interface	
Unique flat surface, Modern Housing design	
Built in Laser Pointer	
With built in contact type thermometer for K-type temperature sensor	
Automatically captures emissivity of the target	
Max / Min / Dif / Avg recording facility	
High - Low Alarm Setting Facility	
Auto Data Hold facility	
Auto Power Off facility	
Low Battery Indication	
Trigger lock facility to continuous measurement without pressing the trigger	
Tripod Stand provided to place the meter for continuous measurement	
Selectable °C / °F Scales	
IR Measurement Range	-50°C to 1050°C / -58°F to 1922°F
Distance to Sight	30:1
Resolution	0.1°C / °F
Accuracy	± 1.5%
Emissivity	Digitally Adjustable from 0.10 to 1.0
TK Measurement Range	-50°C to 1370°C / -58°F to 2498°F
Resolution	0.1°C / °F
Accuracy	± 1.5%
Safety	"CE" Comply with EMC



Gun type Infra Red Thermometer with USB PC Interface	
Anti-Slip Splash proof body	
Dual Laser sighting for indicating the diameter of target whose temperature is being measured	
Unique flat surface, modern housing design	
With built in contact type thermometer for K-type temperature sensor	
MAX/MIN/AVG/DIF Temperature	
Automatic Data Hold	
Trigger Lock	
High & Low Alarm setting facility	
Selectable °C / °F Scales	
Transmit data to PC with USB	
Data Storage up to 100 Data points	
Display:	Backlit LCD Display
TK Temperature Range	-50°C to 1370°C (-58°F to 2498°F)
Accuracy	± 1.5%
Resolution	0.1°C / °F
IR Temperature Range	-50°C to 1800°C / -58°F to 3272°F
Resolution	0.1°C / °F
Accuracy	± 1.0%
Response Time	150ms
Spectral Response	8 ~ 14µm
Distance to Sighting Ratio	50:1
Emissivity	Digitally adjustable from 0.10 to 1.0



Unique flat surface, modern housing design	
Built in Laser Pointer	
With built in contact type thermometer for K-type temperature sensor	
Automatically captures emissivity of the target	
Max / Min / Dif / Avg recording facility	
High Low Alarm Setting facility	
Data Hold facility	
Auto Power Off facility	
Low Battery Indication	
Trigger Lock facility to continuous measurement without pressing the trigger	
Tripod Stand provided to place the meter for continuous measurement	



Gun type Infra Red Thermometer with USB PC Interface	
Anti-Slip Splash proof body	
Dual Laser sighting for indicating the diameter of target whose temperature is being measured	
Unique flat surface, modern housing design	
With built in contact type thermometer for K-type temperature sensor	
MAX/MIN/AVG/DIF Temperature	
Automatic Data Hold	
Trigger Lock	
High & Low Alarm setting facility	
Selectable °C / °F Scales	
Transmit data to PC with USB	
Data Storage up to 100 Data points	



Display:	Backlit LCD Display
TK Temperature Range	-50°C to 1370°C (-58°F to 2498°F)
Accuracy	± 1.5%
Resolution	0.1°C /°F
IR Temperature Range	50°C to 2200°C / -58°F to 3992°F
Resolution	0.1°C /°F
Accuracy	± 1.0%
Response Time	150ms
Spectral Response	8 ~ 14um
Distance to Sighting Ratio	50:1
Emissivity	Digitally adjustable from 0.10 to 1.0

Gun type Infra Red Thermometer	
Telescopic Sighting	
Data Hold Facility	
Hi-Lo Alarm Setting Facility	
Auto Power Off	
Selectable °C /°F Scales	
Over Range /Low Battery Indication	
Display	4 digits Backlit LCD
Measuring Range	500 to 3000°C
Accuracy	1%
Response Time	200mS
Resolution	1°C to 1°F
Emissivity	Adjustable 0.10 ~ 1.00
Distance to Sighting Ratio	120:1
Max /Min /Avg Temperature recording	



Digital Power Factor Meter

Microprocessor based 3 phase and single phase Power Factor measurement.

Available in 96 * 96 mm Bezel Size for three phase and single phase meters and 96 * 48mm for single phase meters.

Meters can be factory set for different CT/PT ratios to give a direct reading.

Three phase meters display individual phase values and also system values.

Available for 415V(LT) and 110 V(HT) systems and for 1 Amp and 5 Amp CT secondary.

Auxiliary Power Supply: 230V AC 50Hz /110V AC 50Hz

In the Model number Y could be 3 for 3 phase and 1 for single phase and X could be 2 for 2 wire loads, 3 for 3 wire loads and 4 for 4 wire loads



Digital Pressure Meter

Backlit LCD Dual Display

Low Battery Indication

Under Range and Over Range Indication

Fast Response Time

Battery Operated.

Measuring Range 0 - 5 PSI

It measures in various units like inH₂O, PSI, bar, mbar, kPa, inHg, mmHg, OZin, ftH₂O, cmH₂O, kgcmz.

With RS-232 PC Interface Facility

High Accuracy of 0.3%



Digital Phase Angle Meter

Size Available	96 x 96 'or' 96 x 48 mm sq
Display	3-1/2 Digits Red LED Display
Range	-180.0° to + 180.0°
Input	300V AC & 5A AC
Voltage to Voltage & Voltage to Current options available	
Auxiliary Power Supply	230 /110V AC 50Hz (AnyOne)



Digital Process Meter

Measures and sources various parameters

Display 3-3/4 Digits 3999 Counts Backlit LCD

Confirms to IEC 61010

Data Hold to freeze the displayed data

Measures

DC Voltage	0 - 4 /40 /400V
Accuracy	±0.2%
DC milli Volt	0 - 40m /400mV
Accuracy	±0.2%
AC Voltage	0 - 400m /4 /40 /400V
Accuracy	±0.5%
DC Current	0 - 40m /400mA
Accuracy	±0.2%
AC Current	0 - 40m /400mA
Accuracy	±0.5%
Resistance	0 - 400/4k/40k/400k/4M/40M Ω
Accuracy	±0.2%
Frequency	0 - 50/500/5k/50k/100kHz
Accuracy	±0.1%



Digital Power Analyzer

Microprocessor Based Instrument	
Measures Single Phase Voltage, Current, Watt and Frequency	
Suitable for direct line applications	
Can also be used in conjunction with a CT having 1A or 5A CT secondary	
Display	4 Digit LED Display
Minimum 10% of full load current is required for proper operation	
Accuracy	1%



Temperature through PT-100 Sensor	-200°C to 700°C
Accuracy	±0.5%
Temperature through Cu-50 Sensor	-50°C to 150°C
Accuracy	±0.5%
Temperature through R type Sensor	-40°C to 1760°C
Accuracy	±0.5%
Temperature through S type Sensor	-20°C to 1760°C
Accuracy	±0.5%
Temperature through B type Sensor	400°C to 1800°C
Accuracy	±0.5%
Temperature through E type Sensor	-200°C to 500°C
Accuracy	±0.5%
Temperature through K type Sensor	-200°C to 950°C Accuracy : ±0.5%
Temperature through J type Sensor	-200°C to 700°C Accuracy : ±0.5%
Temperature through T type Sensor	-200°C to 400°C Accuracy : ±0.5%
Temperature through N type Sensor	-200°C to 1000°C Accuracy : ±0.5%
Diode Test and Continuity Test Facility	

Sources

Resistance	0 to 400 Ω Accuracy : ±0.5%
DC milli Volt	-10 to 100mV Accuracy : ±0.5%
DC Voltage	-0.5 to 5.5V Accuracy : ±0.2%
Frequency	0 - 100/1k/10kHz Accuracy : ±0.2%
XMT	0 to -20mA Accuracy : ±0.2%
DC Milli Ampere	0 to 22mA Accuracy : ±0.2%
Temperature output for Pt-100 Sensor	-200°C to 850°C Accuracy : ±0.5%
Temperature output for Cu-50 Sensor	-50°C to 150°C Accuracy : ±0.5%
Temperature output for R type Sensor	-40°C to 1760°C Accuracy : ±0.5%
Temperature output for S type Sensor	-20°C to 1760°C Accuracy : ±0.5%
Temperature output for B type Sensor	-40°C to 1760°C Accuracy : ±0.5%
Temperature output for E type Sensor	-200°C to 1000°C Accuracy : ±0.5%
Temperature output for K type Sensor	-200°C to 1370°C Accuracy : ±0.5%
Temperature output for J type Sensor	-200°C to 700°C Accuracy : ±0.5%
Temperature output for T type Sensor	-200°C to 400°C Accuracy : ±0.5%
Temperature output for N type Sensor	-200°C to 1300°C Accuracy : ±0.5%

Digital SMT Component Tester

Auto Ranging, Auto Selection SMT Component tester	
Display	6000 Counts LCD Display
Overload and Low Battery Indication	
Auto Power Off	
DC Voltage	0 – 600m /6 /50V DC
Accuracy	±0.8%
AC Voltage	0 – 600m /6 /50V AC
Accuracy	±1.0%
Resistance	0 – 600 /6k /60k /600k /6M /60M Ω
Accuracy	±0.8%
Capacitance	0 – 6n /60n /600n /6u /60u /600u /6m /60mF
Accuracy	±3.0%
Diode & Continuity Test	
Provided with extended probes for discrete component testing.	



Digital Sound Level Meter

Can be used for both audible sound and machine noise	
Can be used for both A and C weighting	
Max Hold and Data Hold facility	
Provides Analog AC/DC outputs for the measurement-made for connection to an analyzer or recorder	
AC output of 0.65V rms at Full Scale (upper limit of each level)	
DC output of 10mV/dB	
Built-in Self-Calibration check facility at 94dB	
Measures in both Low range of 30 to 100dB and hi range of 60 to 130dB	
Accuracy	±1.5dB
Resolution	0.1dB
Dynamic Range 65dB	
Frequency Range	31.5Hz ~ 8kHz
Has Fast and Slow response facility	
Meets IEC651 type 2, ANSI S1.4 type 2 standards	



Can be used for both audible sound and machine noise	
Can be used for both A and C weighting	
Max Hold facility	
Measures in both Low range of 30 to 100dB and hi range of 60 to 130dB	
Range	30 - 130 dB
Accuracy	±1.5dB
Resolution	0.1dB
Frequency Response	31.5Hz to 8kHz
Has Fast and Slow response facility	
Meets IEC651 type 2, ANSI S1.4 type 2 standards	



Measures both audible sound and machine noise	
Has both A and C Weighting	
USB PC Interface with software	
Analogue output of AC 1Vrms and DC 10mV/dB for connection to frequency analyzer or X-Y shaft recorder	
Max /Min Data recording	
Data Hold to freeze displayed data	
Display	4 Digits Large LCD with analogue bargraph
Range	30 - 130 dB
Resolution	0.1dB
Dynamic Range	50dB
Accuracy	±1.4dB
Has Lo, Med. and HI measuring modes	
Time Weighting	FAST and SLOW
Frequency Range	31.5Hz to 8kHz
Confirms to IEC61672-1 CLASS2 for Sound Level Meters	



Digital Storage Oscilloscope

25MHz Bandwidth	
7 Inch Color TFT-LCD Display, 480*234	
500MSa/Sec Sampling Rate	
Channels	2CH+1EXT
Memory Depth	32kpts
6 digits hardware Frequency Counter, real time counting display	
Support SCPI programming command control	
Interface	USB Device ,USB Host, RS-232, Pass/Fail

50MHz Digital Storage Oscilloscope	
7 Inch Color TFT-LCD Display, 480*234	
500MSa/Sec Sampling Rate	
Channels	2CH+1EXT
Memory Depth	32kpts
6 digits hardware frequency counter, real time counting display	
Support SCPI programming command control	
Interface	USB Device ,USB Host, RS-232, Pass/Fail

70MHz Digital Storage Oscilloscope	
7 Inch Color TFT-LCD Display, 480*234	
1GSa/Sec Sampling Rate	
Channels	2CH+1EXT
Memory Depth	2Mpts
6 digits hardware frequency counter, real time counting display	
Support SCPI programming command control	
Interface	USB Device, USB Host, RS-232, Pass/Fail

100MHz Digital Storage Oscilloscope	
7 Inch Color TFT-LCD Display, 480*234	
1GSa/Sec Sampling Rate	
Channels	2CH+1EXT
Memory Depth	2Mpts
6 digits hardware frequency counter, real time counting display	
Support SCPI programming command control	
Interface	USB Device, USB Host, RS-232, Pass/Fail

150MHz Digital Storage Oscilloscope	
7 Inch Color TFT-LCD Display, 480*234	
1GSa/Sec Sampling Rate	
Channels	2CH+1EXT
Memory Depth	2Mpts
6 digits hardware frequency counter, real time counting display	
Support SCPI programming command control	
Interface	USB Device, USB Host, RS-232, Pass/Fail

Unique digital filter and data recorder function	
Embedded 12 languages, online help, one key storing and one key printing	
Vertical Sensitivity 2mV ~ 10V/Div 8	
Bit Vertical Resolution	
Trigger Source	CH1, CH2, Ext, Ext/5, AC Line
Trigger Type	Edge, Pulse, Video, Slope, Alternative
Math Operation	+, -, x, /, FFT

Unique digital filter and data recorder function	
Embedded 12 languages, online help, one key storing and one key printing	
Vertical Sensitivity 2mV ~ 10V/Div 8	
Bit Vertical Resolution	
Trigger Source	CH1,CH2, Ext, Ext/5, AC Line
Trigger Type	Edge, Pulse, Video, Slope, Alternative
Math Operation	+, x, /, FFT

Unique digital filter and data recorder function	
Embedded 12 languages, online help, one key storing and one key printing	
Vertical Sensitivity 2mV ~ 10V/Div 8	
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200MHz Digital Storage Oscilloscope	
7 Inch Color TFT-LCD Display, 480*234	
1GSa/Sec Sampling Rate	
Channels	2CH+1EXT
Memory Depth	2Mpts
6 digits hardware frequency counter, real time counting display	
Support SCPI programming command control	
Interface	USB Device, USB Host, RS-232, Pass/Fail

Unique digital filter and data recorder function	
Embedded 12 languages, online help, one key storing and one key printing	
Vertical Sensitivity 2mV ~ 10V/Div 8	
Bit Vertical Resolution	
Trigger Source	CH1, CH2, Ext, Ext/5, AC Line
Trigger Type: Edge, Pulse, Video, Slope, Alternative	
Math Operation +, x, /, FFT	



Accessories to Digital Storage Oscilloscope

High Voltage Probe to measure AC/DC High Voltage	
Measures upto 30kV DC and 20kV AC	
Accuracy	± 1%
Cable Length 1m	



Digital Stroboscope

Exclusive One Chip Micro Controller LSI Circuit	
Crystal Time base to offer high accuracy	
Wide Measuring Range	
Display	LCD With annunciators
Range	50 to 12,000 FPM
Resolution	0.1 FPM up to 1000FPM else 1FPM
Accuracy	±0.05%
Sampling Rate	0.4 secs
Auxiliary Power Supply	230V AC 50Hz



Provides fast and accurate Non-contact RPM and surface speed measurements of rotating objects

Uses the CPU technique, photoelectrical technique, and junction laser technique for one instrument combined PHOTO TACHOMETER (RPM&REV)

Two test modes: rotation speed mode (unit: RPM) & count mode (unit: REV)

Wide measure range and high resolution Display

5 Digital Large Backlit LCD	
Built in memory recall Max. Min. and Last Value stored	
RPM Test Range	2 to 99,999 RPM
Count Range	1 to 99,999
Accuracy	±0.05% ± 1Digit
Resolution	0.1RPM up to 1000RPM else 1RPM
Detecting Distance	50mm to 500mm



Exclusive One Chip Micro Controller LSI Circuit	
Crystal Time base to offer high accuracy	
Wide Measuring Range	
Display	LCD With annunciators
Range	50 to 40,000 FPM
Resolution	0.1 FPM up to 1000FPM else 1FPM
Accuracy	±0.05%
Sampling Rate	0.4 secs
Auxiliary Power Supply	230V AC 50Hz



The Digital Tachometer provides fast and accurate Contact and Non-Contact RPM and surface speed measurements of rotating objects.

Wide measure range and high resolution
High visible digital LCD and Backlight display.

40 reading memories	
10 selectable MAX measurements, 10 selectable MIN measurements, 10 selectable AVG measurements, 10 selectable DATA measurements.	
Contact Test range	2 to 20,000RPM
Non-Contact Test range	2 to 99,999RPM
Detecting distance	50mm to 500 mm.
9V Battery Operated	



Digital Tachometer

Last Value, Max Value and Min Value memory	
Exclusive One-chip microcomputer LSI Circuit	
Quartz Crystal Time Base	
Display	5 Digits LCD
Range	60 to 49,999 RPM
Surface Speed 6 to 5000 m/min.	
Resolution	0.1RPM up to 1000 RPM thereafter 1 RPM
	0.01m/min up to 100m/min thereafter 0.1m/min
Accuracy	±0.05%
Complete with carrying case, RPM Cone Adaptor, RPM Funnel Adaptor, Surface speed test wheel and operation manual	



Digital Temperature Controller

Microcontroller based Universal Temperature Controller	
Can be programmed for J, K or RTD Sensor	
User Friendly set up	
Has Single Set Point	
3-1/2 Digit RED LED Display	
Size	96 x 96 mm sq
For J type: 0 - 600°C,	
For K type: 0 - 1250°C and	
For RTD (PT-100) 0 - 400°C	
Output	1NO/NC Relay
Auxiliary Power Supply 230V AC 50Hz	



Flush Mounting type	
Sizes	96 x 96 mm sq 'OR' 72 x 72 mm sq
Display	3-1/2 Digits Seven Segment Red LED display
Cold Junction Compensation	Automatic for Thermocouple
Open Sensor Indication	
Sensor Input	J, K, R, S, T/C, PT-100 RTD, V & 4 - 20mA
Accuracy	J,K 1%; R,S 0.5%; PT-100 RTD 0.2%, mV, V, mA 0.1%
Hysteresis Pot	1 to 10°C for each point for ON - OFF Model
Control Action	ON/OFF or Time Proportional
Control output (options available)	a. 6A or 20A, 1C/O Relay, 230V. b. 12V DC pulse output for SSR for each set point
Single Set Point	
Auxiliary Power Supply	230V Single Phase AC 50Hz



Flush Mounting type	
Sizes	96 x 96 mm sq 'OR' 72 x 72 mm sq
Display	3-1/2 Digits Seven Segment Red LED display
Cold Junction Compensation	Automatic for Thermocouple
Open Sensor Indication	
Sensor Input	J, K, R, S, T/C, PT-100 RTD, V & 4 - 20mA
Accuracy	J,K 1%; R,S 0.5%; PT-100 RTD 0.2%, mV, V, mA 0.1%
Hysteresis Pot	1 to 10°C for each point for ON - OFF Model
Control Action	ON/OFF or Time Proportional
Control output (options available)	a. 6A or 20A, 1C/O Relay, 230V. b. 12V DC pulse output for SSR for each set point
Dual Set Point	
Auxiliary Power Supply	230V Single Phase AC 50Hz



K type thermometer Temperature Range	-20° to 1000°C / -4° to 1932°F
Resolution	0.1° (up to 200°) else 1°
Accuracy	±3%
Relative Humidity Range	0.1%RH -100%RH
Resolution	0.1%RH
Accuracy	±3.5%
Confirms to CE	

Humidity meter with Air and Infra Red temperature measurement facility	
Humidity and Air temperature measurement by semiconductor probe	
Max and Data Hold facility	
Auto Power Off facility	
Infra Red Thermometer with laser pointer	
Selectable °C / °F Scales	
Low Battery Indication	

Display	3-1/2 Digits 1999 Digits Dual Backlit Extra Large LCD
Semiconductor Sensor Temperature range	-20° to 60°C
Accuracy	±2°C
Temperature Range for Infra Red Thermometer	-50° to 550°C / -58°F to 932°F
Resolution	0.1° (up to 200°) else 1°
Accuracy	±2.0%
Distance to Sighting Ratio	8:1
Emissivity	0.95 Fixed
Relative Humidity Range	5%RH -95%RH
Resolution	0.1%RH
Accuracy	±3.5%RH
Confirms to CE	



Digital Temperature & Humidity Meter

Humidity meter with Air and K-type thermocouple thermometer	
Humidity and Air temperature measurement by semiconductor sensor	
Max and Data Hold facility	
Auto Power Off facility	
Selectable °C / °F Scales	
Low Battery Indication	
Display	3-1/2 Digits 1999 Counts Backlit Dual
Semiconductor Sensor Temperature range	0° to 40°C



Compact probe size Hygro-Thermometer with Dew Point and Wet Bulb Temperature	
Fast Response time	
Auto Power Off	
High Accuracy and High on performance	
Max / Min Hold and Data Hold Function	
Selectable °C / °F Scales	

Display	4 Digits Backlit Dual LCD
Relative Humidity Range	0 to 100% RH
Resolution	0.01%RH
Accuracy	±2%RH
Temperature Range	-30° to 100°C / -22° to 199°F
Resolution	0.01°
Accuracy Dew Point	±0.5° / 0.9°F
Temperature Range	-30° to 100°C / -22° to 199°F
Resolution	0.01°
Accuracy	±0.5°C / 0.9°F
Wet Bulb Temperature Range	0 to 80°C / 32° to 176°F
Resolution	0.01°
Accuracy	±0.5° / 0.9°F



Digital Thermometer

Displays Temperature, Humidity & Time Simultaneously	
Memory for Max & Min values	
12 Hour /24 Hour Time format	
°C/°F unit selectable	
Alarm Function	
Clock & Calendar function	
Desk Top Placing or Wall Hanging	
Large LCD Display	
Temperature Range	-50 °C TO 70°C
Accuracy	±1 °C
Humidity Range	20% to 90%
Accuracy	±5%RH



CE-Mark approval	
Display	3½ digital 2000 counts with high resolution back-light
K-type thermocouple input °C or °F announced	
Reading HOLD & MAX function	
User-Selectable resolution 0.1°/1°	
Highly accurate with basic 0.1%	
According to temperature standard ITS-90	
Low Battery Indication	
Temperature Range	-50°C to 1300°C, -58°F to 1999°F
Accuracy	±0.3%



Environment comfort display	COMFORT(comfortable),WET (highhumidity), DRY (dobath)
Temperature measuring range	0°C-50°C (32°F-120°F)
Accuracy	±1.0°C (1.8°F)
Humidity measuring range	10%RH - 90%RH
Accuracy	±5%
Time/Temperature/Humidity display	
°C/°F unit selectable	
Highest & Lowest temperature humidity memory function	
Daily alarm functions 12/24 hours clock	



CE-Mark Approval	
Large Backlit LCD Display	
Relative Time clock on Max Min and AVG provides a time reference for major events	
Electronic Offset function	
Temperature Readout in °C, °F or Kelvin	
Auto Power Off	
Range	-200°C to 1372°C (-328°F to 2501°F)
Accuracy	±0.15%



Digital Temperature Indicator

Flush Mounting type	
Sizes	96 x 96 mm sq 'OR' 72 x 72mm sq 'OR' 96 x 48 mm sq
Display	3-1/2 Digits Seven Segment
Red LED display	
Cold Junction	
Compensation	Automatic for Thermocouple
Open Sensor Indication	
Sensor Input	J, K, R, S, T/C, PT-100 RTD, V & 4 - 20mA
Accuracy	J,K 1%; R,S 0.5%;PT-100 RTD 0.2%,mV,V,mA 0.1%
Auxiliary Power Supply	230V Single Phase AC 50Hz.



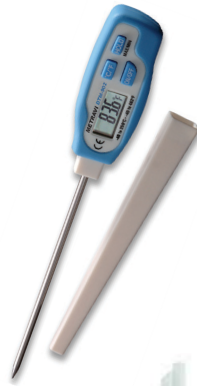
Hand Held Battery Operated	
Is used to measure temperature using PT-100 RTD Sensor	
Measures temperature up	600°C
Accuracy	±1.5%
9V Battery Operated	



CE-Mark Approval	
Two Thermocouple Inputs.	
Can measure temperature of two places at the same time, Differential Temperature Can also be measured between two points	
Large Backlit LCD Display	
Relative Time clock on Max Min and AVG provides a time reference for major events	
Electronic Offset function	
Temperature Readout in °C, °F or Kelvin	
Auto Power Off	
Range	-200°C to 1372°C (-328°F to 2501°F)
Accuracy	±0.15%



Pen type Digital Thermometer	
Max /Min Temperature record	
Auto Power Off	
°C /°F Range selectable	
Waterproof instrument	
Data Hold to Freeze displayed Data	
Display	3-1/2 Digits 1999 Counts LCD
Range	-40° to 250°C / -40°F to 482°F
Resolution	0.1°C /0.1°F
Accuracy	±1.5%



Thermometer with High and Low Alarms	
Built-in 110mm stainless steel sensor	
1 second normal temperature sensing time	
Low Battery Indication	
Data Hold Function	
Temperature can be measured in °C and °F	
Range	-50 to 300°C/ -58°F to 572°F
Accuracy	±1°C
Resolution	0.1°C /0.2°F
Low Battery Indication	



Digital Time Interval Meter

Suitable to test protective device, circuit breaker, tripping coils, relays etc.	
Input	230V Single Phase AC 50Hz.
Number of Channel	One
Display of each channel	7 segment LED type, 4 digits
Ranges	A. 0 - 999.9mSec Resolution 100uSec B. 0 - 9.999 Sec. Resolution 1mSec C. 0 - 99.99 Sec. Resolution 10mSec
Time Start Mode	Simultaneously starts by injection of 20V to 240V AC/DC or by potential Free Contact
Time Stop Mode	Individual stop of timer counting with excitation of auxiliary contacts of relay or switchgear under test.



Suitable to test protective device, circuit breaker, tripping coils, relays etc.	
Input	230V Single Phase AC 50Hz.
Number of Channel	THREE
Display of each channel	7 segment LED type, 4 digits
Ranges	A. 0 - 99.99mSec. Resolution 10uSec B. 0 - 999.9mSec. Resolution 100uSec C. 0 - 9.999mSec. Resolution 1mSec
Time Start Mode	Simultaneously 3 channel starts by injection of 20V to 240V AC/DC or by potential Free Contact
Time Stop Mode	Individual stop of timer counting with excitation of auxiliary contacts of relay or switchgear under test.



Digital Three Phase Ammeter

Designed using microprocessor based multiplexing technique	
Can sense any changes in the line currents	
These are CT Operated meters and are factory set either 1A or 5A CT Secondary	
Displays phase currents for a three phase system	
Size	96 x 96 mm sq,
3-1/2 Digits Red LED Display	
With built-in selector switch	
Measures I _r , I _y , I _b	
Accuracy	±1% of full scale
Current Input	7A Max continuous at any current terminal



Digital Three Phase Voltmeter

Designed using microprocessor based multiplexing technique	
Can sense any changes in the line voltage	
Displays line to line voltages for a three phase system	
Size	96 x 96 mm sq,
3-1/2 Digits Red LED Display	
With built-in selector switch	
Measures V _{r-y} , V _{r-b} , V _{b-y}	
Accuracy	±1% of full scale
Voltage Input	500V Max phase to phase at any voltage terminal



Digital VA Meter

Microprocessor based 3 phase VA measurement.	
Available in 96 * 96 mm Bezel Size.	
Meters can be factory set for different CT/PT ratios to give a direct reading.	
Meters are autoranging from KVA to MVA.	
Available for 415V(LT) and 110 V(HT) systems and for 1 Amp and 5 Amp CT secondary.	
Auxiliary Power Supply	230V AC 50Hz / 110V AC 50Hz.



Digital VAR Meter

Microprocessor based 3 phase VAR measurement.

Available in 96 * 96 mm Bezel Size.

Meters can be factory set for different CT/PT ratios to give a direct reading.

Meters are autoranging from KVAR to MVAR.

Available for 415V(LT) and 110 V(HT) systems and for 1 Amp and 5 Amp CT secondary.

Auxiliary Power Supply: 230V AC 50Hz /110V AC 50Hz.

In the model number X could be 3 for 3 wire loads and 4 for 4 wire loads



Three phase meters display individual phase values and also system values.

Available for 415V(LT) and 110 V(HT) systems and for 1 Amp and 5 Amp CT secondary.

Auxiliary Power Supply | 230V AC 50Hz /110V AC 50Hz

In the Model number Y could be 3 for 3 phase and 1 for single phase and X could be 2 for 2 wire loads, 3 for 3 wire loads and 4 for 4 wire loads

Digital Voltage Controller

Size - 96 x 96 mm. sq.

Display | 3-1/2 Digits

Would measure AC Voltage.

Range: Any Single Range up to 1000V for direct input to the meter 'or' KV rating through a PT input can be made available.

Can set single set point to activate a relay.

Potential free 1 NO+ 1NC Contact

Auxiliary Power Supply: 230V AC 50Hz /110V AC 50Hz/ DC Auxiliary inputs also available

At the time of placing the order, please inform the Voltage range, PTR value (if the input is through a PT), auxiliary power supply



Distance Meter

Measures in imperial /metric units

Start Point Selection

Data Store /Recall

Computes Areas and Volumes

5 Groups of values in memory

Sum of lengths

Auto /Manual shut off

Backlit LCD

Audio warning for wrong readings

Measuring Range 0.5 – 16m (1.64 – 52.48ft)

Accuracy : ±1.0%



Digital Voltmeter

Size - 96 x 96 mm. sq. /72 x 72 mm sq /96 x 48 mm sq

Display: 3-1/2 Digits 'or' 4-1/2 Digits LED Display

Voltmeters for measuring AC voltages.

Range: Any Single Range up to 1000V for direct input to the meter 'or' KV rating through a PT input can be made available.

Auxiliary Power Supply: 230V AC 50Hz /110V AC 50Hz/ DC Auxiliary inputs also available

At the time of placing the order, please inform the Voltage range, PTR value (if the input is through a PT), auxiliary power supply, size, 3-1/2 digits /4-1/2 digits display needs to be mentioned.



ELCB Tester

Taut Band Movement

Simple operation

Wiring check

Robust

Can be used on 2 wires L-E (RCCB /ELCB tester)

Can be used on 3 wires L-E-N (with wiring check)

No batteries

Sense automatically 50 or 60 Hz

Current injected in phase with the voltage.

Current Settings 10-50mA @110Vac (230Vac, 550Vac)

Frequency of operation 50 /60 Hz Sinusoidal

Operating Voltage (L-E) 110Vac (230Vac, 550Vac) +/-15%

Meter Accuracy ±1% of Full Scale



Digital Wattmeter

Digital Watt Meter

Microprocessor based 3 phase and single phase PowerFactor measurement.

Available in 96 * 96 mm Bezel Size for three phase and single phase meters and 96 * 48mm for single phase meters.

Meters can be factory set for different CT/PT ratios to give a direct reading.



Extra Large Liquid Crystal Display.

Very low consumption.

Microprocessor controlled.

Accurate digital readout of disconnection time.

Automatic data hold function.

Zero crossing circuitry permit testing at 0° or 180°.

Disconnection phase polarity shown on L.C.D. display.

Auto-off and off override.

Polarity trip indicator (Positive or Negative phase)

Wiring polarity indicator.

Current Settings 10mA, 20mA,30mA, 200mA, 300mA, 500mA.

Phase Start Selection | 0° and 180°



Over-Temperature Protection, Wiring Correctness Indication, Trip Indicator, Phase Polarity Trip Indicator	
Timer Resolution	1mS (max time=2.999S)
Timer Accuracy	0.6% ±4 dgt
Current Accuracy	±5% ±1mA

Electrical Tester

Non Contact Detection of AC Voltage	
Used to detect live cables from 90V and 1000V	
Indication is both visual and audio	
Buzzer sound and light is produced when the cable is live	
Confirms to IEC-1010 and IP-54	
Battery Operated	



Non Contact Detection of AC Voltage	
Easy to use just bring it near a power outlet or cord and when it glows red you know the line is live	
Fits in shirt pocket for convenience	
All outer surfaces is non-conductive for safety	
Detects voltage without metallic contact	
Rugged, double molded body	
Built-in flashlight with ON/OFF switch for convenience of use on dark areas	
For use on 50/60Hz circuits	
Operating Voltage range is 100 - 600V AC	
Confirms to CAT-III 1000V	



Used to find break in a wire or detect the presence of Voltage at outlets, lighting fixtures, circuit breakers, wire and cables	
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Non Contact Detection of AC Voltage	
Easy to use just bring it near a power outlet or cord and when it glows red you know the line is live	
Fits in shirt pocket for convenience	
All outer surfaces is non-conductive for safety	
Detects voltage without metallic contact	
Rugged, double molded body	
Built-in flashlight with ON/OFF switch for convenience of use on dark areas	
For use on 50/60Hz circuits	
Operating Voltage range is 100 - 600V AC	
Confirms to CAT-III 1000V	



Used to find break in a wire or detect the presence of Voltage at outlets, lighting fixtures, circuit breakers, wire and cables	
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Socket Polarity and Earth Leakage Tester	
Tests Three Wire 220V AC outlets and Earth Leakage Circuit Breakers	
Power Supply: From Unit Under Test	
Confirms to CAT III 600V	
Electrical Safety: IEC 61010/EN 61010; IEC 61557-7/EN 61557-7	
Indicates the following Status: No Earth, Line Neutral Reversal, No Neutral, Line Earth Reversal, No Line	



Phase Rotation Indicator	
Large LCD Display	
Three Phase Indication	
No Battery Required	
Nominal Voltage	40V to 690V AC
Frequency Range	15 to 400Hz
Power Supply	From Unit Under Test
Electrical Safety	IEC 61010/EN 61010; IEC 61557-7/EN61557-7
Protection Level CAT III 600V, IP40	



Microprocessor Based Hand Held	
Self Powered instrument	
Indicates Phase Sequence	
Also can measure AC Voltage and Frequency	
Phase Sequence determined as ABC or ACB	
AC Voltage Range	50 - 500V
Accuracy	±3%
Frequency	20 - 400Hz
Accuracy	±2%



EMF Tester

Display	3-1/2 digits LCD, maximum reading 1999.
Range	200/2000 mG, 20/200µT.
Resolution	0.1/1 mG or 0.01/0.1 µT.
Frequency response	30Hz to 300Hz.
Sensor	Single Axis
Accuracy	±(2.5%±6dgt) at 50Hz/60Hz.
Over load Indication	
Battery	9V



Event Counter

Display	6 Digits Red LED Display
Range	1 to 999999 Counts
Count Input	a. Proximity Switches (PNP/NPN)
	b. Potential Free Contact
	c. 5 to 30V DC Voltage Pulse
	d. 230V AC Mains Pulse (Any One)
Counting Speed	0 to 3 /30 /100 /1000 /2500Hz (Programmable)
Sensor Voltage	12V DC 30mA Max.
Control Input	Hold (Optional)
Reset	Front Reset / Remote Reset (Programmable)
Memory Retention	Non Volatile (E2 PROM) upto 10 years
Auxiliary Power Supply	90V to 270V AC 50Hz /60Hz.



Function Generator

Frequency of the mode	0.1Hz---1MHz
Output waveform	Sine, Triangle, Square, \pm Ramp, \pm Pulse
TTL/CMOS and OUTPUT synchronous output	
Voltage Control Frequency (VCF) Capacity	
Less than 1% distortion at 10Hz-- 100 KHz	
Less than 0.5dB frequency response at 0.1Hz--- 100 KHz	
Frequency Counter	1Hz---30MHz
Amplitude	Not less than 20V p--p (open circuit)
DC Voltage	0-- \pm 10V continuously adjustable



Forehead Infra Red Thermometer

Non Contact Forehead IR Thermometer	
User Selectable $^{\circ}$ C / $^{\circ}$ F	
Selectable Body and Surface Temperature	
Alarm Function	
Memorizes last 32 measurements	
Auto Data Hold	
Auto Power Off	
Confirms to CE0137, FCC Standards	
Measures in the range of 32.0 to 42.5 $^{\circ}$ C (90 to 108 $^{\circ}$ F)	
Accuracy 0.54 $^{\circ}$ F	
Battery Operated	



Frequency of the mode	0.1Hz---2MHz
Output waveform	Sine, Triangle, Square, \pm Ramp, \pm Pulse
TTL/CMOS and OUTPUT synchronous output	
Voltage Control Frequency (VCF) Capacity	
Less than 1% distortion at 10Hz-- 100 KHz	
Less than 0.5dB frequency response at 0.1Hz--- 100 KHz	
Frequency Counter	1Hz---30MHz
Amplitude	Not less than 20V p--p (open circuit)
DC Voltage	0-- \pm 10V continuously adjustable



Frequency Transducer

Input and outputs are Isolated	
Type	DIN RAIL Mounting
AC Input	0 - 3.5, 110, 230,300, 440, 500V, Through PT for Higher Voltages (AnyOne) DC
DC Output	Current(mA) 4-20 Voltage (V) : 0- 10 As per Scale (Other Voltage and current outputs available on request) Single Output is standard Dual Output available onrequest
Auxiliary	Self Powered
Accuracy	Standard : \pm 0.5% of Span
Optional	On Request



Frequency of the mode	0.1Hz---3MHz
Output waveform	Sine, Triangle, Square, \pm Ramp, \pm Pulse
TTL/CMOS and OUTPUT synchronous output	
Voltage Control Frequency (VCF) Capacity	
Less than 1% distortion at 10Hz-- 100 KHz	
Less than 0.5dB frequency response at 0.1Hz--- 100 KHz	
Frequency Counter	1Hz---30MHz
Amplitude	Not less than 20V p--p (open circuit)
DC Voltage	0-- \pm 10V continuously adjustable



Frequency of the mode	0.1Hz---5MHz
Output waveform	Sine, Triangle, Square, \pm Ramp, \pm Pulse
TTL/CMOS and OUTPUT synchronous output	
Voltage Control Frequency (VCF) Capacity	
Less than 1% distortion at 10Hz-- 100 KHz	
Less than 0.5dB frequency response at 0.1Hz--- 100 KHz	
Frequency Counter	1Hz---30MHz
Amplitude	Not less than 20V p--p (open circuit)
DC Voltage	0-- \pm 10V continuously adjustable



Frequency of the mode	0.1Hz---10MHz
Output waveform	Sine, Triangle, Square, \pm Ramp, \pm Pulse
TTL/CMOS and OUTPUT synchronous output	
Voltage Control Frequency (VCF) Capacity	
Less than 1% distortion at 10Hz-- 100 KHz	
Less than 0.5dB frequency response at 0.1Hz--- 100 KHz	
Frequency Counter	1Hz---30MHz
Amplitude	Not less than 20V p--p (open circuit)
DC Voltage	0-- \pm 10V continuously adjustable



20MHz Function Generator with AM/FM
Digital Cymometer and counter function
Built-in linearity /log sweep function
All terminals have the function of short circuit protection and prevent input voltage protection function
Outer connect FM and VCF input
Metal shell has electromagnetic compatibility, smart outline
Output Voltage and Frequency display
Frequency find adjustment makes measurement more accurate
Touch switch light, indicate board function
Two Channel function signal can be used



High Voltage Detector

Detects the presence of voltage in AC Lines.
Can be extended in length from 354mm to 1005mm
Used to detect High Voltage up to 24kV
Water proof
Can also be used to detect low voltage up to 600V
Has both visual and audible indication



Detects the presence of voltage in AC Lines.
Can be extended in length from 230mm to 880mm
Used to detect High Voltage up to 24kV
Water proof
Can also be used to detect low voltage up to 600V
Has both visual and audible indication



Detects High and Extra High Voltage
Elongated insulation rod permits checking of high tension circuits at safe distance
Light weight, Easy to use and Handy
Can be extended from 1370mm to 2450mm
Detects presence of Voltage from 3kV to 81.5kV
Water Proof
Confirms to IEC/EN 61243-1, 60068-2-14, 60068-2-32
Battery Operated



High Voltage Proximity Detector (Non Contact type)
Has an Eight Voltage Detection setting from 240V AC to 275kV AC.
Consists of an internal pickup sensor plate, sensitivity selector.
Has a visual and audible indication
Can be used with HOT STICK to increase the length.
"O" Ring Sealed Body
Self Check facility
Battery Operated.
Hot Stick is Optional



Ideal tool for checking the presence of AC High Voltages and AC Low Voltages in cables, wall outlet, fuses etc.

Non Contact Voltage Detection from 50V to 132kV

Self Check Facility

Can be used with HOT STICK to increase the length

Can be used for Low Voltage 50 V ~ 1.5kV

Also can be used for High Voltage 1.5kV ~ 132kV



Hot Line Indicator

Hot Neon Indicator to check Live Cable

Detects up to 33kV by means of tube

Rated Voltage (Max.) 33kV

Minimum Voltage for Glow: 500V

Audible Alarm Option available

Available in 6.6kV, 11kV and 33kV

Hour Meter

Counting Range 99999.99 Hours

Panel Flush Mounting

Size 52 x 52 mm sq

Standard Voltage 220V /110V AC (AnyOne)

Temperature Range -20 to 65°C



Counting Range 99999.99 Hours

Panel Flush Mounting

Size 52 x 52 mm sq

Standard Voltage 10 – 48 V DC

Temperature Range -20 to 65°C



Infra Red Temperature Calibrator

Black Body is used to calibrate infra red thermometers

Easily certify infra red thermometers up to 500°C (932°F)

RTD Reference Well for high precision

Small compact design

Temperature Range	50°C ~ 500°C (122°F ~ 932°F)
Accuracy	±0.5°C @100°C (±1.0°F @212°F)
	±0.8°C @500°C (±1.4°F @932°F)
Stability	±0.1°C @100°C (±0.2°F @212°F)
	±0.3°C @500°C (±0.5°F @932°F)
Target Emissivity	0.95
Resolution	0.1°C /0.1°F
Heating Time	30 minutes to max
Cooling Time	30 minutes to 100 °C (122°F)
Aperture Diameter	58mm
Power	220VAC(±10%), 1.25A / 110VAC(±10%),2.5A



Complete with carrying case and instruction manual

Insulation Tester

Light Weight Easy to Operate

LED for indicating output ON or OFF

Insulation Resistance Range 0 - 1000 M \wedge

Insulation Resistance test Voltage 500V

AC Voltage 0 - 600V AC

Used for Insulation test for general equipment and electronic components.

Internal Battery Check Facility



Light Weight Easy to Operate

LED for indicating output ON or OFF

Insulation Resistance Range 0 - 2000 M \wedge

Insulation Resistance test Voltage 1000V

AC Voltage 0 - 600V AC

Used for Insulation test for general equipment and electronic components.

Internal Battery Check Facility



Integrated Meter

Microprocessor Based Digital Multi function meter for three phase measurement.

PARAMETERS DISPLAYED:

VOLTAGE	Three phase Line to Line and Line to neutral Voltages with Autoranging to Kilo-Volt.
CURRENT	Three phase currents with Autoranging to Kilo-Amperes.
POWER	Three phase individual KW,KVA and KVAR with Autoranging to MW,MVA and MVAR
Total (of three phases) KW, KVA and KVAR with Autoranging to MW, MVA and MVAR.	
POWER FACTOR	Three phase individual Power factors and overall system Power Factor.
FREQUENCY	System frequency.
ENERGY	KWh, KVAh and KVARh.
MAXIMUM DEMAND	Demand in KW and KVA.

Password Protected.

Programmable CT/PT ratios.

Accuracy	1% for Voltage, current, KWh, KVAh & KVARh. 2% for Power Parameters.
Display	16 Character x 4 Lines Backlit LCD display.
Bezel Size	96 X96 mm
Auxiliary Power Supply	230V AC 50Hz /110V AC 50Hz



Laser Distance Meter

Range	0.05 to 50m (0.16 to 164 ft)
Accuracy	± 1.5mm
Measures in m, in, ft	
Indirect measurement using Pythagoras	
Addition /Subtraction	
Area and Volume Calculation	
Min /Max distance tracking	
Continuous measurement	
Beep Indication	
Illuminated display with multi-line display	
IP-54 Protection	
Records 20 data	
Auto Power Off	



Logic Probe Cum Pulsar

Useful tool for inspecting and repairing logic circuits

Used directly to inject a signal into the logic circuits without removing the IC or breaking the circuits.

The output is changeable between 0.5 to 400Hz, making it suitable for use with either a logic probe or with an oscilloscope

Pulse Width	10ms
Maximum Input Signal Frequency	50MHz
Input Impedance	120K Ω
Power Supply Range	5 – 15 V DC



Kelvin Double Bridge

Suitable for the use of wires and cable manufacturers and Transformer industry

Extensively used for finding the resistance of transformer winding, contact resistance of relays etc.

Measures in the range of 0.2 Micro ohms to 11 Ohms

Measurement Ranges	2 Milli Ω to 11 Ω , 0.2Milli Ω to 1.1 Ω , 20 Micro Ω to 11 Ω , 2 Micro Ω to 0.11 Ω and 0.2 Micro Ω to 0.11 Ω
Max Current	10A intermittent and 5A continuous
Accuracy	± 0.05%

Battery Reversing Switch provided to reverse the current in the bridge to eliminate thermal effect

Complete with Spot Reflecting Galvanometer, Heavy Duty DC Current Source, Conductivity Attachment



Metal Detector

Simple operation, compact design, easy to store, low failure rate.

Sensitivity is very easy to detect the size of a pin (or even less), metal items.

Has the Low battery indication

Very Cost Effective and stylish product

Audio as well as Vibration Alert

Battery Operated

Light Weight

Detection Distance	Pin – 35mm, Handgun – 120mm, US25 Cents 50mm.
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Ultimate sensitivity: detects medium sized pistol from 9" distance; large knife from 6"; razor blades and box cutters from 3" distance; foil-wrapped drugs and tiny jewelry from 1".

Self-calibrating: digital microprocessor technology eliminates the need for periodic sensitivity adjustments.

Rugged, high-impact ABS case with reinforced coil compartment. Exceeds Mil-Std-810F (drop test) Method 516.5, procedures II and IV.

Large 8" scan surface for quick, thorough scanning.

No tools required to change standard 9V battery (included). Optional rechargeable battery kit available.

Sharp audible alarm and bright red LED indicates the detection of metal.

Momentary push button helps temporarily eliminate detection of nearby ambient metal such as rebar, metal walls.

Audio as well as Vibration Alert

Battery Operated

Light Weight



Million Megohms Meter

Ideal for measuring high resistance and insulation

Output Test Voltage 100V/200V/300V/400V/500V

It has a measuring range of 1M \wedge to 10 Million M \wedge

Insulation Resistance Range available in 6 ranges.

Accuracy $\pm 5\%$

Overload Protection

Visual warning for HT link

Analogue Display

Auxiliary Power Supply 220V AC



Motor Checker

Provides a fast and easy means to detect electrical faults-short circuits, open circuits, damaged insulation etc. - in motors and other three phase machine

Used on stationary motors

It measures insulation resistance in the range of; 0 -20 M ohms at 500 V DC, 0.25 mA Max.

Resistance measuring range 0 - 60 \wedge (0 - 0.2 ohms in Range 6)

Inductance measuring range 0 - 300 mH (0 - 1 mH in Range 6)

Battery Test Condition of batteries indicated on meter

Battery operated



Micro Controller based diagnostic tool for Electrical Engineers

Identifies Open and Short Circuits / Loose Connections In a winding coil

Detect Rotor Bar problems without dismantling the motor

Display	LCD
Insulation Resistance	0 - 20M.Ohms at 500V DC
Resistance Test	0 - 200 /20 /6 /2 /600m /200m \wedge
Inductance Test	0 - 1000m /300m /100m /30m /10m /3mH
Low Battery indication	



Micro Controller Based Diagnostic Tool for Electrical Engineers

Insulation Resistance, Resistance, Inductance measurement

Identifies Open and Short Circuits / Lose Connections in a winding coil

Identify inter turn shorts

Shock Proof Rubber Body

Insulation Resistance	200M \wedge @500V and 2000M \wedge @1000V
Accuracy	$\pm 2\%$
Resistance	0 - 200m /20 /200 \wedge
Accuracy	$\pm 2\%$
Inductance	0 - 2m /20m /200m /2000mH
Accuracy	$\pm 3\%$
Battery Operated	



Multifunction Environment Meter

Hand Held Multifunction Four - in - one meter

With RS-232C PC Interface facility

Combination of Sound Level, Lux, Temperature and humidity meter

Low Battery Indication

Display	3-3/4 Digits 3999 Counts LCD
Light	0 - 40 /400 /4000 /40,000 Lux
Accuracy	$\pm 5\%$
Sensor	Silicon Photo Diode with filter
Sound Level range	35 - 130dB
Resolution	0.1dB
Accuracy	± 3.5 dB
Frequency Weighting	A
Time Weighting	Fast
Humidity range	25 to 95% RH
Resolution	0.1%RH
Accuracy	$\pm 5\%$ RH
Temperature range	-20° to 750°C/-4° to 1400°F
Resolution	0.1°C
Accuracy	$\pm 3\%$
Confirms to CE, EN-61010, CAT-II 600V	



6-in-1 digital instrument

Combines Sound Level Meter, Light Meter, Humidity Meter, Temperature Meter, Non Contact Voltage Detector and Digital Multimeter

600V AC/DC Protection on all ranges.

Fully Protected instrument

Data Hold and Relative Measurements

Display 3-4/5 Digits Backlit LCD

Overload and Low Battery Indication

14 functions measure Sound level, Light, Humidity, and Temperature, DC Voltage, AC Voltage, DC Current, AC Current, Resistance, Diode and Continuity test.

3-4/5 Digital large LCD display with units of Lux, °C, %RH and dB indication.

Easy to use with single function switch operating, pocket size and light weight.

Sound level measures from 35dB to 100dB for C weighting checking with 0.1dB resolution.

Light measuring levers ranging from 1 Lux to 40,000Lux.

Humidity measurement from 30%RH to 90%RH with 1%RH resolution and fast time response

Temperature -20°C to 750°C / -4°F to 1382°F

Frequency up to 10MHz



Non Contact Temperature Controller

Precise non-contact measurements

High distance to target ratio measures smaller surface areas at greater distances

Widest temperature range

Emissivity Digitally adjustable from 0.10 to 1.0

Backlight LCD display

Built-in laser pointer

Automatic selection range and Display Resolution 0.1°C (0.1°F)

Heating and Cooling mode control output

Relay Output

Temperature Range -50 to 900°C

D:S Ratio: 50:1

Over Range Indication

Relay Output of 5A / 250V AC

Single Set Point

Size of Panel Meter 72 x 72 mm sq

Complies to CE and EMC Directives



Multi-Point Temperature Indicator

Flush Mounting type

Used to measure Multi-Point temperature

Sizes 96 x 96 mm sq

Display 3-1/2 Digits Seven Segment Red LED Display

Cold Junction Compensation Automatic for Thermocouple

Open Sensor Indication

Sensor Input J, K, R, S, T/C, PT-100 RTD, V & 4 - 20mA

Accuracy J, K 1%; R, S 0.5%; PT-100RTD 0.2%, mV, V, mA 0.1%

Number of Sensor Inputs 6 by Rotary Switch

Auxiliary Power Supply 230V Single Phase AC 50Hz.



Oil Test Set

It is ideal for speedy and accurate testing of dielectric strength of transformer and circuit breaker oil under test room condition in accordance with IS: 1972-1972 for oil testing. Manually operated.

Input 230V Single Phase AC 50Hz.

Output Continuously variable from 0 to 50kV / 0 - 60kV / 0 - 70kV / 0 - 75kV / 0 - 80kV / 0 - 90kV / 0 - 100kV / 120kV AC with centre point of the HV winding earthed

Capacity Spread over a range from 500VA to 1200VA depending on the output voltage

Duty Intermittent duty cycle

Nature of Cooling The transformer is cast resin type air cooled

Manually Operated



Flush Mounting type

Used to measure Multi-Point temperature

Sizes 96 x 96 mm sq

Display 3-1/2 Digits Seven Segment Red LED Display

Cold Junction Compensation Automatic for Thermocouple

Open Sensor Indication

Sensor Input J, K, R, S, T/C, PT-100 RTD, V & 4 - 20mA

Accuracy J, K 1%; R, S 0.5%; PT-100RTD 0.2%, mV, V, mA 0.1%

Number of Sensor Inputs 12 points (Any One) by Rotary Switch

Auxiliary Power Supply 230V Single Phase AC 50Hz.



It is ideal for speedy and accurate testing of dielectric strength of transformer and circuit breaker oil under test room condition in accordance with IS: 6792-1972 for oil testing. Manually operated.

Input 230V Single Phase AC 50Hz.

Output Continuously variable from 0 to 50kV / 0 - 60kV / 0 - 70kV / 0 - 75kV / 0 - 80kV / 0 - 90kV / 0 - 100kV / 120kV AC with centre point of the HV winding earthed

Capacity Spread over a range from 500VA to 1200VA depending on the output voltage

Duty Intermittent duty cycle

Nature of Cooling The transformer is cast resin type air cooled

Manually Operated



Oscilloscope

Professional True RMS Industrial Digital Multimeter with oscilloscope functions

TFT color LCD display, providing fast A/D converting sampling time,

High accuracy, built-in data logging and Trend Capture features.

It can trace any interrupted problems of the equipment and watch on without person

It is easy to find and solve the problems of the production equipment

Providing Bluetooth technology and memorizing the data

It is much more safe measurements with double molded plastic housing design and IP67 waterproof function.

Large 50,000 count 320 x 240 TFT color LCD display

10MHz/50MS/s bandwidth/Real time sample rate

Logging function with TrendCapture for easy review of logged data

Bluetooth PC interface for easy data transfer & accuracy calibration

100kHz/100kHz bandwidth (voltage/current)

AC, AC+DC true-RMS measurements

Records events and trends

Saves measurements

A/D convert fast sampling time

Peak capture (records transients as fast as 250µs)

Min/Max/Average with Time stamp (records signal fluctuations)

Motor winding and low ohm (50 Ω) measurement range

Low pass filter

IP Rating 67

Compatible with AC/DC clamp-on adaptor with Bluetooth at mV range



A unique combination of Digital Storage Oscilloscope + Recorder + Multimeter

Vertical Dual Channel Input, bandwidth 100MHz

Sweep Base Time Velocity | 50s/div ~ 2.5ns/div

Real Time Sampling Rate 100MSa/Sec

Equivalent Sampling Rate 10GSa/Sec

Playback, Zoom and Cursor measurement facility

Auto measure of Waveform parameters

Waveform math calculations

Auto, Edge, External, Video, Pulse Width Trigger Modes

RS-232 PC Interface facility

Storage of waveform and measured value

Vertical Deflection Factor: 2mV/Div ~ 50V/Div in steps of 1 - 2 - 5

Rise Time < 2ns

Channel Isolation > or = 30:1

Horizontal Time Base: 2.5nS/Div to 50S/Div

10 Storage locations to store 2 waveforms in each location

Number of records that can be stored is 2

Complete with test leads, holster, battery, instructionmanual, RS-232 PC interface cable and software



A unique combination of Digital Storage Oscilloscope + Recorder + Multimeter

Vertical Dual Channel Input, bandwidth 200MHz

Sweep Base Time Velocity | 50s/div ~ 2.5ns/div

Real Time Sampling Rate 100MSa/Sec

Equivalent Sampling Rate 10GSa/Sec

Playback, Zoom and Cursor measurement facility

Auto measure of Waveform parameters

Waveform math calculations

Auto, Edge, External, Video, Pulse Width Trigger Modes

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Vertical Deflection Factor: 2mV/Div ~ 50V/Div in steps of 1 - 2 - 5

Rise Time < 2ns

Channel Isolation > or = 30:1

Horizontal Time Base: 2.5nS/Div to 50S/Div

10 Storage locations to store 2 waveforms in each location

Number of records that can be stored is 2

Complete with test leads, holster, battery, instructionmanual, RS-232 PC interface cable and software



Oscilloscope

Single Channel Single Trace Oscilloscope

Bandwidth | 10MHz

Confirms to EN61010-1 (1993) and EN-IEC61326-1 (1997)

Wide measurement

High sensitivity and trigger lock

Sweep switch adopts digital code switch and accuracy

Proper to use in colleges and for engineers and technicians

Deflection factor is 5mV~5V/div in 1-2-5 Sequence in 10 steps

Accuracy | $\pm 5\%$

Maximum Input Voltage | 400Vpk

Sweep deflection factor is 0.1us/div-0.1s/div

Accuracy | $\pm 5\%$

Trigger Sensitivity | INT:1.5div EXT:0.3V

Trigger mode | INT, EXT, LINE, TV

Trigger Sweep Mode | NORM, AUTO, TV. LOCK

Calibration Signal | 0.5V Square wave of 1kHz

CRT Effective working Area | 8x10div 1div=6mm

Auxiliary Power Supply | 220V AC 50Hz



MetraV1 OS-5020

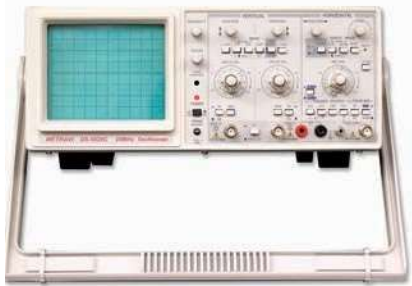
Dual Trace Dual Channel Oscilloscope	
Bandwidth	20MHz
Full bandwidth sweeping circuit is used in the sweeping system	
The flexible and convenient triggering mode has the functions for selecting signals from one channel or triggered by Ext signals	
ALT trigger to observe signals from two irrelative channels	
The instrument has the functions of TV-H /TV-V synchronization and trigger-lock to observe all kinds of signals stably	
From the terminal for trigger input, CH1 and CH2 signals can be output along with the triggering channel to connect the Ext frequency counter	
Y deflection operation	Y1, Y2, ALT, CHOP, ADD, mode X-Y

Vertical Deflection	5mV/Div to 20V/Div infactor 1-2-5 sequence in 12 steps
Rising time	< 18nS
Maximum Input Voltage	400V (DC +ACp-p)
Triggering Source	Y1, Y2, ALT, POWER, EXT
Trigger Coupling	AC/DC (EXT), NORM/TV-H, TV-V
Horizontal Sweep Mode	AUTO, TRIG, LOCK, SINGLE
Sweep time factor	0.1uS/div to 0.2s/div in 1-2-5 sequence in 20 steps
Magnification	x10
X-Y Mode input	X-Axis Y1 and Y-Axis Y2
Z Axis minimum input level	TTL Level
Calibration Signal	Square wave of 0.5V at 1kHz
CTR Display size	8cm x 10cm



Dual Trace Dual Channel Oscilloscope with Component Test Facility	
Bandwidth	20MHz
Full bandwidth sweeping circuit is used in the sweeping system	
The flexible and convenient triggering mode has the functions for selecting signals from one channel or triggered by Ext signals	
ALT trigger to observe signals from two irrelative channels	
The instrument has the functions of TV-H /TV-V synchronization and trigger-lock to observe all kinds of signals stably	
From the terminal for trigger input, CH1 and CH2 signals can be output along with the triggering channel to connect the Ext frequency counter	
Y deflection operation	Y1, Y2, ALT, CHOP, ADD, mode X-Y
Vertical Deflection	5mV/Div to 20V / Div infactor 1-2-5 sequence in 12 steps

Rising time	< 18nS
Maximum Input Voltage	400V (DC +ACp-p)
Triggering Source	Y1, Y2, ALT, POWER, EXT
Trigger Coupling	AC/DC (EXT), NORM/TV-H, TV-V
Horizontal Sweep Mode	AUTO, TRIG, LOCK, SINGLE
Sweep time factor	0.1uS/div to 0.2s / div in 1-2-5 sequence in 20 steps
Magnification	x10
X-Y Mode input	X-Axis Y1 and Y-Axis Y2
Z Axis minimum input level	TTL Level
Component Test Facility	
Calibration Signal	Square wave of 0.5V at 1kHz
CTR Display size	8cm x 10cm
Auxiliary Power Supply	230V 50Hz AC



Dual Channel Four Trace Oscilloscope	
Bandwidth	25MHz
Confirms to EN61010-1 (1993) and EN-IEC61326-1(1997)	
High Sensitivity	1mV/Div
Waveforms are parallax-free with CRT's internal graticule	
Alt Mag	The waveform (x1) and the x5 magnified waveforms can be displayed simultaneously
Alt Trig	Stabilized triggering is accomplished with twounrelated signals
TV Synchronization	Stable TV signals are displayedusing new circuitry
Auto Focus	Focus deviation is automatically corrected
With Component test facility.	
Vertical Deflection sensitivity	5mV/Div to 5V/Div in 1-2-5 sequence in 10 steps

Accuracy	± 3%
Rise Time	14nS
Maximum Input Voltage	300V (DC + AC Peak)
Input coupling system	AC-GND-DC
CH1 output voltage minimum 20mV/Div	
Time Base sweep Mode	x1, x5; x1, x5ALT
Sweep Mode	0.1uS to 0.2S/iv in 20 calibrated steps of 1-2-5 sequence
Sweep Expansion	20ns/div to 40ms/div
Alt Mag Trace	Maximum 4 traces
Trigger Mode	AUTO, NORM, TV-V, TV-H
Trigger Signal Source	INT, CH2, LINE, EXT
X-Y Operation Mode	CH1, X-axis and CH2, Y-axis
Z-Axis bandwidth	DC to 2MHz
Calibration Signal	0.5V Square wave of 1kHz
Auxiliary Power Supply	230V 50Hz AC



Dual Trace Dual Channel Oscilloscope	
Bandwidth	30MHz
Full bandwidth sweeping circuit is used in the sweeping system	
The flexible and convenient triggering mode has the functions for selecting signals from one channel or triggered by Ext signals	
ALT trigger to observe signals from two irrelative channels	
The instrument has the functions of TV-H /TV-V synchronization and trigger-lock to observe all kinds of signals stably	
From the terminal for trigger input, CH1 and CH2 signals can be output along with the triggering channel to connect the Ext frequency counter	
Y deflection operation	Y1, Y2, ALT, CHOP, ADD, mode X-Y

Vertical Deflection	5mV/Div to 20V/Div infactor 1-2-5 sequence in 12 steps
Rising time	< 18nS
Maximum Input Voltage	400V (DC +ACp-p)
Triggering Source	Y1, Y2, ALT, POWER, EXT
Trigger Coupling	AC/DC (EXT), NORM/TV-H, TV-V
Horizontal Sweep Mode	AUTO, TRIG, LOCK, SINGLE
Sweep time factor	0.1uS/div to 0.2s/div in 1-2-5 sequence in 20 steps
Magnification	x10
X-Y Mode input	X-Axis Y1 and Y-Axis Y2
Z Axis minimum input level	TTL Level
Calibration Signal	Square wave of 0.5V at 1kHz
CTR Display size	8cm x 10cm



Dual Trace Dual Channel Oscilloscope with Component Test Facility	
Bandwidth	30MHz
Full bandwidth sweeping circuit is used in the sweeping system	
The flexible and convenient triggering mode has the functions for selecting signals from one channel or triggered by Ext signals	
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Y deflection operation	Y1, Y2, ALT, CHOP, ADD, mode X-Y
Vertical Deflection	5mV/Div to 20V/Div infactor 1-2-5 sequence in 12 steps

Rising time	< 18nS
Maximum Input Voltage	400V (DC +ACp-p)
Triggering Source	Y1, Y2, ALT, POWER, EXT
Trigger Coupling	AC/DC (EXT), NORM/TV-H, TV-V
Horizontal Sweep Mode	AUTO, TRIG, LOCK, SINGLE
Sweep time factor	0.1uS/div to 0.2s/div in 1-2-5 sequence in 20 steps
Magnification	x10
X-Y Mode input	X-Axis Y1 and Y-Axis Y2
Z Axis minimum input level	TTL Level
Component Test Facility	
Calibration Signal	Square wave of 0.5V at 1kHz
CTR Display size	8cm x 10cm
Auxiliary Power Supply	230V 50Hz AC



Dual Channel Four Trace Oscilloscope	
Bandwidth	60MHz
Confirms to EN61010-1 (1993) and EN-IEC61326-1(1997)	
High Sensitivity	1mV/Div
Waveforms are parallax-free with CRT's internal graticule	
Alt Mag	The waveform (x1) and the x10 magnifiedwaveforms can be displayed simultaneously
Alt Trig	Stabilized triggering is accomplished with two unrelated signals
TV Synchronization	Stable TV signals are displayedusing new circuitry
Auto Focus	Focus deviation is automatically corrected
Vertical Deflection	5mV/Div to 5V/Div in 1-2-5 sequencein 10 steps for both channels
Accuracy	± 3%
Rise Time	6nS approx.

Maximum Input Voltage	300V (DC + AC Peak)
Input coupling system	AC-GND-DC
Operation system	CH1, CH2, ADD and DUAL
Time Base sweep Mode	x1, x5; x1, x5ALT
Sweep Time	0.1uS to 0.2S/iv in 20calibrated steps of 1-2-5 sequence
Sweep Expansion	10ns/div to 20ms/div
Alt Mag Trace	Maximum 4 traces
Trigger Mode	AUTO, NORM, TV-V, TV-H
Trigger Signal Source	INT, CH2, LINE, EXT
X-Y Operation Mode	CH1, X-axis and CH2, Y-axis
Z-Axis badwidth	DC to 2MHz
Calibration Signal	0.5V Square wave of 1kHz
Auxiliary Power Supply	230V 50Hz AC



Dual Channel Four Trace Oscilloscope	
Bandwidth	100MHz
Confirms to EN61010-1 (1993) and EN-IEC61326-1(1997)	
It has the function of B delay sweep	
High sensitivity	1mV/DIV
In ALT (A and B alternately sweeps) mode, four traces are displayed	
Fast sweep rate to 5ns/DIV by magnifying 10 Function of B TRIG'D can decrease the delay shrinking	
Hold-off function makes it easier to catch the complex triggering signals	
Vertical deflection sensitivity	5mV/Div to 5V/Div in 1-2-5 sequence in 10 steps
Accuracy	±5%
Rise Time	3.5nS
Maximum Input Voltage	400V (DC + AC peak)
Operating Systems	CH1, CH2, ADD, DUAL (CHOP,ALT)
Trigger mode	AUTO, NORM, TV-V, TV-H

Trigger signal source	INT, CH2, LINE, EXT
External trigger input	About 1m. Ohms 25pF impedance
Z-axis maximum input	30V (DC+AC peak)voltage
Bandwidth	DC to 2MHz
Sweep Mode	A,B, B Triggered, X-Y, ALT
Sweep time	A: 0.05uS to 0.2S/Div ±5% in 21 calibrated steps (1-2-5 seq) B: 0.05uS to 10uS/Div ±5% in 8 calibrated steps (1-2-5 seq)
Delay system	Continuous delay or triggered delay
Hold-off	Continuous change for 2 times
X-Y Operation mode	CH1 X-axis and CH2 Y-axis
Calibration Signal	0.5V Square wave of 1kHz
Auxiliary Power Supply	230V 50Hz AC



Accessories For Oscilloscopes

High Voltage Probe to measure AC/DC High Voltage	
Measures upto 30kV DC and 20kV AC	
Accuracy: ± 1%	
Cable Length 1m	



PC Based Oscilloscopes

Two Channel Digital Storage Oscilloscope	
When connected to PC with USB 2.0 Interface, provides fully featured Digital Storage Oscilloscope	
Provides extra advantage of easily storing data for future use	
Has two independent channels.	
The program screen emulates a conventional oscilloscope	
The Auto Set function adjusts the settings automatically to the current signal, and the extensive trigger functions make it very simple to operate	
The expanded spectrum analyzer windows including the FFT analysis and the multi-kinds of measurements are more powerful tools in data analysis	
Press a button to transfer the on-screen data to an Excel file for further processing and the waveform can be recalled as a reference for comparison with the new one	
Bandwidth	40MHz
Channels	Two + external triggering
Sampling Rate	100MS/sec
Memory	64kB
Resolution	8bit
Plug & Play Device	



Two Channel Digital Storage Oscilloscope	
When connected to PC with USB 2.0 Interface, provides fully featured Digital Storage Oscilloscope	
Provides extra advantage of easily storing data for future use	
Has two independent channels.	
The program screen emulates a conventional oscilloscope	
The Auto Set function adjusts the settings automatically to the current signal, and the extensive trigger functions make it very simple to operate	
The expanded spectrum analyzer windows including the FFT analysis and the multi-kinds of measurements are more powerful tools in data analysis	
Press a button to transfer the on-screen data to an Excel file for further processing and the waveform can be recalled as a reference for comparison with the new one	
Bandwidth	60MHz
Channels	Two + external triggering
Sampling Rate	150MS/sec
Memory	64kB
Resolution	8bit
Plug & Play Device	



Two Channel Digital Storage Oscilloscope	
When connected to PC with USB 2.0 Interface, provides fully featured Digital Storage Oscilloscope	
Provides extra advantage of easily storing data for future use	
Has two independent channels.	
The program screen emulates a conventional oscilloscope	
The Auto Set function adjusts the settings automatically to the current signal, and the extensive trigger functions make it very simple to operate	



The expanded spectrum analyzer windows including the FFT analysis and the multi-kinds of measurements are more powerful tools in data analysis

Press a button to transfer the on-screen data to an Excel file for further processing and the waveform can be recalled as a reference for comparison with the new one

Bandwidth	100MHz
Channels	Two + external triggering
Sampling Rate	250MS/sec
Memory	1MB
Resolution	8bit
Plug & Play Device	

PC Based Arbitrary Function Generator And Frequency Counter

Signal Frequency Range	0-5MHz;
Frequency Counter Range	0~2.7GHz
Outputs	One channel of Arbitrary Waveform; 8 Bits signal; Synchronized signal
Inputs	Two channels of Frequency counter; 8 Bits signal; External Trigger

Arbitrary Waveform edited by mouse

General waveforms Sine, Square, Triangle, Saw-tooth, TTL, White Noise, Gauss noise, Exponent, AM, FM

Settable Parameters Amplitude, Frequency, Offset

The data file's format is completely compatible with Tektronix's products and software. It can read directly the data files from and be edited by Tektronix's software.

DDS technology, High accuracy and resolution, wide software supporting,



PC Based Logic Analyzer

It is devoted to the observation of digital signal test and measurement equipment.

It has multi-line oscilloscope and other advantages of automatic test equipment.

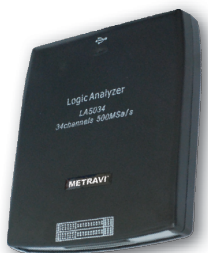
The use of advanced large-scale integrated circuits, integrated USB 2.0, CPLD, FPGA, high-frequency digital circuitry, embedded systems, and other advanced technology

Using plug-and-play USB power supply, compared to the traditional desktop LA5034 with a higher cost performance, portable, easy-to-use, the expansion of the advantages of good, instead of the traditional equipment is the best choice.

It has 500MHz bandwidth, 34 cost-effective channels

It can be used for digital circuit development, measurement, analysis and debugging, electronic research and development, electronic measurement engineers, college students in scientific research and development and teaching assistant.

It also has a variety of new means of measuring equipment.



Primary Current Injection Test Set

Testing especially if the protective gear is connected to the power line via a current transformer it is advisable to carry out primary injection testing

These sets have been designed to enable the users of heavy electrical equipment to carry out such tests as have been described above with a maximum efficiency at minimum cost, providing a convenient of delivering, controlling and measuring a heavy current in a comparatively low voltage low impedance circuit.

Ideal for testing circuit breakers, ammeters with or without current transformers and much other application where a heavy current supply of short duration is required

Current output	Can Vary from 200A to 4000A
Capacity	Can Vary from 1kVA to 10kVA
Number of Ranges	Can Vary from 1 to 4
Duty Cycle	10 mins ON and 10 Mins OFF



Refrigerant Gas Leakage Detector

Detects all CFC refrigerants such as R-22, R-124, R-11 and R-12

The ultra-sensitive long life sensor detects the more current, difficult-to-detect HFC refrigerants such as R-134a, R-404A, and new R-22 replacements, R-410A and R-407C.

It's long, slim gooseneck probe design is easy to use in close areas and for extending into hard-to-reach areas.

It's adjustable alarm, easy one-hand operation and impact resistance storage case add up to value and convenience

Sensitivity to detect: 100ppm of R-134A/R-22

Response Time < 2 sec

Audio and Visual Alarm



Relay Test Set

This is a portable testing kit in one unit, suitable for testing protective relay, over current relay, earth fault relay, protective device, circuit breaker, tripping coils etc.

The set is designed for both laboratory and field use.

INPUT	230 Volts, single phase, 50Hz. AC.
OUTPUTS	Current Output:
	a) 0- 1Amp. At 4/10Volts.
	b) 0- 2Amp. At 4/10 Volts.
	c) 0- 5 Amps. At 4/10 Volts.
	d) 0- 10 Amps. At 4/10 Volts.
	e) 0- 20 Amps.at 4/10 Volts.
	f) 0- 50 Amps. At 4Volts.
	g) 0-100 Amps. At 4 volts.
	h) 0-200 Amps At 4Volts.



Current output is continuously variable and the output is taken out through a multi range C.T. The secondary is connected to an ammeter scaled in 0 to 100%

AC Voltage Output	Continuously variable 0 -230V AC. Capacity- 460VA(Max).
Fixed AC voltage	50V & 110V.
Time Measurement	0-9.999Secs. & 0-99.99Secs. in two ranges. Accuracy : 1%

This is a portable Relay Testing Set suitable for testing different types like over current, earth leakage relays, circuit breakers of 1A – 5A rating etc.

All the components are assembled and enclosed with a portable air cooled M.S.cabinet

Input	230V AC 50Hz
Output Current	1A – 5A–10A-20A – 50A-100A-200A. as per output range selection
Maximum Capacity	1200VA
Output Voltage	0 – 240V AC or DC of capacity 1A
Built-in digital time interval meter - Checks latching time as well as contact reliability of relay under test	
Time Range	0 – 9.999 Sec & 0 – 99.99 Sec



It is suitable for testing distance relays.

Other relays like over current, over voltage, under voltage, earth fault and relays having directional element can also be tested by this relay test set.

Fault phase voltage adjustable between 0 to 110%

Fault current adjustable between 0 to 100%

Phase angle adjustment & measurement 0° to 360°

Digital time interval meter.

Voltage & current indications by digital meters.

Input Voltage	415V±10%, 3phase, 4 wire 50HZ AC
Output (s)	[a] Test Current : 0 to 1,5, 10, 25A, 50A having 0 to 100% resolution in each tap Rated maximum burden : 500 VA. per phase.
Duty Cycle	i) continuous up to 10A. ii) 25A, 50A outputs are rated for intermittent duty cycle i.e. 5mins "ON", 10mins "OFF "
Test Voltages	AC Voltage source: 0-220 Volts , phase to neutral, 50 HZ AC.
Rated maximum burden	150VA /phase.
DC voltage source	Isolated 0-240 volts D.C. with maximum capacity available 1A.
Phase Angle Variation	0 to 3600 in current ckt.
Time Measurement	0-9.999secs. with resolution 1 msec. & 0-99.99sec. with resolution 10 msec



This is a portable Relay Testing Set suitable for testing different types like over current, earth leakage relays, circuit breakers of 1A – 5A rating etc.

All the components are assembled and enclosed with a portable air cooled M.S. cabinet

Input	415V, Three phase, 4 wire 50HZ. AC.
Output Current	1A- 5A –10A –25 & 50A as per output range selection.
Maximum Capacity	250VA at 50 Amps.
Duty Cycle	a) Up to 10A, the loading can be done continuously b) 50A output is rated for intermittent duty cycle i.e. 5 Minutes
Output voltage	Fixed 110V AC ph .to ph .with volt. Control 90%, 100% & 110%
Time Measurement	Built in digital time interval meter. Scope to check latching time as well as contact reliability of relay under test.
Time range	0 – 9.999 sec.Resolution 1 msec. & 0 – 99.99 sec. Resolution10 msec



Short Turn Indicator

This precise instrument measures AC Resistance and compares it to identical windings, detecting the flaw without having you to dismantle the motor

Operates best on poly phase machines or in machines with more than two identical windings like general motors and transformers

Portable, Compact, it is easy to carry.

It operates even on a 9V Battery

Sturdy and long lasting this fault detector will see you through the most complex and tough problems

This instrument does not require any calculations



A low-cost instrument

Solid state, compact meter

Detects even a single turn shorting in coils by simply inserting the coil in mandrill with both leads of the coil in open condition

9V battery operated

Helpful in mass production of transformer coils, solenoid coil, loudspeaker coil, choke coil, relay coil etc..

Useful in the maintenance of the electronic, electrical instruments

LED Version of the meter is also available



Solar Power Meter

Sunlight Measurement up to 1999W/m ² or 634BTU / (Ft ² *hr)
High Accuracy and Fast Response
Data Hold function
Unit and sign display for easy reading
Measuring unit selectable between W/ m ² and BTU/(Ft ² *hr)
Direct Reading with no adjustments
Max / Min value recording
Low Battery Indication
3-1/2 Digits LCD Display
Resolution 1W/m ² ; 1 BTU / (Ft ² *hr)
Accuracy: ± 10W/m ²



Sound Level Calibrator

Standard Sound Ringing Capabilities at 94dB and 114dB	
Can be used for both A Weighting and C Weighting Calibration	
Microphone adaptors are provided	
Low Battery Indication	
Output frequency	1kHz
Accuracy	±0.5dB
Complete with user manual, battery and carrying case	



Spectrum Analyzer

Frequency range	0.15--- 1050 MHz
Center frequency display accuracy	±100kHz
Marker accuracy	(0.1% span +100kHz)
Resolution of frequency display	100kHz (4.5 digit LED)
Frequency scanwidth	100 kHz/div. to 100MHz/div.in 1-2-5 steps and 0Hz/div.(Zero Scan)
Frequency scanwidth accuracy	±10%
Frequency stability	better than 150 kHz/ hour
IF Bandwidth (-3dB)	
Resolution	400 kHz and 20 kHz;
Video-Filter on	4 kHz
Sweep rate	43Hz
Amplitude range	-100dBm to +13 dBm
Screen display range	80 dB (10dB/div.)
Reference level	-27dBm to +13 dBm (in 10dB steps)
Reference level accuracy	±2dB
Average noise level	-99dBm (20 kHz BW)
Distortion	< -75 dBc: 2nd and 3rd harmonic
3rd order intermod	-70dBc (two signals > 3MHz apart)
Sensitivity	<5dB above average noise level

Log scale fidelity	±2dB (without attn.) Ref.: 250MHz
Input impedance	500hms
Input connector	BNC
Input attenuator	0 to 40 dB (4Å~10dB steps)
Input attenuator accuracy	1dB/10 step
Max. input level	+10dBm, ±25V DC (0dB attenuation)
	+20dBm, (40dB attenuation)



Frequency range	0.15--- 1050 MHz
Center frequency display accuracy	±100kHz
Marker accuracy	(0.1% span +100kHz)
Resolution of frequency display	100kHz (4.5 digit LED)
Frequency scan width	100 kHz/div. to 100MHz/div. in 1-2-5 steps and 0Hz/div.(Zero Scan)
Frequency scan width accuracy	±10%
Frequency stability	better than 150 kHz/ hour
IF Bandwidth	(-3dB)
Resolution	400 kHz and 20 kHz;
Video-Filter on	4 kHz
Sweep rate	43Hz
Amplitude range	-100dBm to +13 dBm
Screen display range	80 dB (10dB/div.)
Reference level	-27dBm to +13 dBm (in 10dB steps)
Reference level accuracy	±2dB
Average noise level	-99dBm (20 kHz BW)
Distortion	< -75 dBc: 2nd and 3rd harmonic
3rd order intermod	-70dBc
(two signals > 3MHz apart)	
Sensitivity	<5dB above average noise level
Log scale fidelity	±2dB (without attn.) Ref.: 250MHz
Input impedance	50 Ohms
Input connector	BNC
Input attenuator	0 to 40 dB (4x10dB steps)
Input attenuator accuracy	1dB/10 step
Max. input level	+10dBm, ±25V DC (0dB attenuation)
	+20dBm, (40dB attenuation)
Tracking Generator Frequency range	0.15 MHz to 1050 MHz
Output level range	-50dBm to +1dBm (in 10dB steps and var.)
Output attenuator	0 to 40dB (4Å~10dB steps)
Output attenuator accuracy	±1dB
Output impedance	50> (BNC)
Frequency response	±1.5dB
Radio Frequency Interference(RFI)	<20dBc



Tachometer Calibrator

Easy to use calibrator for instant and reliable calibration of Non -Contact tachometers up to 199999 RPM

The desired RPM can easily be set using the front panel switches

Since RPM is a function of the frequency, the bright White LED flashes at a value nearest to the set RPM and the actual RPM/Frequency is displayed on the 2 Line Backlit alpha numeric LCD display

The actual RPM/Frequency is displayed on the 2 Line Backlit alpha numeric LCD display



6 Digit LED Display	
Auto-ranging from 9999.99 Sec to 999999Hrs	
Ranges can be fixed at	9999.99 Sec, 99999.9 Sec / Min / Hrs, 99Hr / 59Min / 59 Sec, 9999.99 Sec / Min, 999999 Sec / Min / Hrs (User Selectable)
Accuracy	±0.05%
Control Input	Proximity Switches / Contact Closure (Limit Switch, Relay etc.)
Reset	Front Reset / Remove Reset / Auto Reset (Programmable)
Memory Retention	For up to 10 yrs
Sensor Supply	12V DC
Auxiliary Power Supply	90V to 270V AC 50/60Hz
Size	96 x 98 mm sq



Transistor Tester

Mainly used for testing the DC parameters of semiconductors such as diode, transistor, controlled silicon and field effect transistor.

It also can be used to test the withstand voltage of capacitor, protection voltage of varistor and isolation of electrical.

It can test 78 and 79 series three-terminal voltage regulator

Measuring forward voltage, reverse voltage, forward saturation voltage drop, amplification factor, reverse leakage current of various crystal diode, audio, silicon controlled rectifier (SCR), field effect transistor (FET).

Measuring rated working voltage of chemical capacitor, terylene capacitor, Ta capacitor, Leaded multilayer ceramic capacitor, high voltage laker.

Measuring protection voltage of varistor.

Measuring starting voltage of neon bulb, neon lamp.

Measuring constant voltage value of 78,79 series three-pole circuit.



Transformer Turns Ratio Set

Wide measuring range, better resolution, measures percentage ratio & phase error directly, advanced design using integrated circuits, efficient shielding technique, compact in size, phase sensitive null detector, check polarity.

Perfectly suitable to measure actual turns ratio of a transformer

Measures percentage ratio & Phase errors directly

The polarity of the transformer under test is also indicated

Measurements are carried out in 10 ranges arranged in a 1, 2, 5, 10 sequence.

The measuring span has a range of ratios from 0.800 to 2021

The ratio resolution is 0.01%.

Phase deviation measurements are carried out in two ranges.

Accuracy: ±0.1% of reading.



Time Totalizer

6 Digit LED Display

Auto-ranging from 9999.99 Sec to 999999Hrs

Ranges can be fixed at 9999.99 Sec, 99999.9 Sec / Min / Hrs, 99Hr / 59Min / 59 Sec, 9999.99 Sec / Min, 999999 Sec / Min / Hrs (User Selectable)

Accuracy ±0.05%

Control Input Proximity Switches / Contact Closure (Limit Switch, Relay etc.)

Reset Front Reset / Remove Reset / Auto Reset (Programmable)

Memory Retention For up to 10 yrs

Sensor Supply 12V DC

Auxiliary Power Supply 90V to 270V AC 50/60Hz

Size 96 x 48 mm sq



Two Color Infra Red Thermometer

Two Color Infra Red Thermometer	
D:S Ratio	150:1
Temperature Range	600-1400
Visual Optical Sighting	
Accuracy	± 1%
Response Time	Less than 100 ms
Adjustable Emissivity 0.10 - 1.00 (1-color) and 0.800 - 1.200 (2-color)	
Can work as both single color and two color modes	
Peak Hold, Average, Relay Alarm	
RS-485 Output for PC Interface	
Analogue Output 4 - 20mA	
Ideally used for Areas having smoke, steam or dust in the atmosphere	
Also ideal for targets where emissivity is changing	
Auto Power Off	
IP-65 Protection	



Two Color Infra Red Thermometer	
D:S Ratio	300:1
Temperature Range	700-1800
Visual Optical Sighting	
Accuracy	± 1%
Response Time	Less than 100 ms
Adjustable Emissivity 0.10 - 1.00 (1-color) and 0.800 – 1.200 (2-color)	
Can work as both single color and two color modes	
Peak Hold, Average, Relay Alarm	
RS-485 Output for PC Interface	
Analogue Output 4 – 20mA	
Ideally used for Areas having smoke, steam or dust in the atmosphere	
Also ideal for targets where emissivity is changing	
Auto Power Off	
IP-65 Protection	



Two Color Infra Red Thermometer	
D:S Ratio	300:1
Temperature Range	1000-3000
Visual Optical Sighting	
Accuracy	± 1%
Response Time	Less than 100 ms
Adjustable Emissivity 0.10 - 1.00 (1-color) and 0.800 – 1.200 (2-color)	
Can work as both single color and two color modes	
Peak Hold, Average, Relay Alarm	
RS-485 Output for PC Interface	
Analogue Output 4 – 20mA	
Ideally used for Areas having smoke, steam or dust in the atmosphere	
Also ideal for targets where emissivity is changing	
Auto Power Off	
IP-65 Protection	



Ultrasonic Thickness Gauge

Micro-controller based	
Quick and Precise Measurement of thickness of most of industrial material.	
Suitable for measuring materials that are good ultrasonic conductors such as metal, plastic, ceramic, glass etc	
Auto calibration to assure the accuracy	
Auto linear compensation: this advanced software program enhances the precision by correcting the non-linear accuracy of transducer.	
Coupling icon to learn if the coupling is accomplished or not	
10 thickness measurement storage and recall function	
Sound velocity measurement	
Low battery indication	
Auto power off mode	
Transducer choice	10mm 2.5MHz Transducer, 10mm 5.0MHz Transducer
Display	4-digital LCD display
Minimum display unit	0.1mm
Working frequency	5MHz/2.5MHz
Measuring range	1.2 to 220mm (steel)



Minimum limit for tube curvature measurement	20*3mm (steel)
Accuracy	+/- (1%H+0.1)mm, H denotes the measured thickness.
Sound velocity range	1000 to 9999m/s

Vibration Meter

Designed as a simple diagnostic tool for preventive maintenance	
The instrument and the monitoring technique are based on the recommendations of ISO	
Pocket Size, most economical	
Low Battery indication	
Measuring range	0.2 to 99.9 mm/s RMS
Frequency range	10 to 1000Hz
Resolution	0.1mm/s
Accuracy	± 2%
Input Sensitivity	10pC/m/Sz
Power Supply	9V - 6F22
Display	3 digit 7 segment LED
Vibration Transducer is piezo electric type accelerometer	
Sensitivity of transducer	10pC/m/Sz



Measuring Vibration Velocity, Displacement and Acceleration.	
True RMS measurement	
Sealed Membrane key pad	
Suitable for monitoring machinery vibration caused by imbalance, misalignment and gear faults	
Micro Controller based	
Back Light Display	
Auto Power Off	
Battery Low Indication with text	
Pocket size and Light weight	
Displacement Measuring	0.1- 2800µm (0.0001-2.800mm) PK-PK & RMS
Velocity Measuring	0.1 to 200 mm/s RMS & PEAK-PK
Acceleration Measuring Range	0.1 to 200 m/sz RMS, PK-PK
Resolution	0.1mm/s
Accuracy	± (2% + 0.1mm/s)
Frequency response	10-1000 HZ



Pen type Pocket Size instrument	
LCD Display	
It can measure acceleration, velocity and displacement.	
Compact Size. It is light and easy to carry.	
Simple Two Key Operation	
Auto Power Off facility	
Acceleration	0.01-199.9m/sz (peakvalue)
Velocity	0.01-199.9mm/s(effective value)
Displacement	0.001-1.999mm (peak-peakvalue)
Acceleration Frequency Response	10Hz-1kHz.
Velocity Frequency Response	10Hz-1kHz.
Displacement Frequency Response	10Hz-500Hz



Video Infra Red Thermometer

2.2" TFT LCD display

640*480 pixels (30 million pixels)

MicroSD memory card

Image (JPEG) and video (AVI)

Picture and Video of target under test can be taken

Pictures with target sighting, temperature and time stamp

Humidity and Air Temperature measurement

Dual laser targeting

Type-K thermocouple probe

Adjustable emissivity

High accuracy

Fast response time

Dew-point temperature and Wet bulb temperature

50:1 Distance to Sighting Ratio

Temperature Range -50 to 1850°C

Adjustable Emissivity 0.10 to 1.00

Contact type Thermometer with K type Thermocouple measures Range-50 to 1370°C

Re-chargeable battery and Battery Charger

USB PC Interface



Wheatstone Bridge

Useful for measuring Low Resistance values

Range 0.001 to 11.1M Ω

Accuracy $\pm 0.05\%$

In-built 4.5V dry battery

Best Quality Manganin Wire is used for coils

In-built high sensitive galvanometer of 20uA/mm

Suitable for Murray & Varlex Loop Test

Optional Light Spot Galvanometer can also be supplied



Weather Station

Touch Screen Panel, USB Port for PC Interface

All Weather data from the base station and history data with user adjustable measuring intervals can be recorded and uploaded to the PC

Rainfall Data

Wind Chill and Dew Point Temperature Display

Records min. and max. wind chill and Dew Point with time and date stamp

Wind Speed (mph, m/s, km/hr, knots, Beaufort)

Wind Direction display with LCD Compass

Weather forecast tendency arrow

Weather alarm modes

Storm Warning,

Barometric Pressure with 0.1hPa resolution

Indoor and Outdoor Humidity

Time Zone Setting, Time Alarm

Battery Operated.



LCD displays measurement result and conditions directly
Measures acceleration (m/s² peak), velocity (mm/s RMS) and displacement (mm p-p)

Selective vibration characteristic

Uses hi-sensitive vibration sensor for accurate measurements

Equipped with two probes (SHORT and LONG) to adapt to the different measurement requirements

Magnetic probe is provided, to be used for holding the sensor in un-easy conditions

Low battery indication

Auto Power Off

Backlit LCD Display

Maximum value Hold function

Measures Temperature in °C /°F

Acceleration 0.1~199.9m/s² peak

Velocity 0.1~199.9mm/s rms

Displacement 0.001~1.999mm p-p

Frequency range of Acceleration
10Hz ~ 1KHz (LO)
1KHz ~ 15KHz (HI)

Frequency range of Velocity
10Hz ~ 1KHz (LO)

Frequency range of Displacement
10Hz ~ 1KHz (LO)

Temperature -10°C to 80°C

Battery Operated

Auto Power Off

Signal Output AC output 2V peak,
Earphones can be connected



Micro-processor based diagnostic tool

Direct Indication of machine condition in terms of good- reduced- bad

Mechanical Condition of Bearing

Lubrication condition of Bearing

Damage Severity readings for rolling bearings.

Non-Contact measurements of rotational speed
Vibration Severity measurements according to ISO recommendations.

Bearing Tester Function Range 0 to 99dBpv

Vibration Range 0.1 to 99.9 mm/s RMS

Laser Tachometer range up to 20000 RPM

Bearing Probe, head phone, Accelerometer, tachometer probe, manual, battery and carrying case



Voltage Transducer

Input and outputs are Isolated

Type DIN RAIL Mounting

AC Input 0 - 3.5, 110, 230, 300, 440, 500V, Through PT for Higher Voltages (AnyOne)

DC Output Current(mA) : 4-20 Voltage (V) : 0-10 As per Scale (Other Voltage and

current outputs available on request) Single Output is standard, Dual Output available on request

Auxiliary Self Powered

Accuracy Standard : $\pm 0.5\%$ of Span

Optional On Request





ELECTRO METER CORPORATION
NABL Accredited Calibration Laboratory

Corporate office & Laboratory
Kolkata:

P-5, CIT Road, Scheme LV
Near Moulali Crossing
6th, 7th & 9th Floor
Kolkata - 700014
Phone: + 91-33-2265-9824 / 4401