

## PRODUCT CATALOGUE

2015 - 2016

























#### **TESTING AND MEASURING INSTRUMENTS**





#### **Forthcoming Products**

- PH Meter
- Conductivity Meter
- TDS Meter
- Dissolved Oxygen Meter
- Chlorine Meter
- Turbidity Meter
- Discharge Rod
- Micro Ohms Meter
- Fully Automatic Oil Test Set

- Infra Red Temperature Sensor
- Cable Fault Locator
- Cable and Pipe Path Finder
- Wire Less Phasing Tester
- Gas Detectors
- Flue Gas Analyzer
- Hardness Tester
- Water Hardness Tester
- Calorimeter

- Glass Meter
- Stroboscopes
- Force Gauge
- Tension Meter
- Oxygen Meter
- Optical Power Source
- Optical Power Meter
- Optical Time Domain Reflectometer

#### **TESTING AND MEASURING INSTRUMENTS**

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Metravi is one of the largest distributors of ELECTRICAL & ELECTRONIC TEST and MEASURING INSTRUMENTS in INDIA, in this line of business since 1970 and catering to the needs of almost all major Government, semi-Government, private and public sector industries including the Defense, Telecom, Power Generation, Iron & Steel sectors. We have been introducing a variety of new products over the years, keeping in pace with latest cutting-edge technologies & innovations.

Consider us a "ONE STOP SHOP" for all your needs for measuring electrical and electronic parameters, from simple Voltmeters & Ammeters to Oscilloscopes and Spectrum Analyzers to High Voltage Testing equipment.

Backed by years of accumulated experience, quality and acumen, the METRAVI brand is an alliance of rich experience in the instruments field, exceptional expertise in instruments' manufacturing and state of the art technology, resulting in the best next-generation instruments that your money can buy. The METRAVI range of instruments offer 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 a METRAVI product.

We also undertake calibration jobs for acquiring National & International Standards calibration certificates. Our associates have their entire primary calibrating instruments traceable to National or International Standards, hence making it possible for us to issue the required certificates.

Give us a chance to serve you and we assure you QUALITY & PROMPT SERVICE backed with EXPERIENCE & EXPERTISE!



#### **Acidity Testing Kit**

#### **Metravi AKT**

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 Droppler

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



#### A.C. High Voltage Test Set

#### **Metravi ACHV**

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**

#### Metravi-300

It confirms 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).

COMMINIS TO CAL	11 000 V, IEC 10 10 1 (EIV 010 10 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 Fac	ility



#### Metravi M-600

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

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/200kΩ	
Accuracy	± 4%	
Temperature up to 150°C / 300°F		
Accuracy	5°C	
Confirms to IEC-61010, CAT II 600V		
Fuse Protection		
Pointer Lock Facility		



#### Metravi SK-7200

Easy Range Selec	tion 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**

#### Model 250TR

Hand Held Mu	ıltimeter	
DC Voltage	0 - 2.5/10/50/250/1000V	
Accuracy	±5%	
AC Voltage	0 - 10/50/250/1000V	
Accuracy	±5%	
Resistance	0 - 20k/2MΩ	
Accuracy	±5%	
Battery Test	1.5/9V	
Accuracy	±5%	
Decibel	-22 to 20 dB	
Confirms to IEC 61010, CAT II 300V		



#### **Metravi 260TR**

Hand Held Mul	timeter
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/20MΩ
Accuracy	±3%
dB Test	-10dB to +62dB
Transistor Polar Test	ity Test and Audible Continuity
Fuse Protection	1



#### Metravi 5050E

Confirms to C	AT 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 /2000MΩ
Accuracy	±2%
Audible Continuity Test	
Fuse Protection	



#### Metravi 6060

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 – 2/20/200/2kΩ	
Accuracy	±10%	
Audible Continuity Test		



#### Metravi 2010BA

Confirms to IEC 61010, CAT III 600V

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

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/20MΩ	
Accuracy	±3%	
Battery Test	1.5V/9V	
Transistor Test, Diode Test and Continuity Test Facility		



#### **Battery Impedance Tester**

#### Metravi TM-6001

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  $% \left( 1\right) =\left( 1\right) \left( 1\right)$ 

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  $\!\mu$   $\Omega$  to 40  $\Omega$ 

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**

#### **Metravi 45 T-RMS**

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/20MΩ	
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		



#### Metravi M 3500A

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/		
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 measuremer	nts 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/ 100MΩ
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.



#### Metravi 3510A

Most Cost Effective 6-1/2 Digit Multimeter  Dual Displays & Dual Measurements		
Basic DC Voltag	e Accuracy of 0.009%	
Free Software P	T-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.	



#### Metravi 3511A

Most Cost Effective 6-1/2 Digit Multimeter		
Dual Displays & Dual Measurements		
Wide Range Current Muasurement		
Basic DC Voltage Accuracy of 0.009%		
Free Software P	T-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**

#### **Metravi PES-2000A**

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 mimumum 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



#### **Metravi CFL-01**

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



#### Metravi CFL-02

Pin Points Fault in all underground cables

Useful for Power, Control & Telecom Cables

Maximum Cable Length 5kms

Accuracy: ±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  $1M\Omega$  measure by 1KV



#### **Calibrators**

#### **Metravi RTD Calibrator CAL-408**

Portable Type		
12 Fixed range Select	2 Fixed range Selectable Outputs	
Outputs available at	-200, -100, -50, 000, 50,100, 150, 200, 300, 400,500, 600°C	
Accuracy	±0.05% Ohm of FSR	
Compensation	Long Wire Compensation of 100m. sensor cable	



#### Metravi CAL-400-3

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 m	V	
	Measures Current and Power		
-	Current Source Range	0 – 19.99 / 24mA	
	Accuracy	±0.25%	
	DC Milli Volt Source Range	-199.9 to +199.9mV	
	Accuracy	±0.25%	
	DC Current Measurement Range	0 - 19.99 / 24mA	
	Accuracy	±0.25%	



#### Metravi CAL-400-4

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% 400 to 1800°C B type thermocouple Resolution 1°C Accuracy: ±0.05% E type thermocouple -200 to 1000°C 0.1°C Accuracy: ±0.05% Resolution K type thermocouple -200 to 1370°C Resolution 0.1°C Accuracy: ±0.05% -200 to 1200°C J type thermocouple Resolution 0.1°C Accuracy: ±0.05% -200 to 400°C T type thermocouple 0.1°C Accuracy : ±0.05% Resolution -200 to 1300°C N type thermocouple Resolution 0.1°C Accuracy: ±0.05% PT-10 385 Sensor -200 to 850°C 0.1°C Accuracy: ±0.05% Resolution 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 0.1°C Accuracy : ±0.05% Resolution Cu50 Sensor -50 to 150°C



#### Metravi CAL-402-4

венси юр гонав	le, 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



Resolution

## Metravi Thermocouple / RTD / DC Voltage & Resistance Calibrator-01

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

DC Voltage and resistance	
°C and °F scales selectable	
Suitable for field use	
High Accuracy of 0.05%	
Display	5 Digits LCD
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	0.1/1Ω Accuracy : ±0.05%



0.1°C Accuracy: ±0.05%

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%			





Measuring Range	
Resistance Range	0 to 500 / 5000Ω
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%

#### **Metravi Loop Calibrator - 05**

Provides output and measures DC Voltage and Loop Current		
nalogue 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 fromzero 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		
0 - 22mA		
0.001mA, Accuracy : ±0.05%		
0 to -22mA		
0.001mA, Accuracy : ±0.05%		
24V		
Accuracy ±10%		
Measuring Range		
Voltage 0 to 28V		



#### Metravi Universal Process Source Model 11+

1mV, Accuracy: ±0.05%

0.001mA, Accuracy: ±0.05%

0.001mA, Accuracy : ±0.05%

-1.00 to 20mA

0 to 24mA

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 autoreference joint point); the unit can be converted between  $^{\circ}\text{C}$  and  $^{\circ}\text{F}$ .

Outside place temperature detector with high accuracy of +2 °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

White backlight with auto turn off		
Sources		
DC Voltage	0 – 100m / 1000m / 10V	
Resolution	1uV, Accuracy : ±0.02%	
DC Current	0 – 20mA	
Resolution	1uA, Accuracy : ±0.02%	
Resistance	0 – 400 / 4k / 40kΩ	
Resolution	0.01Ω, 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	
B type thermocouple	600 to 1820°C	
Resolution	1°C Accuracy : ±1.1°C	
E type thermocouple	-200 to 1000°C	
Resolution	0.1°C Accuracy : ±0.04°C	
K type thermocouple	-200 to 1372°C	
Resolution	0.1°C Accuracy : ±0.5°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 : ±0.08°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-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	
PT-1000 type sensor	-200 to 630°C	
Resolution	0.1°C Accuracy : ±0.2°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	
Frequency	1Hz to 110Hz	
Resolution	0.01Hz Accuracy: ± 2 counts	
Pulse	1 to 100 / 1k / 10kHz	
	1 12 1007 1117 1011112	

Resolution

Resolution

Switch



Resolution

Resolution Loop Current

Resolution

Current

1 Cycle Accuracy: ± 2 counts

0.01Hz Accuracy: ± 2 counts

1Hz to 100Hz / 1kHz /

10kHz/100kHz

#### Metravi DC voltage / Therm-resistance / Thermocouple calibrator 14+

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

Wicasarcs	
DC Voltage	0 – 50mV/500mV
Resolution	1uV Accuracy : ±0.02%
Resistance	0 – 500/5kΩ
Resolution	0.01Ω 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 – 500Ω
Resolution	0.01Ω
Sources	
DC Voltage	0 – 100mV / 1000mV
Resolution	1uV Accuracy : ±0.02%
Resistance	0 – 400 / 4kΩ
Resolution	0.01Ω 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	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



#### Metravi Voltage / mA Calibrator Model 15+

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

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

High Accuracy of 0.05%

Display 6 Digits LCD

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	

0.1°C Accuracy: ±0.4°C

0.1°C Accuracy: ±0.5°C

0.1°C Accuracy: ±0.6°C

0.1°C Accuracy: ±0.7°C

-200 to 1200°C

-250 to 400°C

-200 to 1300°C

600 to 1820°C

J type thermocouple

T type thermocouple

N type thermocouple

B type thermocouple

Resolution

Resolution

Resolution





#### **Metravi Universal Calibrator -25**

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

ivieasures	
DC Voltage	0 - 50mV/500mV/ 5V/50V DC
Accuracy	±0.02%
DC Current	0 - 50mA
Accuracy	±0.02%
Resistance	0 - 500/5kΩ
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
Accracy	±0. 7°C
Temperature forT 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/40kΩ
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**

#### **Metravi CO-10**

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 monoxidein 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	



#### Metravi CO-09

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

The Meter indicates the presence of carbon monoxidein 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 Fa	icility
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**

#### **Metravi CET-01**

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

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	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	

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#### **Metravi CET-02**

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.

#### **Metravi CET-03**

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	

## A W OI I M C D

#### **Metravi CET-04**

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	32mm
Display	4 digit Backlit LCD
Resistance Range	0.01 to 1200Ω
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 – 199Ω
Setting Range of Current Alarm Critical Value	1-499mA
Data Hold, Auto Power Off	



#### Coatmeter

#### Metravi CTG-01

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

O .:	57.1		e 9
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

Disable / late i evici en lanction via merve setting.	
Measuring Ranges	
Ferrous	0 ~ 1250um 0 ~ 49.21mils
Non Ferrous	0 ~ 1250um 0 ~ 49.21mils
Guaranteed Tolerance	

Ferrous	±3% ±1um ±3% ± 0.039 mils
Non Ferrous	±3% ±1.5um ±3% ± 0.059mils
Precision	
Ferrous	0.1um / 0.001 mils

0.1um / 0.001 mils

#### Non Ferrous

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**

#### Metravi GLD-01

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**

#### Metravi CE-0102CT

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



#### Data Logger for Sound Level

#### Metravi DL-SL-01

Sampling Rate

This unit confirms 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	±1.4dB	
Frequency Range	31.5Hz to 8kHz	
Data Memory	129920 Data	
Campling Pato	Settable from 1 Sec.	

With USB PC Interface Cable and Software

to 24 Hours.



#### **Data Logger for Temperature & Humidity**

#### Metravi DL-TH-01

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	±3.0%
Temperature	-40 to 70°C
Accuracy	±1°C
Sampling Rate	Settable from 1 Sec. to 24 Hours.
14 C. L. LIGB. B.C. L	6.11 16.6

With USB PC Interface Cable and Software



#### **Data Logger for Voltage and Current**

#### Metravi DL-VI-01

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	± 2%	
AC Current Range	10A ~ 200A (50 / 60Hz)	
Accuracy	± 2%	
Wave Record Function	Records the wave which exceeds the set Voltage / Current.	
Real Time Display, Calibrated v	vith software	

Max / Min Reading Hold

Peak Hold Function

USB PC Interface with software



#### **DC High Voltage Test Set**

#### Metravi DCHV

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. apacity: 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**

#### Metravi RPS-3002

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

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 - 30V DC
Variable Output Current	0 - 2A

#### Metravi RPS-3005

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

#### Metravi RPS-6002

Utilizes SMT Technology

Green LED Display

Voltage and Current displayed together

Multi-turn variable device to provide high precision

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



### Metravi RPS-6005

Litilizas CNAT To shanala su

Input

Utilizes Sivi i lechnology			
	Attractive Digital Display showi	ng 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		tection	
Rugged Reinforced Metal Frame Construction.		e Construction.	
	Output Polarity	Positive and Negative	

230V AC 50Hz

0 – 60V DC

0 – 5A DC



#### Metravi RPS-3010

Variable Output Voltage

Variable Output Current

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	



#### Metravi RPS-3020

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	



#### Metravi RPS-3030

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

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	



#### Metravi RPS-6010

Littliano	CNAT	Tachna	
Utilizes	SIVII	Techno	loav

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.

riagged Neimoreed Wetar Fame Construction.	
Output Polarity	Positive and Negative
Input	230V AC 50Hz
Variable Output Voltage	0 – 60V DC
Variable Output Current	0 – 10A DC



#### Metravi RPS-6020

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

Short cheat protection	
Input	220 / 110V ±10% 50~60Hz
Variable Output Voltage	0 - 60V DC
Variable Output Current	0 - 20A
Working hours	8 hours continuous working



#### Metravi RPS-6030

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

Constant Carrent 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



#### Metravi RPS-3002-2

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	



#### Metravi RPS-3005-2

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



#### Metravi RPS-3002-3

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



#### Metravi RPS-3005-3

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

more emedic 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



#### **DDS Function Generator**

#### **Metravi DDS-1005**

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



#### Metravi DDS-1010

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





#### **Metravi DDS-1025**

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	



#### **Metravi DDS-1050**

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

#### **Metravi DT-230**

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 - 400m/4/40/400/600V.	
Accuracy	±0.8%	

AC Voltage	0 - 400m/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/40MΩ
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	



#### **Metravi DT-6250**

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 II	I 600V	
Clamp Jaw Dia	30mm	
DC Voltage	0 - 400m/4/40/400/600V.	
Accuracy	±0.8%	
AC Voltage	0 - 400m/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/40MΩ	
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		



#### Metravi DT-3690

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	n	
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/40MΩ
Accuracy	±2.5%
Frequency	Upto 10MHz
Accuracy	±0.5%
Duty Cycle	0.1 to 99.9%
Accuracy:	±1%
Diode and Continuity Test Facility	

#### Metravi DT-3250A

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	±0.8%
AC Voltage	0 – 750V
Accuracy	±1.5%
DC Current	0 – 400/1000A
Accuracy	±2.5%
AC Current	0 – 400/1000A
Accuracy	±2.5%
Resistance	0 – 400/4k/40k/400k/4MΩ
Accuracy	±1.2%
Frequency	0 – 10/100/1k/10k/100k/1MHz
Accuracy	±0.1%
Duty Cycle	10 to 90%
Accuracy	±0.5%
Diode and Continuity Test Facility	

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#### Metravi DT-3250

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 Measure	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 - 400/1000A.	
Accuracy	±2.0%	
AC Current	0 - 400/1000A.	
Accuracy	±2.0%	
Resistance	0 - 400/4k/40k/400k/4M/40M $\Omega$	
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		



#### **Metravi DT-4250**

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	±0.8%
AC Voltage	0 - 400m/4/40/400/600V.
Accuracy	±1.0%
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/40MΩ
Accuracy	±1.0%
Temperature	-20°C to 1000°C / -4°F to 1832°F
Accuracy	±3.0%
Frequency	0 - 5/50/500/5K/50K/100KHz
Accuracy	±1.2%
Capacitance	0 - 40n/400n/4u/40u/100uF
Accuracy	±3.0%
Duty Cycle	0.5 - 99.9%
Accuracy	±1.2%
Diode Test and Continuity Test	
Confirms to CE, IEC 61010, CAT-III 600V	



#### **Metravi DT-5250**

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	±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%
DC Current	0 - 40/400/1000A
Accuracy	±2.8%
Resistance	0 - 400/4k/40k/400k/4M/40MΩ
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 C	ontinuity Test
Confirms to CE, I	EC 61010, CAT-III 600V





#### Metravi DT-3600

	C/AC T-RMS Clamp meter
Auto Power Off	f
Peak Hold and	Data Hold facility
Display	3-3/4 Digits 3999 Counts Backlit LCD with analogue bargraph
Frequency Measthrough clamp	surement while measuring current
Relative Measur	rement 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/40MΩ
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



#### **Metravi DT-9250**

Auto-ranging D	OC/AC T-RMS Clamp meter
Auto Power Of	f
Peak Hold and	Data Hold facility
Display	3-3/4 Digits 3999 Counts Backlit LCD with analogue bargraph
Frequency Mea	surement while measuring current
Relative Measu	rement 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/40MΩ
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 CAT-IV 600V	, IEC 61010, CAT-III 1000V,
600V DC/AC P	rotection on all ranges



#### Metravi DT-8250

600V DC/AC Protection on all ranges

Auto-ranging AC	/DC Clamp meter
Auto Power Off	
Peak Hold and D	ata Hold facility
Display	3-3/4 Digits 3999 Counts Backlit LCD with analogue bargraph
Frequency Measu through clamp	rement while measuring current
Relative Measure	ment 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/40MΩ
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 C	ontinuity Test
Confirms to CE, I	IEC 61010, CAT-III 1000V, CAT-IV 600V

600V DC/AC Protection on all ranges



#### **Metravi Metraclamp-20**

For the First Time in INDIA, 40,000 Counts, 4-3/4
Digits LCD Dual Display with Analogue Bargraph

	Il Display with Analogue Bargraph
Provides higher I	Resolution and Accuracy
Fully protected D	OC/AC T-RMS Clamp Meter
500V AC/DC Pro	otection on all ranges
1000V AC/DC P	rotection in Voltage range.
Clamp Jaw Dia	52 mm
Low Battery and	Over-range indication
Data Hold & Pea	ık Hold
In-Rush Current	Measurement
Max / Min Recor	rd Facility
Double Moulded	d Injection Body
Auto Power Off	
In-Built Non Cor	ntact 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/40MΩ
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 be mentioned.



#### **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 Ammeter**

#### Metravi AVM-02

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



#### **Metravi AVM-03**

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 Of

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





#### Metravi AVM-05

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 ±3%

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

1.4 to 108.0 km/hr; accuracy ±3%

80 - 5900ft/min; accuracy ±3%

0.9 to 67 MPH accuracy ±3%

Range of Air Flow:

0 to 9999 CFM; accuracy ±3% 0 to 9999 CMM; accuracy ±3%

Range of Temperature :

-10° to 60.0°C / 14.0° to 140.0°F

Accuracy: ± 1.5°C/±2°F



## Digital Anemometer with differential Pressure Meter AVM-09

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

20 Point average for air flow Super Large Backlit LCD Display

Range of Wind Speed:

Range of Air Flow: 0 to 9999 CFM; accuracy ±3% 0 to 9999 CMM; accuracy ±3%

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

Accuracy: ± 1.5°C / ± 2°F

Distance to sighting ratio: 8:1

Infra Red Temperature: -50 to 260°C

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 ±3%

80 - 5900ft/min; accuracy ±3%

0.9 to 67 MPH: accuracy ±3%

3% velocity accuracy via low friction 2.83" Dia

ballbearing vane wheel on 3.9 ft (120cm) cable

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 ±3%

0.8 to 58.0 knots; accuracy ±3%

1.4 to 108.0 km/hr; accuracy ±3%

80 - 5900ft/min; accuracy ±3%

0.9 to 67 MPH; accuracy ±3%

Range of Air Flow:

0 to 9999 CFM; accuracy ±3% 0 to 9999 CMM; accuracy ±3%

Range of Temperature:

-10° to 60.0°C / 14.0° to 140.0°F Accuracy :  $\pm$  1.5°C /  $\pm$  2°F

Unit of measurement of pressure: psi, inH<sub>2</sub>o, bar, mbar,

kPa, inHg, mmHg, ozin, ftH<sub>2</sub>o, cmH<sub>2</sub>o, kgcm Max / Min / Avg value recording

Range in Manometer mode: inH<sub>2</sub>0:0 - 138.3

psi : 0 – 5

mbar : 0 - 344.7; kPa : 0 - 34.47

inHg: 0 - 1.018; mmHg: 0 - 258.5

ozin : 0 - 80; ftH<sub>2</sub>0 : 0 - 11.53 cmH<sub>2</sub>0 : 0 - 351.5; kgcm : 0 - 0.351

bar : 0 - 0.344; Accuracy : ±0.3%FSO

Repeatability: ±0.2% (Max.+/-0.5% FSO)

Linearity/Hysteresis: ±0.29% FSO

Complete with carrying case, instruction manual and battery.

#### Metravi AVM-07

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 ±3%

1.2 to 58.0 knots; accuracy ±3%

2.2 to 108.0 km/hr; accuracy ±3%

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

119 to 5900 ft/min; accuracy ±3%

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

Accuracy: ± 0.8°C/± 1.5°F

Confirms to CE



#### Digital Anemometer with Infra Red Thermometer AVM-08

Digital Anemometer with Air flow and Infra red temperature measurement facility

Simultaneous display of Air temperature and velocity
CFM / CMM Thermo-Anemometer + Infra Red

Max / Min / Avg value measurement with time stamp

Low battery indication and Auto Power Off

Simultaneous display of air flow or air velocity withtemperature

Easy to set Area dimensions





#### **Digital Hotwire Anemometer AVM-10**

Measures Low velocity of Air	r
Display: Dual LCD Display	
Measures Air velocity and Te	mperature
Air Velocity is measured usin	g Glass Bead Thermistor
Temperature is measured usi	ng Precision Thermistor
Data Hold to freeze displaye	d data
MAX / MIN / AVG Recording	g 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%



#### **Metravi DT-115**

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/20MΩ	
Accuracy	±1.2%	
Diode and Continuity Test		
Confirms to CAT-III 600V		



#### Digital Capacitance Meter

#### **Metravi DCM-1502**

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	



#### **Metravi DT-125**

Auto and Manual Ranging		
Display	3-1/2 Digits 1999 Counts Backlit LCD	
Low Battery and Overload Indication		
Data Hold		
Non Contact type V	oltage 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/20MΩ	
Accuracy	±1.0%	
Diode and Continuity Test		
Confirms to CAT-III 600V		



#### **Digital Clamp Meter**

± 0.5%

#### **Metravi DT-625**

Accuracy

Single Switch Open	ration
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/40MΩ
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 Co	ntinuity Test



#### **Metravi DT-225**

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 Prot	ection 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/40MΩ
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		

#### **Metravi DT-1150**

Peak Hold Facility	1
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/20MΩ
Accuracy	±1.5%
Diode Test and C	ontinuity Test
Hard Carrying Ca	ase



#### Metravi DT-1250

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/20MΩ
Accuracy	±1.0%
Diode Test and Continuity Test	
Confirms to CE, IEC 61010, CAT-III 600V	
OverloadProtection : upto 500V DC / AC RMS in all ranges	



#### **Metravi DT-2255**

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/40MΩ
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.

#### **Metravi Metraclamp-10**

Auto Power Off	
Data Hold, Relativ	ve Measurement
Auto-ranging	
Non Contact Volt	age 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/40MΩ
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 Co	ontinuity Test
Confirms to CAT	III 1000, CAT IV 600V, IEC 1010-1 and

Overload Protection of 600V DC/AC RMS in Resistance, Frequency, Diode and Continuity Test Ranges.



#### Metravi DT-7250

UL 3111-IStandards

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/40MΩ
Accuracy	±1.0%
Frequency 0 - 99.99/999.9/9.999k/99.99k/99 9.9kHz	
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.



#### **Metravi DT-525**

T-RMS Clamp Meter	
al 3999 Counts Backlit LCD	
4/40/400/600V.	
4/40/400/600V T-RMS.	
/1000A T-RMS.	
/40k/400k/4M/40MΩ	
000°C / -40°F to 1832°F	
/400n/4u/40u/400u/4m/40mF	
Diode Test and Continuity Test	
Confirms to CE, IEC 61010, CAT-III 600V	



### Metravi Digital Clamp Meter with Wireless PC Interface DT-5250W

Auto / Manual Ra	anging	
T-RMS AC/DC CI	amp 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	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 Voltage	0 – 40 / 400 / 1000A T-RMS	
Accuracy	ccuracy ±2.8%	
Resistance	0 – 400 / 4k / 40k / 400k / 4M / 40MΩ	
Accuracy	±1.0%	
Capacitance 0 – 4n / 40n / 400n / 4u / 40u / 400u / 4m / 40mF		
Accuracy	Accuracy ±3.0%	
Frequency	0 – 4kHz	
Accuracy	±1.5%	
Temperature	-40 - 1000°C / -40°F to 1832°F	
Accuracy	Accuracy ±3.0%	
Continuity Buzzer and Diode Test		
Confirms to IEC 61010 CAT III 600V / CAT II 1000V		



#### **Digital Clamp On Power Meter**

#### **Metravi 107F**

10000 Count digital Backlit LCD display
Auto Backlit, Large scale display
VoltSenseTM (None Contact Voltage)
Analog Bar graph
True RMS reading on AC and AC+DC mode
Torch lightening 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



#### **Metravi 307**

Auto Power Off

AC Current Accuracy

Frequency

Accuracy

T-RMS AC Clamp On Power Clamp

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 PhaseLoads	
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%

0 - 600/1500A. T-RMS

±2.5%

0 - 200 / 2kHz ±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-I (2000 Version), CAT III 600V	

#### Metravi 307N

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 BC L + 1		

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

55mm

Display

4.0 - 600V T-RMS.

4 + 4 Digits 9999 Counts LCD Dual

## CC OF STATE OF STATE

Accuracy	turacy ±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		



#### Metravi 607

Power Quality Analysis for Single and Balanced Three	2
Phase System.	

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

Confirms to CE, IEC 61010, CAT-III 600V

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  $(\phi)$ , 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 Capcture 129

Transient Events

Clamp Jaw Dia 55mm

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



Metravi 407

Harmonic Analyzer

Overload Protection

Max / Min / Peak Hold facilities

Auto Power Off

Clamp Jaw Size

Display

AC Voltage

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**

#### **Metravi ERT-1501**

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

#### **Metravi ERT-1502**

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

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



#### Metravi FC-2700

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

#### **Metravi CE-500F**

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**

#### **Metravi DICT-2040**

Self Diagnosis

Self Blaghosis		
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		
TTL54 Series, TTL55 Series, TTL74 Series, TTL75 Series  Library of ICs  Library of ICs  TTL54 Series, TTL55 Series, TTL74 Series, TTL75 Series  CMOS14 Series, CMOS40 Series, Optical Coupler Series, TTL75 Series,		

LED Display Series, RAM Series, SCM Series, CPU



Peripheral Series





#### **Digital Insulation Resistance Tester**

#### **Metravi DIT-910**

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	200MΩ @ 250V	
	200MΩ @ 500V	
	2000MΩ @ 1000V	
Accuracy	±4%	
Measures DC Voltage	0 – 1000V	
Accuracy	±0.5%	
Measures AC Voltage	0 – 750V	
Accuracy	±1%	
Low Resistance	0 – 2kΩ	
Accuracy	±0.8%	
Continuity Test		



#### **Metravi DIT-912**

Display	3-1/2 Digits 1999 Counts Dual Extra
Display	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

Operation	
Insulation Resistance	200MΩ at 250V
	200MΩ at 500V
	2000M.Ωat 1000V
Accuracy	±3%
Low Resistance	0 - 200Ω / 200kΩ
Accuracy	±1%
DC Voltage	0 - 1000V
Accuracy	±0.8%
AC Voltage	0 - 750V
Accuracy	±1.2%
Audible Continuity Test Facility	
Confirms to CE, EN 61010-1	



#### **Metravi DIT-913**

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

	<u> </u>	
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 $\Omega$ . Transforming scale automatically
Test Voltage	250V / 500V / 1000 / 2500V
Insulation Resistance Range:	2000M.Ω@ 250V
	20G.Ω @ 500V
	20G.Ω @ 1000V
	20G.Ω @ 2500V
Accuracy	±3%

#### **Metravi DIT-921**

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	$0.1 \text{M}\Omega$ to $60 \text{G}\Omega$	
Insulation test voltages	500V,1000V, 2500V, 5000V	
AC/DC voltage	0.5 V to 600 V	
Continuity Test Fecility		
Resistance	0.1 Ω to 6kΩ	

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.

 $\label{live} \hbox{\it LIVE circuit warning symbols plus audible warning.}$ 

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 measurments.

Accuracy +2.5%

#### **Metravi DIT-914**

Accuracy

Low Resistance Accuracy

500V, 1000V, 2500V, 5000V
uto extends for 30 seconds.
ce testing
interval with warning beeper
esistance measuring
est results in dimly lit areas.
LCD: 75*35mm,
1999
500V/1000V/2500V/5000V
2000MΩ @ 500V
2000MΩ @ 1000V
20GΩ @ 2500V
200GΩ @ 5000V
±5.0%
0 – 750V

±1.0%

±0.8%

 $0-200\Omega$ 





#### **Metravi DIT-915**

Micro-processor Control	led	
Auto-ranging insulation Resistance Range		
Warning and Display of external voltage presence		
Bargraph Indicates test voltage rise and decay can beobserved 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 - 60GΩ @ 1000V	
	0 - 150GΩ @ 2500V	
	0 - 300GΩ @ 5000V	
	0 - 600GΩ @ 10,000V	



#### **Metravi DIT-99D**

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	2000ΜΩ	
Accuracy	±4%	



#### Digital KWH Meter

#### Metravi CE-030XEML

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/  $\operatorname{PT}$  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



#### **Metravi DIT-99A**

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	200ΜΩ	
Accuracy	±4%	



#### **Metravi DIT-99B**

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	200ΜΩ	
Accuracy	±4%	



#### **Digital LCR Meter**

#### Metravi 460

Facility

Data Hold Facility to freeze the displayed data		
MAX/MIN Data Record		
Relative Measurement		
Display	11,000 Counts Backlit LCD	
Inductance	0 - 2m/20m/200m/2/20H	
Confirms to EN61010-1, Insulation Class 2		
Low Battery and Over-range indication		
Auto Power Off		
Inductance	0 - 11m/110m/11/20H	
Accuracy	±2.0%	
Capacitance	0 - 11n/110n/1.1u/11u/110u/ 1.1m/110m/110mF	
Accuracy	±5.0%	
Resistance	0 - 110/1.1k/11k/110k/1.1M/11M/ 110MΩ	
Accuracy	±1.2%	
Diode Test, A	udible Continuity Test, Transistor Test	



#### **Metravi DIT-99C**

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	1000ΜΩ	
Accuracy	±4%	





#### Metravi 4070D

B 18 18:168 8 1		
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 200.00Ω~200.0MΩ		
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 μH ~ 2000.0 H	
С	2000.0 pF ~ 2.000 Mf	
R	20.000 Ω ~ 200.0 ΜΩ	
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



#### **Digital LCR Multimeter**

#### Metravi 451

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	±0.5%
AC Voltage	0 - 200mV/2V/20V/200V/750V
Accuracy	±0.8%
DC Current	0 - 2mA/20mA/200mA/20A.
Accuracy	±0.8%
AC Current	0 - 2mA/20mA/200mA/20A.
Accuracy	±1.0%
Resistance	$0 - 200/2 k/20 k/200 k/2 M/20 M/2000 M\Omega$
Accuracy	±0.8%
Capacitance	0 - 20nF/200nF/2uF/20uF/200uF
Accuracy	±2.5%
Frequency	0 - 2k/20k/200k/2M/10MHz
Accuracy	±1.0%
Inductance	0 - 2m/20m/200m/2/20H
Accuracy	±2.5%
Temperature	-40°C~+1000°C
Accuracy	±1.0%
Diode Test, Transistor Test and Audible Continuity test facility.	



#### Metravi 506

True RMS LCR Multimeter With RS-232C PC interface facility10 Memory Location. Time Mode with alarm, clock andstop watch. MIN., MAX., AVG. and relative modes. DataHold 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	±0.3%	
AC Voltage	0 - 400mV/4V/40V/400V/750V T-RMS.	
Accuracy	±1.0%	
DC Current	0 - 400uA/400mA/20A.	
Accuracy	±1.0%	
AC Current	0 - 400uA/400mA/20A T-RMS.	
Accuracy	±1.5%	
Resistance	0 - 400/4k/40k/400k/4M/40MΩ	
Accuracy	±0.5%	
Capacitance	0 - 100uF	
Accuracy	±3.0%	
Frequency	0 - 10 kHz/100kHz/1MHz/10MHz	
Accuracy	±0.01%	
Inductance	0 - 20/50/100H	
Accuracy	±3.0%	
Duty Cycle	0.1% ~ 99.9%	
Accuracy	±1.2%	
Temperature	-20°C~+1200°C / 0°F~+2000°F	
Accuracy	±3%	
dBm	-25dBm to + 59dBm	
Accuracy	±0.5dBm	
Logic Test, Diode Test, Signal Output and Audible		

Logic Test, Diode Test, Signal Output and Audible Continuitytest facility.

Confirms to UL 1244 AND VDE-0411

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



Auto Power O	off
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	±1.0%
DC Current	0 - 400u/40mA/400mA/10A
Accuracy	±1.0%
AC Current	0 - 400u/10mA/100mA/10A
Accuracy	±1.5%
Resistance	0 - 400/4k/40k /400k/4M/40M/400MΩ
Accuracy	±0.8%
Capacitance	0 - 4nF/ 40nF/ 400nF/4uF/400uF
Accuracy	±5.0%
Freq ue ncy	0 - 1kHz/10k/100k/1000kHz
Accuracy	±0.5%
Inductance	0 - 4m/40m/400m/4/40H
Accuracy	±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

#### Metravi 4671

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%
Law David City of a city in the configuration of the configuration of	

Low Pass Filter for eliminating effect of High Frequency Noise.

#### Metravi 4672

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/40MΩ
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	





#### Metravi 6054

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		



#### **Metravi MULTI-140**

Confirms to IEC 61010-1 (2001), IEC 61010-2-032 (2002), Installation Category II 600V Phase to Earth, Catergory 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**

#### Metravi 1330

Easy to Use, Pocket Size	, light weight
Over range Indication	
Low Battery Indication	
Long Life Silicon Photo D	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



#### Metravi 1331

Easy to Use, Pocket Size	e, light weight	
Over range Indication		
Max Hold and Data Ho	ld Facility	
Auto Power Off		
Low Battery Indication		
Displays both in Lux and	d 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 / Ec	





#### Metravi 1332

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%	
	·	



#### Metravi 1332A

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%	



#### Metravi 1333

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 speci	tral relative efficiency	
No need of correction fac	ctor for non standard lightsource	



#### Metravi 1334

Data hold facility to freeze the displayed data		
Autoranging		
Annunciat	or display and automatic zero facility	
With USB	Interface for PC Connectivity	
	tion factor need not be manually 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 cor	rected 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	



#### **Digital Micro Ohms Meter**

& 0 - 40/400/4000/40,000 Fc.

#### **Metravi 53C**

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/ 1.999/19.99/199.9/1999Ω	
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 andtest leads

#### **Metravi UONT-10A**

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 Ω
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

#### **Metravi UONT-100A**

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/ 199.9mΩ
Accuracy	±1% or rdg ±5 dgts
Auxiliary Power Supply	230V Single Phase AC50Hz.

Complete with current leads, potential leads, power supply cable and instruction manual

#### **Metravi UONT-200A**

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/ 199.9mΩ
Accuracy	±1% or rdg ±5 dgts
Auxiliary Power Supply	230V Single Phase AC50Hz.

Complete with current leads, potential leads, power supply cable and instruction manual



#### **Digital Milli Ohms Meter**

#### **Metravi 52C**

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



#### **Digital Moisture Meter**

#### **Metravi MM-1**

Accuracy

Resistance

Accuracy

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

± 3.0%

± 1.0%

 $4M/40M\Omega$ 

0 - 400/4k/40k/400k/



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 : ± 1%
	Hardened Material : ±0.05%

#### **Metravi MM-2**

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 ±1%		



#### Metravi MM-3

Built in electrodes

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	

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

Range	0-40%
Resolution 1	1%



#### **Metravi MM-5**

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	±1%	
Temperature Measuring Range	-35°C ~ 80°C	



#### **Metravi MM-10**

Accuracy

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

±2°C

Used for non-destructive tracing dampess 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 Measurment

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

#### **Metravi XB-30**

Display: 1999 (3 ½) 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	



#### **Metravi XB-32**

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/20MΩ
Accuracy	± 1.0%
With Diode test, Transistor test, Audible continuity	



#### Metravi XB-33C

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

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	0-200Ω/2kΩ/20kΩ/200kΩ/2ΜΩ/20ΜΩ
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	
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#### **Metravi XB-33F**

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	$0-200\Omega/2$ k $\Omega/2$ 0k $\Omega/2$ 00k $\Omega/2$ Μ $\Omega/2$ 0Μ $\Omega$
Accuracy	± 0.8%
Frequency	0 - 20kHz
Accuracy	± 1.5%
With Diode test, Audible Continuity test, Data Hold	



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



#### Metravi 702

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	0-200Ω/2kΩ/20kΩ/200kΩ/2M/20MΩ
Accuracy	± 0.8%
With Diode Tes	t. Transistor Test. Audible Continuity Test

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

Confirms to CE, CAT-II 1000V



#### Metravi 603

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	0-200Ω/2kΩ/20kΩ/200kΩ/2ΜΩ/200ΜΩ
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

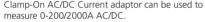


#### Metravi 901-I

Housing.	
Double Insulation class 2 Double Injection Molded	
Data Hold Facility to freeze the displayed Data	
Auto Power Off	
Auto Ranging	

Overload Protection of 500V DC/AC RMS in the resistance, Temperature, Diode test and continuity test ranges.

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	$0-200\Omega/2$ K $\Omega/2$ 0K $\Omega/2$ 00K $\Omega/2$ M $\Omega/2$ 0M $\Omega$
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	



Accuracy shall be  $\pm$  1.5% for AC Measurement and  $\pm$  1.0% for DC current Measurement.

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

#### Metravi 19

Data Hold to	freeze displayed data
Auto power 0	Off
Auto-ranging	
Relative Meas	urement 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	0-400Ω/4ΚΩ/40ΚΩ/400ΚΩ/4ΜΩ/40ΜΩ
Accuracy	0.8%
Capacitance	0-4nF/40nF/400nF/ 4μF/40μF/200μF
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, D Continuity Tes	iode test, Transistor test and audible st.
Confirms to C	CE, EMC/LVD, IEC1010.



#### Metravi 901-II

Data Hold to	Freeze Displayed data
Auto Power Off	
Relative Measurement Facility	
Display	3-¾ 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	0-400Ω/4ΚΩ/40ΚΩ/400ΚΩ/4ΜΩ/40ΜΩ
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 an	d Audible Continuity Test
Confirms to C	AT-III 600V,EN61010-1, CE



#### Metravi 901-III

Data Hold to Freeze Displayed data	
Auto Power Off	
Relative Measure	ement facility
Display	6000 Counts LCD Backlit display with anlogue 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	0-600Ω/6ΚΩ/60ΚΩ/600ΚΩ/6ΜΩ/60ΜΩ
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 A	Audible Continuity Test
Confirms to CAT	-III 600V, EN61010-1, CE.
Overload prote	ection upto 600V AC/DC on all range





#### Metravi 901-IV

Data Hold to Freeze Displayed data	
Auto Power Off	
True RMS	
Display	6000 Counts Backlit LCD with anlogue 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	0-600Ω/6ΚΩ/60ΚΩ/600ΚΩ/6ΜΩ/60ΜΩ
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



#### **Metravi 801**

Peak Hold to freeze the peak value		
Auto Power Off		
Display	3-¾ 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 - 400Ω/4ΚΩ/40ΚΩ/400ΚΩ/4ΜΩ/40 ΜΩ/400ΜΩ	
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



#### **Metravi DT-19TB**

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	3-¾ 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	400Ω/4kΩ/40ΚΩ/400ΚΩ/4ΜΩ/40ΜΩ
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  $\pm\,1.5\%$  for AC Measurement and  $\pm\,1.0\%$  for DC Measurement.

Diode Test and Audible Continuity Test

Confirms to CAT-II 1000V, EN61010-1, CE.

#### Metravi 23Smkll

Data Hold	
Auto Power Of	F
Live Wire Detec	tion
Display	4-1/2 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 - 200Ω/2ΚΩ/20ΚΩ/200ΚΩ/2ΜΩ/200ΜΩ
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





#### Metravi 540

T–RMS Measurement		
Data Hold		
Auto Power C	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 - 200Ω/2ΚΩ/20ΚΩ/200ΚΩ/2ΜΩ/20ΜΩ	
Accuracy	± 0.1%	
Capacitance	0 – 20nF/200nF/2μF/20μF	
Accuracy	± 2.0%	
Frequency	0 – 20KHz/200KHz	
Accuracy	± 1.0%	
Diode Test and Audible Continuity Test		



#### Metravi DM-454

T-RMS Measurement		
Data Hold to Freeze the displayed data		
Auto Power Off		
Double Molded Body		
Display	4-1/2 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 - 200Ω/2ΚΩ/20ΚΩ/200ΚΩ/2ΜΩ/20ΜΩ	
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		



#### **Metravi Metrasafe Series**

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)

The instrument has overload protection up to 20A DC/AC RMS in the Voltage Rangeand 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

#### **Metravi Metrasafe-13**

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	3-¾ 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 - 400Ω/4kΩ/40ΚΩ/400kΩ/4ΜΩ/40ΜΩ	
Accuracy	± 1.0%	
Capacitance	0 – 4nF/40nF400nF/4uF/40uF/200uF	
Accuracy	± 3.0%	
Frequency	0 – 9.999Hz/99.99Hz/999.9Hz/9.999KH z/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.

### **Metravi Metrasafe-14**

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





3-¾ digits 3999 Counts Backlit LCD	
0 - 400mV/4V/40V/400V/1000V	
± 0.5%	
0 – 400mV/4V/40V/400V/1000V	
± 1.2%	
0 – 400uA/4000uA/40mA/400mA/20A	
± 1.0%	
0 – 400uA/4000uA/40mA/400mA/20A	
± 1.5%	
0 - 400Ω/4ΚΩ/40ΚΩ/400ΚΩ/4ΜΩ/40ΜΩ	
± 1.0%	
0 - 4nF/40nF/400nF/4uF/40uF/200uF	
± 3%	
0 – 9.999Hz/99.99Hz/999.9Hz/9.999kHz/ 99.99kHz/999.9kHz/9.999MHz	
± 1.2%	
0.1% ~ 99.9%	
± 1.2%	
-20°C to -760°C/-4°F to +1400°F	
± 3%	
Diode Test&Audible Continuity Test	
Confirms to CAT-III 1000V, CAT IV 600V, EN61010-1, CE.	



#### **Metravi Metrasafe-15**

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	3-¾ 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 - 400Ω/4kΩ/40ΚΩ/400ΚΩ/4ΜΩ/40ΜΩ		
Accuracy	± 0.8%		
Capacitance	0 - 4nF/40nF/400nF/4uF/40uF/400uF/4 mF/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	Diode Test and Audible Continuity Test		
Confirm to CA	AT-III 1000V, CAT IV 600V,EN61010-1,CE		



#### **Metravi Metrasafe-16**

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 Recor	rding	
Auto Power Off		
Display	3-¾ 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		
Accuracy ± 0.8%		
DC Current	0 - 400uA/4000uA/40mA/400mA/20A	
Accuracy ± 1.2%		
AC Current 0 – 400uA/4000uA/40mA/400mA/20 T-RMS		
Accuracy ± 1.5%		
Capacitance 0 – 4nF/40nF/400nF/4uF/40uF/40 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		



#### **Metravi Metrasafe-18**

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	4-¾ 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 - 400Ω/4ΚΩ/40ΚΩ/400ΚΩ/4ΜΩ/40ΜΩ



Accuracy	± 0.3%	
Capacitance	0 - 40nF/400nF/4uF/40uF/400uF/4000u F/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.		

#### **Metravi Metrasafe-19**

Fully Protected I	DMM
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1200V DC/AC RMS Protectoin 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	4-¾ 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 - 400Ω/4ΚΩ/40ΚΩ/400ΚΩ/4ΜΩ/40ΜΩ	
Accuracy	± 0.3%	
Capacitance	0 – 40nF/400nF/4μF/40μF/400μF/400 0μF/40mF	
Accuracy	± 3.5%	
Frequency	40Hz/400Hz/4KHz/40KHz/400KHz/4M Hz/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		



### **Accessories For Digital Multimeters**

#### **Metravi CA-01**

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

Sensi	tivity	1A/mV AC
Accui	racy	±2%
Clam	p Jaw Size	16mm Dia.



#### Metravi CA-1000D

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 600 mV 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



#### **Metravi TS-03**

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	





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

61010B-2-031



### Digital Non Contact Infra Red Thermometer

#### **Metravi MT-2**

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



### **Metravi MT-4**

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	

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



### **Metravi MT-5**

Gun type Infra Red Thermometer		
Anti-Slip Splash Proof b	ody	
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

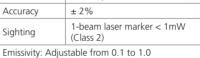
-50°C to 800°C / -58°F to 1472°F



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

#### **Metravi MT-6**

Gun Type Infra Red Thermometer		
Laser Pointer inc under test	dication to Indicate the target	
Data Hold Facili	ty	
Auto Power Off		
Max / Min record facility		
Hi – Lo Alarm setting facility		
Selectable °C / °F Scales		
Over Range / Lo	w Battery Indication	
Display	3 ½ Digits backlit Liquid Crystal Display	
Range	-30°C to 550°C / -22°F to 1022°F	
Resolution	Resolution 0.5/1°C, 1°F	
Accuracy	± 2%	
Sighting	1-beam laser marker < 1mW (Class 2)	



Spectral Response: 6 to 14um nominal

#### **Metravi MT-8**

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	

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

### **Metravi MT-10**

Gun type Infra Red Thermometer	
Anti-Slip Splash Proof Body	
Laser Pointer Indication to Indicate the target under test	





Range

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 ~ 14um	
Safety	"CE" Comply with EMC	



#### Selectable °C / °F Scales -50°C to 1300°C / -58°F IR Measurement Range to 2372°F 0.1°C / °F Resolution Digitally Adjustable from Emissivity 0.10 to 1.0 Distance to Sighting Ratio -50°C to 1370°C / -58°F TK Measurement Range 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 "CE" Comply with EMC

#### **Metravi MT-13**

Wireless USB Interface (RF 433MHz) for PC Interface
Unique flat surface, Modern Housing desing

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

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



#### **Metravi MT-16**

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 ~ 14um
Distance to Sighting Ratio	50:1

Digitally adjustable from 0.10 to 1.0



#### Metravi MT-14

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



#### **Metravi MT-18**

Emissivity

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

#### **Metravi MT-20**

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 Metravi CE-0Y0XPF**

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 for1 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**

#### **Metravi PM-01**

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 inHzO, PSI, bar, mbar, kPa, inHg, mmHg, OZinz, ftH2O, cmHzO, kgcmz.		
With RS-232 PC Interface Facility		

High Accuracy of 0.3%



### **Digital Phase Angle Meter**

#### **Metravi CE-0102D**

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 (Any One)



### **Digital Process Meter**

Measures and sources various parameters

### **Metravi PM-29**

Accuracy

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/40MΩ
Accuracy	±0.2%
Frequency	0 - 50/500/5k/50k/ 100kHz

±0.1%



### **Digital Power Analyzer**

#### **Metravi CE-0102PA**

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



	I
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%
	-200°C to 1000°C Accuracy : ±0.5%
Temperature output for E type Sensor	
Temperature output for E type Sensor Temperature output for K type Sensor	-200°C to 1370°C Accuracy : ±0.5%
	-200°C to 1370°C Accuracy : ±0.5% -200°C to 700°C Accuracy : ±0.5%
Temperature output for K type Sensor	

### **Digital Sound Level Meter**

#### **Metravi SL-4005**

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 measurementmade for connection to an analyzer or recorder

AC output of 0.65V rms at Full Scale (upper limit ofeach 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

01 00 to 150db	
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 rangeof 60 to 130dB
Range
30 - 130 dB

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	



### **Digital SMT Component Tester**

#### **Metravi SMT-01**

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 / 60MΩ	
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.		





#### Metravi SL-4015

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**

### Metravi DSO-5025A

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	

Unique digital filter and data recorder function		
Embedded 12 languages, online help, one key storing a nd 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	



### Metravi DSO-5050A

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	

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	



### **Metravi DSO-5070A**

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	

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	



### **Metravi DSO-5100A**

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	

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



### Metravi DSO-5150A

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	



#### Metravi DSO-5200A

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**

#### **Metravi PD-20S**

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

#### Metravi DT-2350PA

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



#### Metravi NCTM-2000

**Metravi NCTM-1000** 

PHOTO TACHOMETER (RPM&REV)

mode (unit: REV)

RPM Test Range

Detecting Distance

Count Range

Accuracy Resolution

Display

speed measurements of rotating objects

Wide measure range and high resolution

Provides fast and accurate Non-contact RPM and surface

Uses the CPU technique, photoelectrical technique, and junction laser technique for one instrument combined

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

Built in memory recall Max. Min. and Last Value stored 2 to 99,9999 RPM

1 to 99,9999

±0.05% ± 1Digit

50mm to 500mm

5 Digital Large Backlit LCD

0.1RPM up to 1000RPM else 1RPM

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.

		3 1 7
40 read	ing memories	10 selectable MAX measurements, 10 selectable MIN measurements, 10 selectable AVG measurements, 10 selectable DATA measurements.
Contact	t Test range	2 to 20,000RPM
Non-Co	ntact Test range	2 to 99,999RPM
Detectir	ng distance	50mm to 500 mm.
9V Batt	ery Operated	



#### Metravi DT-2350PB

Exclusive One Chin Micro Controller LSI Circuit

Exclusive one emphasical controller Est 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	



#### **Digital Tachometer**

#### Metravi DT-2235

Last Value, I	Max Value and Min Value memory
Exclusive One-chip microcomputer LSI Circuit	
Quartz Crys	tal Time Base
Display	5 Digits LCD
Range	60 to 49,999 RPM
Surface Spe	ed 6 to 5000 m/min.
Resolution	0.1RPM up to 1000 RPM thereafter 1 RPM
Kesolution	0.01m/min up to 100m/min thereafter 0.1m/min
Accuracy	±0.05%
	rith carrying case, RPM Cone Adaptor, RPM Funel rface speed test wheel and operation manual



# **Digital Temperature Controller**

#### **Metravi METCAT**

medati mere	••
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	





#### **Metravi DTC-200**

Flush Mounting typ	e	
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 forThermocouple	
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 RTD0.2%, mV, V,mA 0.1%	
Hysterisis 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	



### **Metravi DTC-202**

Flush Mounting type		
Sizes	96 x 96 mm sq 'OR' 72 x 72 mm sc	1
Display	3-1/2 Digits Seven Segment Red LED display	
Cold Junction Compensation	Automatic forThermocouple	
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 RTD0.2%, mV, V,mA 0.1%	
Hysterisis 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	



## Digital Temperature & Humidity Meter

### Metravi HT-3005

Semiconductor Sensor

Temperature range

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

0° to 40°C



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	

#### Metravi HT-3004CT

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 wit	h laser pointer	
Selectable °C / °F Scales		
Low Battery Indication		
Display	3-1/2 Digits 1999 Digits Dual BacklitExtra 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		
Confirms to CE		



#### Metravi HT-3006

Compact probe size Hygro and Wet Bulb Temperature	o-Thermometer with Dew Point e
Fast Response time	
Auto Power Off	
High Accuracy and High o	n 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 BulbTemperature Range	0 to 80°C / 32° to 176°F
Resolution	0.01°
Accuracy	±0.5° / 0.9°F



#### **Metravi HTC-01**

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 Tope Placing or Wall Hanging	
Large LCD Display	
Temperature Rage	-50 °C TO 70°C
Accuracy	±1°C
Humidity Range	20% to 90%



### **Digital Thermometer**

#### Metravi 305XL

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



#### **Metravi TH-04**

Accuracy

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	

±5%RH



#### **Metravi DTM-900**

CE-Mark Approval	
Large Backlit LCD Display	
Relative Time clock on Max time reference for major eve	
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**

#### **Metravi DTI-101**

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.	



#### **Metravi DTM-100**

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	



### **Metravi DTM-901**

Accuracy

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

±0.15%

-200°C to 1372°C (-328°F to 2501°F)





#### **Metravi DTM-902**

Pen type Digital Therm	nometer
Max / Min Temperatur	e record
Auto Power Off	
°C / °F Range selectab	le
Waterproof instrumen	t
Data Hold to Freeze di	splayed 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%



#### Metravi ST-9283B

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 Three Phase Ammeter**

#### **Metravi CE-03A**

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 Ir, Iy, Ib		
Accuracy	±1% of full scale	
Current Input	7A Max continuous at any	



### **Digital Time Interval Meter**

#### **Metravi NTT-4D**

Suitable to test pro- tripping coils, relays	tective device, circuit breaker, s 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 countingwith excitation of auxiliarycontacts of relay or switchgearunder test



#### Metravi NTT-3CH-4D

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. Resolution1mSec	
Time Start Mode	Simultaneously 3 channel starts by injection of 20V to240V 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 Voltmeter**

#### **Metravi CE-03V**

Designed using microprocessor technique	or based multiplexing	
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 Vr-y, Vr-b, Vb-y		
Accuracy	±1% of full scale	
Voltage Input	500V Max phase to phase at any voltage terminal	



### Digital VA Meter

#### **Metravi CE-030XVA**

Microprocessor based 3 phase VA measurement.

Available in 96 \* 96 mm Bezel Size.

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**

#### Metravi CE-030XVAR

Microprocessor based 3 phase VAR measurement.

Available in 96 \* 96 mm Bezel Size.

Meters can be factory set for different CT/PT ratios togive 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



### Digital Voltage Controller

#### Metravi CE-0102VC2SP

Size - 96 x 96 mm. sq.

Display

3-1/2 Digits

Would measure AC Voltage.

Range: Any Single Range up to 1000V for direct inputto the meter 'or' KV rating through a PT 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

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



### **Digital Voltmeter**

#### Metravi CE-0102V

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 inputto 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.



### **Digital Wattmeter**

#### Metravi CE-0Y0XW

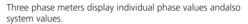
Digital Watt Meter

Microprocessor based 3 phase and single phase PowerFactor

Available in 96  $\star$  96 mm Bezel Size for three phase and single phase meters and 96  $\star$  48mm for single phase meters.

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





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

### Distance Meter

#### **Metravi DM-09**

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%



#### **ELCB** Tester

#### Metravi 1810EL

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



#### Metravi 1812EL

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**

#### **Metravi AC-1**

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** 



#### Metravi AC-4

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





Socket Polarity and Earth Leakage Tester

Tests Three Wire 220V AC outlets and Earth LeakageCircuit 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



#### Metravi AC-7

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



#### **Metravi AC-8**

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%	



#### Metravi AC-5

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



#### **EMF Tester**

#### **Metravi EMF-823**

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**

#### **Metravi RI-49**

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**

#### Metravi FG-1000

Frequency of the mode	0.1Hz1MHz	
Output waveform	Sine, Triangle, Square, ±Ramp, ±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	1Hz30MHz	
Amplitude	Not less than 20V pp (open circuit)	
DC Voltage	0±10V continuously adjustable	



### Forehead Infra Red Thermometer

#### **Metravi FIR-1**

Non Contact Forehead IR Thermometer
User Selectable °C / °F
Selectable Body and Surface Tempeature
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°C (90 to 108°F)
Accuracy 0.54°F
Battery Operated



#### Metravi FG-2000

Frequency of the mode	0.1Hz2MHz	
Output waveform	Sine, Triangle, Square, ±Ramp, ±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	1Hz30MHz	
Amplitude	Not less than 20V pp (open circuit)	
DC Voltage	0±10V continuously adjustable	



### Frequency Transducer

#### **Metravi CE-0102FT**

Input and outputs are Isolated	
Туре	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 : ± 0.5% of Span
Optional	On Request



### **Metravi FG-3000**

Frequency of the mode	0.1Hz3MHz	
Output waveform	Sine, Triangle, Square, ±Ramp, ±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	1Hz30MHz	
Amplitude	Not less than 20V pp (open circuit)	
DC Voltage	0±10V continuously adjustable	





#### Metravi FG-5000

Frequency of the mode	0.1Hz5MHz	
Output waveform	Sine, Triangle, Square, ±Ramp, ±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	1Hz30MHz	
Amplitude	Not less than 20V pp (open circuit)	
DC Voltage	0±10V continuously adjustable	



#### Metravi FG-10000

Frequency of the mode	0.1Hz10MHz	
Output waveform	Sine, Triangle, Square, ±Ramp, ±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	1Hz30MHz	
Amplitude	Not less than 20V pp (open circuit)	
DC Voltage	0±10V continuously adjustable	



#### Metravi FG-20000

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  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left($ 

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

#### Metravi 276HD

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

#### Metravi 276SHD

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

#### Metravi 290HD

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** 



#### Metravi 275HP

High Voltage Proximity Detector (Non Contact type)

Has an Eight Voltage Detection setting from 240V AC  $\ensuremath{\text{tc}}$  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



#### **Metravi 277HP**

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**

#### **Metravi HM-01**

Counting Range 99999.99 Hours	
Panel Flush Mounting	
Size 52 x 52 mm sq	
Standard Voltage	220V / 110V AC (Any One)
Temperature Range	-20 to 65°C



#### Metravi NE 045/7S DC

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**

#### **Metravi BB-550**

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

### **Insulation Tester**

#### **Metravi IT-500**

Light Weight Easy to Operate	
LED for indicating output ON or OFF	
Insulation Resistance Range	0 - 1000 ΜΩ
Insulation Resistance test Voltage	500V
AC Voltage	0 - 600V AC
Used for Insulation test for general equipment and electronic components.	
Internal Battery Check Facility	



#### Metravi IT-1000

Internal Battery Check Facility

Light Weight Easy to Operate	
LED for indicating output ON or OFF	
Insulation Resistance Range	0 - 2000 MΩ
Insulation Resistance test Voltage	1000V
AC Voltage	0 - 600V AC
Used for Insulation test for general equipment and electronic components.	





### **Integrated Meter**

#### Metravi CONCEPT CE-030XIM

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.	

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**

#### **Metravi LDM-100**

Range	0.05 to 50m (0.16 to 164 ft)		
Accuracy	± 1.5mm		
Measures in m, in, f	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 Pulser**

#### **Metravi CHY-625**

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	120ΚΩ
Power Supply Range	5 – 15 V DC



### **Kelvin Double Bridge**

#### **Metravi KDBR**

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 $\Omega$ to 11 $\Omega$ , 0.2Milli $\Omega$ to 1.1 $\Omega$ , 20 Micro $\Omega$ to 11 $\Omega$ , 2 Micro $\Omega$ to 0.11 $\Omega$ and 0.2 Micro $\Omega$ to 0.0011 $\Omega$
Max Current	10A intermittent and 5A continuous
Accuracy	± 0.05%

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

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



#### **Metal Detector**

#### Metravi MD-300

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

Pin - 35mm, Handgun - 120mm, **Detection Distance** US25 Cents 50mm.



#### **Metravi SUPER-V Scanner**

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**

#### **Metravi MMM-01**

Ideal for measuring high resistance and insulation		
Output Test Voltage	100V/200V/300V/400V/500V	
It has a measuring range of 1M $\Omega$ to 10 Million M $\Omega$		
Insulation Resistance Range available in 6 ranges.		
Accuracy	±5%	
Overload Protection		
Visual warning for HT link		
Analogue Display		
Auxiliary Power Supply	220V AC	



#### **Motor Checker**

#### Metravi MC-22

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 - 60Ω ( $0 - 0.2$ ohmsin Range 6 )
Inductance measuring range	0 - 300 mH ( 0 - 1 mH inRange 6 )
Battery Test	Condition of batteries indicated on meter
Rattery operated	



#### **Metravi MC-22D**

Micro Controller based diagnostic tool for Electrical Engineers

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

Detect Rotor Bar problems without dismounting the motor

1110101	
Display	LCD
Insulation Resistance	0 - 20M.Ohms at 500V DC
Resistance Test	0 - 200 / 20 / 6 / 2 / 600m / 200mΩ
Inductance Test	0 - 1000m / 300m / 100m / 30m / 10m / 3mH

Low Battery indication



#### Metravi MC-38D

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

Shock Proof Rubber Body	
Insulation Resistance	200MΩ @ 500V and 2000MΩ @ 1000V
Accuracy	±2%
Resistance	0 – 200m / 20 / 200Ω
Accuracy	±2%
Inductance	0 – 2m / 20m / 200m / 2000mH
Accuracy	±3%
Battery Operated	

Battery Operated



#### **Multifunction Environment Meter**

#### **Metravi ET-2**

Hand Held Multifunction Four - in - one meter

With RS-232C PC Interface facility

Combination of Sound Level, Lux, Temperature and humidity meter

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





#### **Metravi ET-3**

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

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**

#### **Metravi IT-91**

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



### **Oil Test Set**

#### Metravi OTS

It is ideal for speedy and accurate testing of di-electric strength of transformer and circuit beaker 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	



Manually Operated

#### Metravi MOTS

It is ideal for speedy and accurate testing of di-electric strength of transformer and circuit beaker 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	



### **Multi-Point Temperature Indicator**

#### Metravi DTI-101M 6CH

nt temperature 96 x 96 mm sq
96 x 96 mm sq
<u>'</u>
3-1/2 Digits Seven Segment Red LED Display
Automatic forThermocouple
J, K, R, S, T/C, PT-100 RTD, V & 4 - 20mA
J,K 1%; R,S 0.5%; PT-100RTD 0.2%, mV,V,mA 0.1%
6 by Rotary Switch
230V Single Phase AC 50Hz.



### Metravi DTI-101M 12CH

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 forThermocouple
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.



#### Oscillometer

#### **Metravi 700S**

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

Motor winding and low ohm (50 $\Omega$ ) measurement range

Low pass filter

IP Rating 67

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

### Metravi 7100

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:  $2mV/Div \sim 50V/Div in$ 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



#### Metravi 7200

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

RS-232 PC Interface facility

Storage of waveform and measured value

Vertical Deflection Factor:

 $2mV/Div \sim 50V/Div in$  steps of 1 - 2 - 5

Rise Time < 2ns

Channel Isolation > or = 30:1

Horizontal Time Base: 2

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

#### Metravi OS-5010A

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 andtechnicians		
Deflection factor is 5mV~5V/div in 1-2-5 Sequence in10 steps		
Accuracy	±5%	
Maximum Input Voltage	400Vpk	
Sweep deflection factor is 0.1us/div-0.1s/div		
Accuracy	±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 waveof 1kHz	
CRT Effective working Area	8x10div 1div=6mm	
Auxiliary Power Supply	220V AC 50Hz	





#### Metravi 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

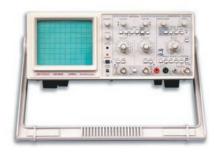
ALT trigger to observe signals from two irrelative channels

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
------------------------	-------------------------------------

5mV/Div to 20V/Div infactor 1-2-5 sequence in 12 steps
< 18nS
400V (DC +ACp-p)
Y1, Y2, ALT, POWER, EXT
AC/DC (EXT), NORM/TV-H, TV-V
AUTO, TRIG, LOCK, SINGLE
0.1uS/div to 0.2s/div in 1-2-5 sequence in 20 steps
x10
X-Axis YI and Y-Axis Y2
TTL Level
Square wave of 0.5V at 1kHz
8cm x 10cm



#### **Metravi OS-5020C**

Dual Trace Dual Channel Oscilloscope with Component	
Test Facility	

Bandwidth	20MHz
Full bandwidth awaanin	a circuit is used in the surrenin

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

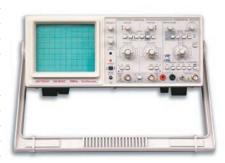
Rising time	< 18nS	
Maximum Input Voltage	400V (DC +ACp-p)	
Triggering Source	Y1, Y2, ALT, POWER, EXT	
Trigger Coupling	AC/DC (EXT), NORM/TV-H, TV-V	
Horizontal Sweep Mode	AUTO, TRIG, LOCK, SINGLE	
Sweep time factor	0.1uS/div to 0.2s / div in 1-2-5 sequence in 20 steps	
Magnification	x10	
X-Y Mode input	X-Axis YI 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	



#### Metravi OS-5025C

Dual Channel Four Trace Oscilloscope	
Bandwidth	25MHz
Confirms to EN61010-1 (	(1993) and EN-IEC61326-1(1997)
High Sensitivity	1mV/Div
Waveforms are parallax-f	ree with CRT's internal graticule
Alt Mag	The waveform (x1) and the x5 magnifiedwaveforms 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 mini	mum 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



#### Metravi OS-5030

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

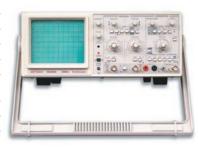
ALT trigger to observe signals from two irrelative channels

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 YI 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



#### **Metravi OS-5030C**

	Dual Trace Dual Channel Oscilloscope with Component Test Facility	
Bandw	idth	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		

fine 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 opera	tion 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 YI 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



#### Metravi OS-5060

Dual Channel Four Trace Oscilloscope		
Bandwidth	60MHz	
Confirms to EN61010-1 (1993) and EN-IEC61326-1(1997)		
High Sensitivity	1mV/Div	
Waveforms are paralla	x-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





#### Metravi OS-5100

Dual Channel Four T	race 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 aredisplayed		
Fast sweep rate to 5	ns/DIV by magnifying 10	
Function of B TRIG'D	can decrease the delay shrinking	
Hold-off function ma	akes it easier to catch the gnals	
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 25pFimpedance
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% in21 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 triggereddelay
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**

#### **Metravi PD-20S**

High Voltage Probe to measure AC/DC High Voltage

Measures upto 30kV DC and 20kV AC

Accuracy: ± 1%

Cable Length 1m



### **PC Based Oscilloscopes**

#### Metravi DSO-2090

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 Excelfile 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	



#### Metravi DSO-2150

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 Excelfile for further processing and the waveform can be recalled as a reference for comparison with the new one

	<u>'</u>
Bandwidth	60MHz
Channels	Two + external triggering
Sampling Rate	150MS/sec
Memory	64kB
Resolution	8bit
Plug & Play Device	





#### Metravi DSO-2250

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

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

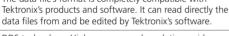
Press a button to transfer the on-screen data to an Excelfile for further processing and the waveform can be recalled as a reference for comparison with the new one

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

#### Metravi DDS-3005

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		



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

# oftware supporting,

**PC Based Logic Analyzer** 

### Metravi LA-5034

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**

#### **Metravi PCIT**

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	



### **Regrigerant Gas Leakage Detector**

#### **Metravi RLD-01**

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**

#### **Metravi RNT-5**

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%

#### Metravi RNT-5A

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 latchin time as well as contact reliability of relay under tes	

0 – 9.999 Sec & 0 – 99.99 Sec



# **Metravi RNT-33**

Time Range

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.
	a) Up to 10A, the loading can be done continuously
Duty Cycle	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.
	0 – 9.999 sec.Resolution 1 msec.
Time range	& 0 – 99.99 sec. Resolution10 msec



#### Metravi ZNT-34

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.	
	i ) continuous up to 10A.	
Duty Cycle	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.	

& 0-99.99sec. with

resolution 10 msec

0-9.999secs. with resolution 1 msec.



### **Short Turn Indicator**

#### Metravi EFD

Time

Measurement

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 ploy 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 eve 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



#### Metravi LITTLE GIANT

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

LED Version of the meter is also available



#### **Solar Power Meter**

#### Metravi 207

Sunlight Measurement up to 1999W/m<sup>2</sup> or 634BTU /(Ft<sup>2</sup>\*hr)

High Accuracy and Fast Response

Data Hold function

Unit and sign display for easy reading

Measuring unit selectable between W/m² and BTU/(Ft²\*hr)

Direct Reading with no adjustments

Max / Min value recording

Low Battery Indication

3-1/2 Digits LCD Display

Resolution 1W/m<sup>2</sup>; 1 BTU /(Ft<sup>2</sup>\*hr)

Accuracy: ± 10W/m<sup>2</sup>



Log scale fidelity	±2dB (without attn.) Ref.: 250MHz
Input impedance	50Ohms
Input connector	BNC
Input attenuator	0 to 40 dB (4Å~10dB steps)
Input attenuator accuracy	1dB/10 step
NASS SECTION AND ASSESSED	+10dBm, ±25V DC (0dB attenuation)
Max. input level	+20dBm, (40dB attenuation)



### **Sound Level Calibrator**

#### **Metravi SC-05**

Standard Sound Ringing Capabilities at 94dB and 114dB

Can be used for both A Weighting and C WeightingCalibration

Microphone adaptors are provided

Low Battery Indication

Output frequency 1kHz
Accuracy ±0.5dB

Complete with user manual, battery and carrying case



### Spectrum Analyzer

#### Metravi 5010

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

#### Metravi AT-5011

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
Man investigated	+10dBm, ±25V DC (0dB attenuation)
Max. input level	+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**

#### Metravi CE-0102TMC

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



#### **Transistor Tester**

#### **Metravi TT-01**

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 lacker.

Measuring protection voltage of varistor.

Measuring starting voltage of neon bulb, neon lamp.

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



### Time Totalizer

#### **Metravi TT-300**

6 Digit LED Display		
Auto-ranging from 9999	uto-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 Clusure (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	



#### Metravi TT-302

6 Digit LED Display		
Auto-ranging from 9999.99 Sec to 999999Hrs		
Ranges can be fixed at	9999.99 Sec / 9999.9 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 Clusure (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	



#### **Transformer Turns Ratio Set**

96 x 98 mm sq

#### **Metravi TTRS-100**

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.

Perfectively 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.



### Two Color Infra Red Thermometer

#### Metravi ST-300A

the atmosphere

Auto Power Off IP-65 Protection

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		

Also ideal for targets where emissivity is changing



#### **Metravi ST-300B**

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

#### **Metravi ST-300C**

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



#### Metravi UTG

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, glassetc

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

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



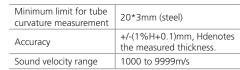








6300



#### **Vibration Meter**

#### Metravi VIB-30+

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 0.2 to 99.9 mm/s RMS Measuring range 10 to 1000Hz Frequency range 0.1mm/s Resolution 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



#### Metravi AVD-80

Measuring Vibration Velocity, Displacement and

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



#### **Metravi PVB-820**

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

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





#### Metravi 908

LCD displays measurement result and conditions directly

Measures acceleration (m/sz 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 lemperature 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 AC output 2V peak, Signal Output Earphones can be connected





### **Metravi BCA-III (Shock Pulse Meter)**

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**

#### **Metravi CE-0102VT**

Input and outputs are Isolated		
Туре	9	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		

isstandard, Dual Output available on request

Auxiliary	Self Powered
Accuracy	Standard : ± 0.5% of Span
Optional	On Request



#### Video Infra Red Thermometer

#### Metravi VIT-20

2.2"TFTLCDdisplay

640\*480pixels (30millionpixels)

MicroSDmemorycard

Image(JPEG)andvideo(AVI)

Picture and Video of target under test can be taken

Pictures with target sighting, temperature and time

Humidity and AirTemperature measurement

Duallasertargeting

Type-Kthermocoupleprobe

Adjustableemissivity

Highaccuracy

Fastresponsetime

Dew-point temperature and Wet bulb temperature

50:1 Distance to Sighting Ratio

Temperature Range -50to 1850"C Adjustable Emissivity 0.10 to 1.00

Contact type Thermometer with K type Thermocouple measures Range-50to1370"C

Re-chargeable battery and Battery Charger

USB PC Interface



#### **Wheatstone Bridge**

#### Metravi WSB

Useful for measuring Low Resistance values

Range	0.001 to 11.1MΩ
Accuracy	± 0.05%
In-built 4.5V dry battery	
Post Quality Managania Wise is used for sails	

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**

#### Metravi WH-1081PC

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 Opeated.



#### **Some of Our Customers**

Aarti Steels Ltd ABB Limited ACE Calderys Ltd Adhunik Metaliks Ltd Aditva Birla Insulators Aditya Birla Nuvo Ltd Air ÍNDIA Airports Authority Of India Amara Raja Batteries Ltd American Consulate General Amrit Cement Industries Ltd. Andhra Organics Ltd ANUPAM-MHI INDUSTRIES LTD Apar Industries Ltd Appollo Fibers Ltd Archaeoligical Survey of India ARCL Organics Ltd Areva T&D India Ltd Asian Electronics Ltd Assam Petrochemicals Ltd Autometers Alliance Ltd.

Avtec Limited B S E S Limited RHFI B.S.N.L. Bajaj Electricals Ltd. Ballarpur Industries Ltd. Balrampur Chini Mills Limited Bangladesh Criclet Control Board Bangladesh Steel Re - Rolling Mills Ltd. Barak Valley Cements Ltd Bengal Chemicals & Pharmaceuticals Ltd Besco Limited
Bhabha Atomic Research Centre Bhagalpur Electricity Distributors Co Pvt Ltd Bharat Cooking Coal Ltd. Rharat Farth Movers Ltd. Bharat Electronics Ltd. Bharat Sanchar Nigam Ltd Bharti Airtel Limited BHEL Electrical Machines Ltd. Bhushan Steel & Strips Ltd Bhutan Carbide & Chemicals Ltd. Binani Cement Limited Birla Ericsson Optical Ltd Birla Institute of Technology & Science Birla Research Institute For Applied Sciences BLUE STAR LTD Bongaigaon Refinery & Petrochemicals Ltd. Bose Institute BS LIMITED BSA Motors

BSES Kerala Power Ltd
C.E.S.C. LTD. C&S ELECTRIC LTD. Calcom Cement India Ltd. Calcutta Medical Research Institute Calcutta Telephones Carborundum Universal Ltd CARTINI INDIA LTD. CDE ASIA LIMITED
CELL INDUSTRIES LTD. Cement International Ltd Central Coalfields Ltd Central Fuel Research Institute Central Glass & Ceramic Research Institute Central Institute of Plastic Engg. & Tech (CIPET) Central Mechanical Engineering Research Institute Central Mine Planning & Design Institute Ltd Central Power Research Institute Central Railway Chittaranian Locomotive Works Cochin Shipyard Ltd Columbia Asia Hospital Corporate Ispat Allovs I ts Crompton Greaves Ltd. CRSU', VECC

Cummins India Ltd.

Dabur India Limited Dalmia Cement Bharat Ltd Damodar Vally Corporation Damodhar Cement & Slag Ltd DCM Engineering Ltd DCW Limited Deepak Steel & Power Ltd Delhi & District Cricket Association Delta Ltd Delta Papers Mills Limited.
Department of Atomic Energy Dept. of Light House & Light Ships Descon Limited. Diamond Cements Diesel Loco Modernisation Works Dishnet Wireless Ltd Doeacc Centre Imphal

Dongfang Electric Corporation Doordarshan Maintenance Centre Durgapur Chemicals Ltd

Durgapur Steel Plant E.I.D. Parry (India) Limited E.M.C. Limited East Central Railway Eastern Spining Mills & Industries Ltd Eastern Coalfields Ltd Eastern Metalizing Ltd. Eastern Railway
Electro Steel Casting Ltd. Electronics Regional Test Laboratory Electronics Test & Devolopment Centre Flectrosteel Steels Ltd. Emami Paper Mills Ltd ESAB India Limited Essar Projects (India) Ltd Essar Steel India Limited Essel Mining & Industries Ltd Eveready Industries India Ltd

Exide Industries Ltd. FACOR Alloys Ltd

Fan Manufacture of Cluster Foundation of Kolkata

Farakka Super Thermal Power Project Fci Oen Connectors Ltd Ferro Alloys Corporation Ltd Ferro Scrap Nigam Ltd Flender Ltd Fluidomat Limited GA Danieli India Ltd

Gail Gas Limited GALLANTT ISPAT LIMITED
GANPATI SUGAR INDUSTRIES LTD. Garden Reach Shipbuilders & Engineers Ltd Garware Polyester Ltd Gas Authority of India- Auriya Genus Power Infrastructures Ltd GLOSTER LIMITED Goa Cricket Association Gobind Sugar Mills Ltd Godrej & Boyce Mfg. Co, Ltd Gontermann Peipeprs India Limited Goodricke Group Ltd. Graphite India Ltd. Grasim Industries Ltd. Great Eastern Energy Corporation Ltd Greaves Limited Green Ply Industries Ltd Gun & Shell Factory
Guru Nanak Auto Enterprises Ltd

H G I Industries Ltd Haldia Energy Ltd. Haldia Petro Chemicals Ltd. Hanuman Agro Industries Ltd. Harelli Industrial Ltd. Harinagar Sugar Mills Ltd Havell's India Ltd HBL NIFE Power System Ltd. HBL Power Systems Ltd HCL Infosystems Ltd HCL Technologies Ltd Heavy Engineering Corporation Ltd Heavy Water Plant HEG Limited Heidelberg Cement India Ltd HERO MOTORS LTD Hind Rectifiers Ltd Hindalco Industries Limited Hindustan Aeronautics Limited Hindustan Copper Ltd. Hindustan Oil Exploration Co, Ltd Hindustan Paper Corporation Ltd. Hindustan Zinc Limited Hindusthan Engineering & Industries Limited Hindusthan Malleables & Forgings Ltd. Hitech Abrasives Ltd Holcim Cement (Bangladesh) LTC

LT C Limited IB Thermal Power Station IDCOL Ferro Chrome & Alloys Ltd IFB Industries Ltd. IND Synergy Ltd IND-BARATH ENERGY (UTKAL) LIMITED India Carbon Ltd India Dairy Products Limited India Resources Ltd Indian Aluminium Co. Ltd Indian Charge Chrome Ltd Indian Explosives Ltd Indian Farmers Fertiliser Co - Operagtive Ltd Indian Institute of Technology
Indian Jute Industries Research Institute Indian Metal & Ferro Alloys Ltd Indian Oil Corporation Limited

Indianoil Petronas Pvt. Ltd. Indo - Gulf Industries Ltd INLAND POWER LTD Institute of Himalayan Bio- Resource Technology Integrated Cleanroom Technologies Ltd. IPCA Laboratories Limited IPI Steel Ltd Isolux Ingenieria, S.A. Ispat Alloys Ltd Ispat Chrome Ltd. ISRO Satellite Centre JCT Limited

J.K. Paper Ltd J.S.B. Cement LLP Jai Balaji Industries Ltd Jain Carbides & Chemicals Ltd. Jaintia Cement Limited JAIPRAKASH ASSOCIATES LIMITED Jaiswal Alloys Pvt Ltd Jammu & Kashmir Cricket Association Jashree Chemical Ltd. ( Kol ) JCT Limited (Filament Unit) Jessop & Co Jindal India Ltd JINDAL POWER LIMITED Jindal Saw Ltd lindal Stainless Ltd JK Paper Ltd JKEW Forgings Ltd IMT Auto I td Johnson & Johnson Ltd JSL Stainless Ltd JSW Cement Ltd ISW Fneray Ltd JSW Steel Processing Centres Ltd Jyothy Laboratories Ltd K.C.P. Sugar & Industries Corpn. Ltd

Kaefer Punj Lyods Ltd. Kalyani Alloy Casting Ltd Karnataka Power Corporation Ltd. KEONJHAR SCHOOL OF ENGINEERING Khaitan Electricals Limited Khalilabad Suger Mills Khanna Paper Mills Ltd Kingsley Industries Ltd. Kirloskar Bros Ltd Kirloskar Electric Co Ltd Kirloskar Theratronics (P) Ltd Kitoly Industries Ltd Krypton Industries Ltd. Kudremukh Iron & Steel Co. Ltd Kurichhu Hydro Power Corporation Kurlon Limited

Kusalava International Ltd. L & T Shipbuilding Ltd L.N. Metallic Ltd Lafarge India Ltd Lahiri Power & Steels Ltd Laila Nutraceuticals Larsen & Toubro Limited Lawatherm Furnace Pvt Ltd Lawrence & Mayo (India) Pvt Ltd Lemos Cement Ltd LG Polymers India Pvt. Ltd Life Care Systems Light House & Lightships Limtex Tea & Industries Ltd Lohit Glass Pvt Ltd. Lower Assam Hospital & Research Centre Loyal Textile Mills Ltd LTS Plastics (I) Pvt Ltd Luminous Power Technologies Pvt Ltd Lycos India Ltd Maa Laxmi Steel Ltd

Mackintosh Burn Ltd. Macmet India Ltd MACNEILL ENGINEERS LTD. Madhya Bharat Papers Ltd Madras Cements Ltd. Mafatlal Denim Ltd Maheshwary Ispat Ltd Mahindra Water Utilities Ltd Maithan Alloys Ltd Maithan Ispat Ltd Maithan Steel & Power Ltd Malu Paper Mills Ltd Mankapur Chini Mills Marathon Electric Motors (India) Ltd MARK STEEL LIMITED Marsons Ltd Max India Limited Mayurbhani School of Engineering MB Ispat Corpn. Ltd Mceregore & Baflour India Ltd Mcnally Bharat Engg. Co. Ltd.

Meghalaya Cements Ltd Meghalaya Power Ltd Meghalaya State Electricity Board Meja Urja Nigam Pvt Ltd Metro Dairy Limited MGM MINERALS LTD MGM Steels Ltd Mideast Integrated Steels Ltd (Mesco Steel)
MIZORAM POLICE RADIO ORGANIZATION Monnet Ispat Ltd MPS Food Products Ltd MSP Metallics Ltd MSP Sponge Iron Ltd MUKAND LTD. Mysore Cements Ltd.

N. F. Railway N.T.P.C. Limited Nagarjuna Fertilizers & Chemicals Ltd Nalwa Steel & Power Ltd National Aluminium Co. Ltd. National Council of Science Museums National Fertilizers Limited National Institute of Science Education & Research National Plywood Industries Ltd. Nava Bharat Ferro Alloys Ltd Nava Bharat Ventures Ltd NDT Laboratories Pvt. Ltd NEC Energy Pvt Ltd NEC Motors (P) Ltd. Neelachal Ispat Nigam Ltd Nelco Ltd Nellimarla Jute Mills Co. Ltd Neo Metaliks Ltd. Nepa Limited

Nippon Power Ltd Nirlon Ltd Nissan Ashok Leyland Technologies Ltd Nixon Steel & Power Ltd North Central Railway North Eastern Frontier Railway North Eastern Railway North Frontier Railway Nuclear Power Corpn. of India Ltd Numaligarh Refinery Ltd. NVD Solar Ltd

Neptune (India) Ltd.

OCL India Ltd

NESTLE INDIA LIMITED

Octavious Tea & Industries Ltd. Oerlikon Balzers Coating India Pvt. Ltd.
Oil & Natural Gas Corporation Limited OPTO CIRCUITS (INDIA) LTD.
ORB Biotronics Pvt. Ltd. ORDNANCE Factory Organon (India) Ltd. Ori Plast Ltd Orient Cement ORIENT ELECTRIC Orient Fans Orient Paper Mills Orissa Air Products Ltd. Orissa Hydro Power Corporation Ltd. Orissa Manganese & Minerals Ltd Orissa Power Generation Corpn. Ltd Orissa Sponge Iron & Steel Ltd Oswal Chemicals & Fertilizer Otis Elevator Co. (India) Ltd.
Palashbari Tea Co Ltd

Palsons Drugs & Chemical Industries Paradeep Carbon Ltd Paradeep Phosphates Ltd. Penden Cement Authority Ltd Pengg Usha Martin Wires Pvt Ltd Penna Cement Industries Ltd PERFECT FILAMENTS ITD Pioneer Friction Ltd Polar Industries Ltd Polar Pharma India Ltd. Power Grid Corporation of India Ltd Prabartak Jute Mills Ltd. Prakash Industries Ltd Pratap Synthetics Ltd Praxair India Ltd Premier Cryogenics Ltd.

Premier World Technology Ltd. Progressive Fertichem (P) Ltd. Protap Polysacks Ltd. Proton Steels Ltd. PSPL NTPC Punjab Engineering College Punrasar Jute Park Ltd. Purhanchal Cement Limited Pure Coke Ltd

OFD Solutions

Quadra Medical Centre Quality Services & Lahoratories Quantum Powertech Pvt Ltd

R.K.B. Cements Pvt. Ltd Rai West Power Ltd Rajasthan Cricket Association Rajasthan Fertilizer & Chemicals Corpn. Ltd Raiiv Gandhi Thermal Power Plant Ralson (India) Limited RANBAXY LABORATORIES LIMITED Rane Brake Linings Ltd RAS NEW CEMENT UNIT Raymond Zambaiti Ltd RAYON TEXTILE INDIA PVT. ITD. RDR Textiles Ltd Regency Ceramics Ltd Reliance Communications Ltd Reliance Energy Ltd. Reliance Industries Ltd Reliance Infrastructure Ltd Reliance Storage Energy & Systems Pvt. Ltd. Reliance Telecom Research & Development Centre for Iron & Steel Rico Auto Industries Ltd. RITES LTD. RNB CEMENTS PVT. LTD. ROOTS INDUSTRIES INDIA LIMITED Roshni Powertech Ltd Rotomac Eletricals P. Ltd Rotomag Motors & Controls Pvt Ltd Rotomotive Power Drives (I) Ltd. RPG Netcom Ltd RPG Transmission Ltd. RSB Transmissions (I) Ltd RTS Power Corporation Ltd Rugby Pharma Pvt Ltd RUIA CHEMICALS PVT. LTD. RUSAN PHARMA LTD S R F Limited

SDF. Vsnl Sentacon Steel Pvt Ltd Seven Hills Steel & Iron Factory Shalimar Wires Industries Ltd Sharp Ferro Alloys Ltd Shree Badarinarayan Alloys & Steel Ltd Shree Cement Limited Shriram EPC Ltd. Siemens Ltd SML Isuzu Ltd South Central Railway South City Project Kolkata Ltd. South Fast Central Railway South Eastern Coalfields Ltd. South Eastern Railway South Western Railway Southern Raiway Space Applications Centre SPS Steel & Power Ltd. SQAE (Electronics) SR INFRA PROJECT PVT.LTD. Sree Metaliks Ltd SRF Limited Steel Authority of India Ltd Sterling and Wilson Ltd. Sterlite Industries (India) Ltd Structural Engg. Research Centre Sun Bio Technology Ltd. Sundaram Brake Linings Ltd Sunflag Iron & Steel Co.Ltd. Supreme Paper Mills Ltd. Surva Roshni Ltd Suzlon Structures Pvt Ltd
T S Alloys Ltd

T&T Projects Ltd.

Tata Chemicals Ltd

Tata Cummins Ltd

Tata Honeywell Ltd Tata Metaliks Ltd

Tata Ryerson Ltd Tata Sponge Iron Ltd

TATA PROJECTS LIMITED

Technimont ICB Limited
Tecmag Transformers (India) Pvt. Ltd

The Andhra Pradesh Paper Mills Ltd

The Andhra Sugars Limited - Taduvai The Apollo Clinic

The Andhra Petrochemicals Ltd.

Tantia Constructions Ltd

Saha Institue Of Nuclear Physics

Sasa Musa Sugar Works Ltd Satish Dhawan Space Centre

Schenck Process India Ltd

Scientific Clinical Research Laboratory Pvt Ltd

The Associated Cement Companies Ltd. The Roard of Control for Cricket in India The Fertilisers & Chemicals Travancore Ltd The India Cements Ltd The Indian Iron & Steel Co. Ltd The Madras Aluminium Co Ltd The Mysore Paper Mills Ltd The Teloijan Tea Company Ltd The Travancore - Cochin Chemicals Ltd The Wallace Flour Mills Co. Ltd. The West Coast Paper Mills Ltd. Thermax Ltd Thyssenkrupp Elevator (INDIA ) Pvt. Ltd. TIL India Ltd Times Ferro Alloys Limited Times Steel & Power Ltd. Timken India Ltd. Torrent Power Limited Traco Cable Company Ltd. TRANSTONNELSTROY - AFCONS J V TRF Limited Triveni Engineering & Industries Ltd. True Power Tech (P) Ltd Tulip Tea Co. Ltd. Tulsipur Sugar Co TVS Srichakra Ltd U. P. Jal Vidyut Nigam Ltd. UGC DAE CSR ULTRATECH CEMENT LIMITED

Uma Plastics Ltd Unitech Paper & Board Industries (Pvt ) Ltd United Conveyor Corporation (India) Pvt Ltd United Paner Boards Ltd United Storage & Tank Terminals Ltd Unitek Power Solusions (India) Ltd Unitherm Engineers Ltd Universal Cables Ltd Universal Machines Ltd UNIVERSITY COLLEGE OF SCIENCE University of Hyderabad Uranium Corporation Of India Ltd Usha Martin Ltd Usha Welds Ltd. V - Guard Industries Ltd Vandana Vidhyut Ltd.

Varun Beverageges Ltd, VFCC Vedvvas Ispat Ltd Vehcles Research & Dev. Estt (VRDE) Versatile Wire Ltd. Vertex Research Centre (Rangasamuthiram) Vikas Metal Ltd Vikram Sarabhai Space Centre Virchow Laboratories Ltd. Vishnu Sugar Mills Ltd Vishva Flectrotech Ltd. Visvesvaraya National Institute of Technology Vivada Inland Water Ways Ltd VOLTAS Limited VSNI

WXL Technologies Ltd
W.B.S.E.D.C.L Webcon Equipments Pvt. Ltd. Webel Consumar Electronics Ltd. Welcast Steels Ltd West Bangal State Elerctricity Board West Bengal Chemical Industries Ltd. West Bengal State Transmission Co Ltd West Cental Railway Windsor Machines Ltd (Kol) Winsome International Ltd Wonder Cement Ltd

Worthy Plywoods Ltd. WPIL Ltd XENITIS INFOTECH LTD.

Xpro India Ltd. Y-S HITECH SEC. PRINT (P) LTD. Yamuna Industries Ltd Yamuna Power & Infrastructure Ltd Yash Paners Ltd Yashoda Hospital Yetazu Instrumentation YL Solutions Yoedbar Enterprise

Yuksom Breweries Ltd Zeco Aircon Industries Ltd Zenith Frrectors Pvt Ltd. ZENITH MECHANICS (INDIA ) PVT. LTD. Zentech Engineering Systems Zetadel Technologies Pvt Ltd.









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