Metrix+TM

PRODUCT CATALOG

ELECTRICAL & ELECTRONIC TEST & MEASUREMENT INSTRUMENTS



OCTOBER 2023

www.metrixinstrument.in

ABOUT US

WE VALUE ESTABLISHING LASTING, FRUITFUL RELATIONSHIPS THAT GO BEYOND BUSINESS.

MISSION

Our sole aim is to provide the most reliable solution for any industrial challenge faced with the help of instruments and technology.

VISION

To enable manufacturing industries to produce goods as per the quality standards, which eventually leads to the consumer getting the best possible products.

WORKING PRINCIPLE

We like to closely work with our customers to understand their industrial challenges and come up with an innovative solution with our instruments. Further, we strive to establish ourselves in the long term, by offering the best after sales service to earn their maximum trust and confidence.

We fully support our channel partners, spread across India, as we believe our strength lies with our esteemed partner network.

OUR OFFERING

We provide a wide range of measurement equipments to offer you a definite solution for your all testing needs. Currently, our portfolio includes electrical instruments, NDT instruments, surveying equipment and environmental testers. We are expanding our range every quarter!

The entire range of test & measuring instruments are produced as per the global quality standards so, that they are acceptable worldwide. Our offered products are not only appreciated for their outstanding quality but also for their competitive rates.





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NDT (NON-DESTRUCTIVE TESTING) INSTRUMENTS

COATING THICKNESS GAUGES (DFT METERS)

Coating thickness gauges also known as elcometers and dry film thickness (DFT) meters are used for measuring the thickness of coatings on metals like paint, platings, anodized layer, galvanized layer, lacquer layer, phosphide layer, etc.

Integrated probe



F
0 ~ 1500um
•
•



Coat Gauge	FNxL
Economic	

Туре	F & NF
Measuring Range	0 ~ 1500um
um/mil and backlit LCD	•
Zero and multi-point calibration	•



Coat Scope i Simple use	
Туре	F & NF
Measuring Range	0 ~ 2000um
um/mil and backlit LCD	•
Zero and multi-point calibration	•
Memory and statistics	•



Coat Gauge Pro	
Feature Rich	

Туре	F & NF
Measuring Range	0 ~ 2000um
um/mil and backlit LCD	•
Zero and multi-point calibration	•
Memory and statistics	

Flexible probe





Coat Measurer F+N Reliable

Туре	F & NF
Measuring Range	0 ~ 1250um
um/mil and backlit LCD	•
Zero and multi-point calibration	•





Coat Scope 27

Simple use	
Туре	F & NF
Measuring Range	0 ~ 2000um
um/mil and backlit LCD	•
Zero and multi-point calibration	•
Memory and statistics	



Coat Scope Pro

Feature Rich	
Туре	F & NF
Measuring Range	0 ~ 2000um
um/mil and backlit LCD	•
Zero and multi-point calibration	•
Memory and statistics	





Wet Film Thickness Measurement



CG 3000 Wet film comb

Easily measure thickness of wet film coatings like wet paint, enamel layer, adhesive, architectural coating, color coating, varnish, etc

Range :25 ~ 3000um | 1 ~ 118mils



ULTRASONIC THICKNESS GAUGES

Ultrasonic Thickness Gauges measure the thickness of a material using ultrasonic waves. It is widely used in fields such as oil & gas, petroleum, chemicals, metallurigcal, aerospace, etc.

Our UTGs can measure a wide variety of materials, please refer individual catalogs for detailed information.

	UTM 5A+ Menu operation			UTM 5 Mid-Range	
Motrix: " UTN EA. Scan Of All	Measuring Range	1 ~ 300um	SO	Measuring Range	1 ~ 200um
Mat: Steal S920 Mas: An Min An	Resolution	0.1/0.01mm/0.01inch Switchable	φ	Resolution	0.1/0.01mm
THICKNESS GAUGE	Memory	•		Memory	-
			Unable Treasure UTM 5	Selection of Probes	•
	UTM 9 Mid-Range		Metrix**	UTG 27 Metal Body	
E C O	Measuring Range	0.9 ~ 350um	Ø	Measuring Range	0.75 ~ 400um
	Resolution	0.1/0.01mm	EX. Large	Resolution	0.1/0.01mm/0.1inch Switchable
	Memory	-		Memory	-
	Selection of Probes	•	UTG-37 ULTRASPARCE THICKNESS GAUGE	Selection of Probes	•



The measuring ranges are as per tested on 45# Steel



ULTRASONIC FLAW DETECTOR

Ultrasonic flaw detectors are the next step in material inspection testing. They help in determining any anomalies, like pits, flaws, abnormal welds, etc, inside the material, via output of sound waveforms.

An NDT technician is well equipped to use this for flaw detection.



UTFD 80

	Measuring Range	1 ~ 10m
•	Backlit Color d	isplay

- Intricate user customisable settings of gain, gate, rectifiers, etc.
- Solid metal housing, dust cover included
- Straight beam and angle beam probes included
- Knob design for faster operation
- Inbuilt battery

SURFACE ROUGHNESS TESTERS

A roughness tester is used to quickly and accurately determine the surface roughness of a material. Few industries include automobile manufacturing and spare parts processing, machinery parts processing, metal processing equipment and accessories, surface engineering treatment, mold casting and precision manufacturing.



MICROSURF 10A Integrated Probe

SURFACE ROUGHNESS TESTER Metrix+ ²	Ra, Rq Rz, Rt Filters Cutoff length	0.005 ~ 16.00 um 0.020 ~ 160.0 um RC, PC-RC, Gauss 0.25mm / 0.8mm/ 2.5mm
\bigcirc	Sensor Data storage	Diamond tip •
	SURFTEST 10A Flexible Probe	
	Ra	0.05 ~ 10.00 um
	Rz	0.10 ~ 50.0 um
	Filters	RC, PC-RC, Gauss
	Filters Cutoff length	RC, PC-RC, Gauss 0.25mm / 0.8mm/ 2.5mm

GLOSS METERS

Gloss Meter is used to measure the specular reflection (gloss) of a surface. Few industries where it is used are Paints & coatings, additives, inks, plastics, aerospace, automotive manufacture and re-finish, etc.





330 00	GLS 09M Multi Angle	
	Measuring Angle	20° / 60° / 85°
C CLS COM	Measuring Range	0 ~ 200 GU
	Memory	
	Calibration Plate	
in the set of the set	MICROGLOSS High Quality	
A to	Measuring Angle	20° / 60° / 85°
	Measuring Range	20°/60° : 0 ~ 1000 GU 85° : 0 ~ 160 GU One-button
		simultaneous measurement

MOISTURE METERS

Moisture meters generally adopt pin type measurement by measuring the electrical conductivity between the two pins to measure the moisture content of the material to be measured.

Memory

Calibration Plate



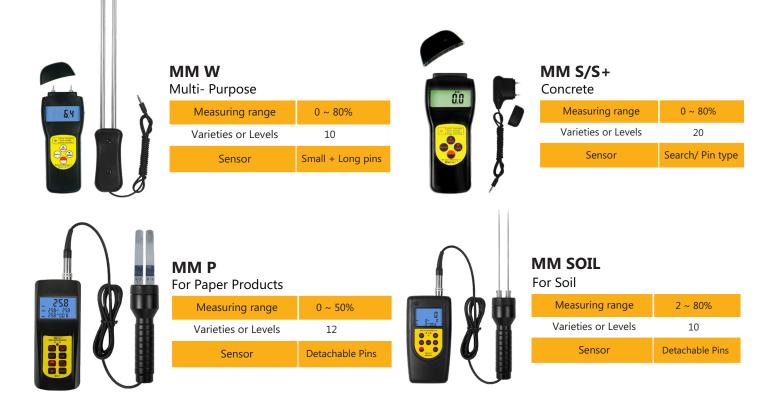
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Moisture levels vary with temperature, humidity, sample composition, etc, hence, it is always recommended to calibrate it against standard testing procedures to determine the best suited code (sensitivity) level.



Grain Moisture Meters







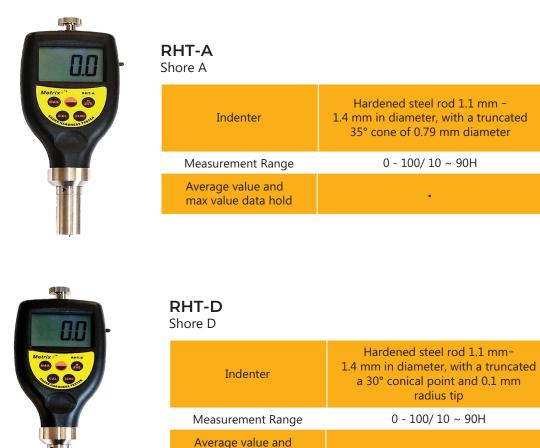
HARDNESS TESTERS

Rubber Hardness Testers

Shore A scale is used for testing soft Elastomers (rubbers) and other soft polymers like soft vulcanized rubber, natural rubber, nitriles, thermoplastic elastomers, flexible polyacrylics and thermosets, wax, felt and leathers, with hardness values between 20 ~ 90A.

Shore D scale is used for testing hard elastomers and most other polymer materials (thermoplastics, thermosets)s like hard rubber, thermoplastic elastomers, harder plastics and rigid thermoplastics, with hardness values greater than 90A

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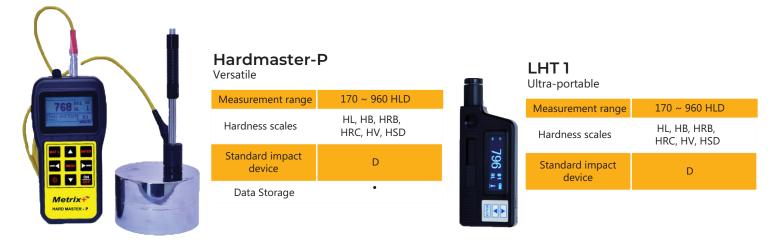


max value data hold



Leeb Hardness Testers

These employ the rebound method of measuring hardness. Leeb hardness testers can be used to measure the hardness of die cavity of moulds, inspection of bearings, installed machinery, heavy work pieces and other mass produced parts in a production line, failure analysis of pressure vessel, steam generator and other equipment.



ELECTRICAL TESTERS

DIGITAL MULTIMETERS



603+	
IR Test	

2 7	Test	

AC/DC V	1000 V DC; 750V AC
AC/DC A	10A
Additional measurements	Ω, F, Hz, hFe, IR test, live wire detection
Others	Data hold





IR Test & Temperature

AC/DC V	1000 V DC; 750V AC
AC/DC A	10A
Additional measurements	Ω, F, Hz, hFe, °C, IR test, live wire detection
Others	Data hold



171TRMS+

5999 Count True RMS

AC/DC V	1000 V DC; 750V AC
AC/DC A	20A AC/DC
Additional measurements	Ω, F, Hz, %, °C, NCV, Triode
Others	Backlight and Torch



LCR Multimeter

AC/DC V	1000 V DC; 700V AC
AC/DC A	10A DC; 20A AC
Additional measurements	DC/AC V, DC/AC A, Ω, F, H, Hz, hFe
Others	Backlight and Torch

 Ω - Resistance, F - Capacitance, Hz - Frequency, % - Duty, °C - Temperature, H - Inductance All models have diode, continuity, data hold and auto-power off



Metrix+™ 31TRMS
FRMS AUTO µ A
~ ТТТТТ
FUNC RANGE DH-#-
107 2 5 5 107 2 5 5 107 2 5 5 107 10 10 10 107 10 10 107 10 10 107 10 10 10 10 10 10 10 10 10 10 10 10 10 1
-HHz HetC 10A COM VΩmA

31TRMS Economic	
AC/DC V	600V True RMS
AC/DC A	10A
Additional measurements	AC/DC V, AC/DC A, Ω, F, Hz, NCV, °C
Others	Auto-range, backlit



DM 620

50000 Count Data Logger

AC/DC V	1000V True RMS
AC/DC A	10 A True RMS
Additional measurements	AC/DC V, AC/DC A, Ω, F, Hz, duty, °C
Others	Trend plot and graph

DIGITAL CLAMP METERS (TONG TESTERS)

AC current measurement only

1250A Sturdy		Moltrix ** 2250T	2250T Sturdy	
AC A	1000A True RMS		AC A	1000A True RMS
Count	1999		Count	3999
Additional measurements	AC/DC V, Ω, F, Hz		Additional measurements	AC/DC V, Ω, F, Hz, %, °C
Jaw Ø	52mm		Jaw Ø	52mm
		<u><u></u></u>		

 Ω - Resistance, F - Capacitance, Hz - Frequency, % - Duty, °C - Temperature, H - Inductance All models have diode, continuity, data hold and auto-power off



AC & DC current measurement



DIGITAL INSULATION TESTERS

Insulation Testers, or commonly called Meggers, are used to measure the insulation strength of cables transformers units.

It does this by sending a high voltage signal to the load under test, measuring the current and calculating the resistance.

	DIT 918 2.5kV			DIT 3125A(Ecc 5kV)
♥▲ 2500√® 9.98.	Output Voltage	100/250/500/1000/2500V		Output Voltage	500/1000/2500/5000V
Insulation Tester	Test range(Ω)	0 ~ 50GΩ	High Voltage Insulation Tester	Test range(Ω)	0 ~ 1000GΩ
Metrix TM DIT S18	Test range(V)	30 ~ 600V AC/DC	Image: State	Test range(V)	30~600V AC/DC
	Others	Auto discharge, backlit LCD, live circuit warning	in in its second	Others	Auto discharge, backlit LCD, live circuit warning, Timer measurement, PI, power via DC adapter

Proper precaution has to be taken while measuring the insulation resistance, due to high voltage signals.



DIGITAL EARTH RESISTANCE METERS

Earth Resistance Meter or Grounding Resistance Tester is a soil resistance testing device. It measures the adequecy of the earth resistance, as a safety inspection for testing a proper ground path for faulty currents.

It works by generating electrical current in the measuring electrodes, embedded in soil, to mimic a faulty current, and measuring the voltage bwteen them to determine the earth resistance.





DET 1501

Economic	
Test range(Ω)	0 ~ 2000Ω
Earth Voltage	600V
Others	Data hold, low battery indication

DET 1503

Versatile	
Test range(Ω)	0 ~ 20 / 200 / 2000Ω
Earth Voltage	0 ~ 200V
Others	Backlit LCD, timer measurement, data hold, auto power off

LINE TESTERS



CD 2 Mid-Range

inia nange	
Measurement range	24 ~ 600V AC
Indication	Buzzer and light
Changeable Sensitivity	-
Flashlight	-



CD 3

Wider range	
Measurement range	12 ~ 1000V AC
Indication	Buzzer, light and bar display
Changeable Sensitivity	•
Flashlight	•

Line testers check for live wires, by detecting the magnetic field generated by AC voltage. It can be run over a wire, to detect the presence of a current, as a safety check.

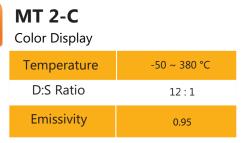
SURVEYING EQUIPMENT

INFRARED THERMOMETERS (PYROMETERS)



FH 2		
Human Body IRT		
Temperature	35 ~ 42.9 °C	
Test Distance	5 ~ 15cm	
Emissivity	0.95	







MT 4xL Economic	
Temperature	-32 ~ 550 °C
D:S Ratio	12 : 1
Emissivity	0.95

62 Pro Circular laser	
Temperature	-50 ~ 650 °C
D:S Ratio	12:1
Emissivity	0.1 ~ 1.0 adjustable



65 Pro K-type		
Temperature	-50 ~ 850 °C	
D:S Ratio	12:1	
Emissivity	0.1 ~ 1.0 adjustable	



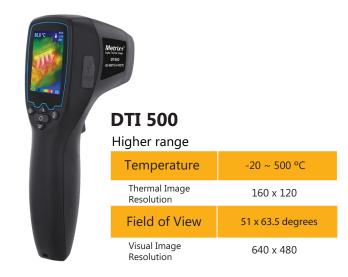
MT 12A Wide range

i ale i all'ige			
Temperature	-18 ~ 1150 °C		
D:S Ratio	50:1		
Emissivity	Adjustable 0.1 ~ 1		



DIGITAL THERMAL IMAGERS (THERMAL SCANNERS)

	DTI 350 Basic	
	Temperature	-20 ~ 350 °C
	Thermal Image Resolution	32 x 32
	Field of View	33 x 33 degrees
	Visual Image Resolution	640 x 480





VIBRATION METERS

A vibration meter is used for machine condition monitoring, product testing and quality assurance. A vibration meter also can be used in civil engineering to measure the vibration of structures such as buildings, roads and bridges.



LASER DISTANCE METERS

The DM series are a versatile range of laser distance meters from 40 to 100m range. They can be used to calculate distance, area, volume, pythagorean distance in different measurement units. The features are :

- Bi-axis spirit levels
- Clear backlit LCD display
- Data storage and recall
- Measurement in m, ft, inch
- Silent operation
- Pocket type





TACHOMETERS

Tachometers are used to measure the RPM of a rotating object by either contact method, attaching it to the shaft, or by non-contact method, using laser to calculate the RPM. The features are :

- Max and min value
- Data hold and backlit LCD(only in DT 2234BL and DT 2235BL)



DT 2234BL Non-Contact type



DT 2235BL Contact type





STROBOSCOPES

Stroboscopes are used to provide still image of single, dual or multiple vibrating, rapidly rolling or a periodic motion object and can also observe movement tracks. Machine parts and vibrating string are common examples. The features are :

7

- · Automatic stop flashing to increase tube time
- Internal/external triggering and x2 / /2 buttons for fast adjustment
- · Automatic tracking function of the pattern



DT 2239 50 ~ 12,000 FPM



DT 2259A 50 ~ 40,000 FPM

ENVIRONMENTAL TESTERS

ANEMOMETERS

Anemometers are used for measuring wind speed. They are widely used in fields such as heating, ventilation, air conditioning, environmental protection, energy conservation monitoring, meteorology, etc. The features are :

- Measurement units of m/s, km/hr, ft/min, knots
- Air temperature measurement
- AVM 05 has wind flow measurement in m3/min and ft3/min
- AVM 05 has data storage





LUX METERS

Lux meters measure the light intensity and display the values in lux or Foot Candle(FC) units. It is widely used in lamp industry, laboratory, environmental agencies, photography and video filming, etc. The features are

- Lux / FC conversion
- Data hold and auto power off
- Max/min value hold(only in LX 1330A+)



LX 101+ Upto 2L lux



LX 1336A Upto 5L lux

SOUND LEVEL METERS

Sound Level Meters monitor the sound energy in the surroundings and display in dB value. They are widely used by in industries and environmental protecton agencies to ensure sound level below required standards and regulations. The features are :

- 1/2 inch electret condenser mic
- Fast and slow time weighing selection
- Max hold function





- A-weighting
- Bar-graph
- Ambient temperature and humidity reading
- Negative display for better readability
- Inbuilt battery with Type-C charging



SL 4005

Versatile

- A, C and Fweighting
- Data storage
- Backlit LCD
- Lp, Leq and Ln functions

TEMPERATURE AND HUMIDITY METERS





TH 01

Indoor Thermo-Hygro Meter, which shows the surrounding temperature and humidity, time, date and has a sleek table-top design.



DT 305-S Digital thermometer with K-type thermocouple

• Data storage

• High precision with 19999 counts

22

- Standard probe: -50 ~ 250°C
- Alarm set
- °C / °F convertible



HT 9B

Temperature and Humidity Meter

- Wet bulb temperature
- Dew point temperature
- Data storage
- Max/min/data hold
- Large backlit LCD



DIGITAL SIGNAL OSCILLOSCOPES



1013D

Tablet type DSO

- 100Mhz, dual channel
- 1 Giga samples/ second
- 7" 800 x 480 resolutionfull capacitive touch screen
- Inbuilt data storage
- Powerful waveform picture manager
- Inbuilt battery with Type C charging



1014D

Benchtop DSO with Signal Generator

- 100Mhz, dual channel with inbuilt signal generator
- 1 Giga samples/ second
- 7" 800 x 480 resolution color display
- Inbuilt data storage
- Powerful waveform picture manager

MISCELLANEOUS



ULD 30

Ultrasonic Leakage Detector

• Detect the source of ultrasonic emissions generated by compressed gas or air leaks

- 20kHz ~ 100kHz
- LED display panel

• Audible tone as sensitivity indicator, which can be heard by internal buzzer or optional headphones



DCM 1501

- Capacitance Meter
- Wide measuring range 0.1pf
 20mF
- Data Hold
- · Zero adjustment knob





COL 45

Digital Color Meter

• This instrument can be used to measure the color of no lighting and non-fluorescent samples such as textile, paper, leathers, painting materials, etc.

• Six color spaces for measurement and comparison – (L*,a*,b*), (L*, C*ab, hab), (Y, x, y), (X, Y, Z), (Rs, Gs, Bs) and (WI, YI, Tw)

- \cdot 45°/0° measuring geometry, with tri-stumulus absorption of light
- \cdot 9 different color targets can be stored for comparison
- $\boldsymbol{\cdot}$ Statistics display and data storage
- \cdot Color difference tolerance can be set to PASS/ WARN/ FAIL
- User calibration function



WD-09

Multi-functional wall detector

• This instrument can be used to detect metallic objects(sttel bars, rebars, copper pipes, live wires, wooden studs and other foreign objects inside walls, plasterboards, ceilings and floors upto a depth of 5 inch

- $\boldsymbol{\cdot}$ High definition display with intuitive user interface
- 3 levels of sensitivity adjustment
- Positioning hole for drill markings
- \cdot Mutliple indicators to center on target detection area/ object, like lights,
- buzzer, arrows, instantaneous strength calculation and depth value
- \cdot Inbuilt battery with Type C charging



GC-01

Nuclear Radiation Detector

• This instrument uses Geiger-Miller counter to detect ionizing radiation like Beta-particles, gamma rays and X-rays.

• The radiation exposure or dose can be measured in various units like uSv/h (micro Sievert per hour), uGy/h (micrograys per hour), mR/h, Count per second and Count per minute.

• Useful in medical enviroments, cermaic and marble industry, industrial radiation, and food and metal industries.

· Color display with real time monitoring and alarm value

• High capacity inbuilt battery with Type C charging



SUPPORT

• All detailed specifications and updated, individual, product catalogs are available for download on our website www.metrixinstrument.in

• For after sales support, contact us on support@metrixinstrument.com. Purchase tax invoice is mandatory for verification and support

• Mail us for soft copy of instruction manuals, or any software related issues

• We provide technical consultation to help you choose the right instrument as per your application requirements. Please mail us for any technical doubts or queries.

• We provide on-site demos and trainings for our instruments (subject to region and availability). If demo is not possible, we suggest to send a sample to our works, to verify the right instrument fit over video.

• We have our esteemed channel partners, in form of stockists, distributors and dealers, spread out across India. Please ask for Metrix+ authorisation certificate to verify the same.

• All Metrix+ instruments carry 1 year limited warranty against manufacturing defects. No warranty on probes, spares, connectors and other accessories as their lifetime depends on careful usage and maintenance by the user.

• All prices, mentioned in this catalog, are excluding all taxes (as applicable) and other charges (as applicable).

• All prices, models and specifications are subject to change without prior notice.

• This catalog is not exhaustive of our range of products and accessories. Please refer to our website www.metrixinstrument.in for updated list of our products, accessories and their specifications.

• We are growing and adding new products every quarter! Subscribe to our email list from our website, to stay updated on our latest news and offers.

Why choose *Metrix*+[™]?

• We provide end-to-end solution for all your testing needs

Choose the right instrument, at the right price, with comprehensive after sales service



> We have a wide range of testing instruments

Reduce your purchasing overhead, service worries and quality doubts by choosing one brand, one roof, for all your testing needs.







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