Metrix+™

Innovative Excellence

A WIDE RANGE OF ELECTRICAL & ELECTRONIC
TEST & MEASUREMENT INSTRUMENTS

PRODUCT BROCHURE

APRIL 2025



ABOUT US

MEASUREMENT MADE SIMPLE

We firmly believe that testing and measurement process is critical to ensure quality of a product. We are manufacturers and importers of a wide range of test and measurement instruments, ranging from electrical testers, NDT instruments, inspection tools and environmental testers, available in ***Metrix+***, an Indian brand.

MISSION

To provide a reliable measurement solution with our instruments and technology.

VISION

Empower everyone to measure any parameter they require, in a simple and accurate way.

VALUES

Simplicity, transparency and continuous learning guide us to establish ***Metrix+*** as a trusted brand in measurement solutions.

Why *Metrix+* ?

TECHNICAL EXPERTISE

We help in choosing the right product as per application

ON-TIME SUPPLY

We adhere to our supply-time commitments

AFTER SALES SUPPORT

Comprehensive after sales support with quick response

PARTNER NETWORK

Our strength lies with esteemed channel partners across India

EXPANDING RANGE

We are expanding our product range and our network reach

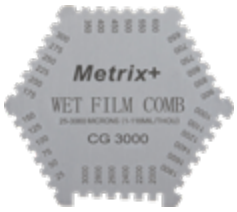
INDEX

SL.No	Description	Page No.
	NDT (Non-Destructive Testing) Instruments	
1	Coating Thickness Gauges Ultrasonic Thickness Gauges & Flaw Detectors	4
2	Roughness, Hardness & Gloss Meters	6
	Electrical Testers	
3	Line Testers, Multimeters, Insulation, Earth Resistance Testers	8
4	Clamp Meters	10
	Inspection Tools	
5	Infrared Thermometers & Imagers	11
6	Vibration Meters, Tachometers, Stroboscopes, Distance Meters	12
7	Moisture Meters	13
8	Digital Force Gauges & Torque Testers	14
9	Belt Tension Meters, Cable Tenion Meters & Welding Pressure Gauges	16
10	Digital Gauss Meters, Screen Tension Meter & Water Activity Meter	17
11	Open Channel Flow Meters, Color Meter, Wall Scanner & Leak Detector	18
	Environmental Testers	
12	Anemometer, Lux Meter & Irradiance Meters, Temperature & Humidity Meters	19
13	Sound Level Meters and Indoor Air-Quality Testers	20
	Fnirsi	
14	Digital Storage Oscilloscopes	21
15	Signal Generators & Multimeters, Clamp Meter	23
16	Soldering Irons & Stations, Transistor Testers, Battery Tester & Power Supply	24
17	Radiation Meters, Refractometers, Night Vision Devices, Gas Detector	25
	Smart Sensor	
18	Gas Detectors, Water Quality Testers	26
19	Anemometers, Earth Clamp Testers, EMF Tester, Metal Detector	27

NDT(Non-Destructive Testing) INSTRUMENTS

COATING THICKNESS GAUGES

Coating thickness gauges, also known as dry/ wet film thickness (DFT) meters, are used for measuring the thickness of coatings on metals like paint, anodized layer, galvanized layer, lacquer layer, phosphide layer, tin, nickel coating, etc.









Integrated Probe

Model	CG 3000	CG FNxL	CG Pro xL	CS 27-i
Range	25~3000um	0 ~ 1800um	0 ~ 3000um	0 ~ 2000um
F/ NF	Wet film	Both F & NF	Both F & NF	Both F & NF
Data & Statistics	-	-	•	•



Flexible Probe

Model	CMF	CMFN	CS 27	CS 27-4k	CS 27-5k
Range	0~1250um	0~1250um	0~2000um	0~4000um (F) 0~3000um(NF)	0~5000um(F) 0~3000um(NF)
F/ NF	Only F	Both F & NF	Both F & NF	Both F & NF	Both F & NF
Data & Statistics	-	-	•	•	•

F is ferrous, materials which are magnetic. Iron, steel, etc.
NF is non-ferrous, materials which are non-magnetic. Aluminium, copper, brass, etc.
Our probes can automatically detect ferrous or non-ferrous material, removing the need for different probe for different type of material. We have different probes available.

Microcoat Series: Better accuracy on thin coatings





Model	Microcoat F	Microcoat N
Range	0 ~ 200um	0 ~ 200um
F/ NF	Only F	Only NF

Macrocoat Series: Better accuracy on thick coatings



Model	Macrocoat F	Macrocoat FN
Range	10mm	10mm F, 4mm NF
F/ NF	Only F	Both F & NF

ULTRASONIC THICKNESS GAUGES

Ultrasonic Thickness Gauges help in measuring the thickness of various materials including metals, alloys, PVC, high density plastics (HDPE), etc. Its a convenient and quick way to measure thickness upto 0.01mm resolution, with data storage for batch processing.



Model	UTM 5A+	UTM 5	UTM 9	UTG 27	UTM 18CT
Range	1 ~ 300mm	1 ~ 200mm	0.9 ~ 350mm	0.75 ~ 400mm	PE: 0.65~600mm EE: 3 ~ 60mm
Special	Menu design	Simple to use	Simple to use	Metal body	Through coating
Data & Statistics	•	-	-	-	•

**Please refer Note 1 on next page.*

Ultrasonic thickness is measured by calculating the time of flight for ultrasonic waves to travel inside the material and reflect from backwall. Sound velocity of these waves inside the material-under-test is required for this calculation. While, our UTGs have preset sound velocity for different materials, we suggest to enter exact velocity as per the material composition for best accuracy. It can be back calculated using 1-point calibration, or via trial-and-error method.

ULTRASONIC FLAW DETECTORS

Ultrasonic Flaw Detectors help in detecting flaws, pits, holes, etc, inside metals, alloys, high density plastic and rubber materials, etc. In addition to thickness, these output the ultrasonic reflection waveforms in the form of A-scan, B-scan, C-scan, etc which are analysed to detect flaws inside the materials.





Model	UTM 90CT	UTFD 80
Range	PE: 1.2~200mm EE: 3~50mm	0 ~ 10,000mm
Data storage	•	•

Note 1

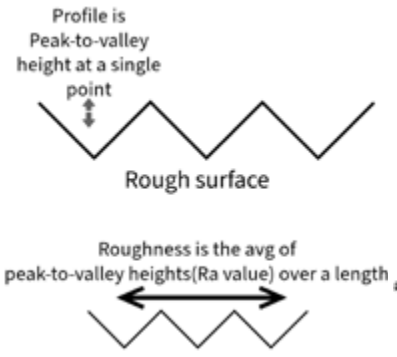
**The range is as per testing with standard probe on #45mm steel at 25C and 70% RH*

**PE is Pulse-Echo, EE is Echo-Echo, where PE measures the thickness including coatings, and EE measures thickness excluding the coatings(through coating thickness), for better accuracy.*

**There are different ultrasonic sensors as per the material, temperature, etc. Apart from our standard sensor, we have lots of optional sensors as per the specfic applications.*

SURFACE ROUGHNESS TESTERS

Surface Roughness Testers help to determine the roughness of machined and polished surfaces in um(micron) values. The instruments have a diamond tip sensor which traverses over a surface and calculates the peak-to-valley heights to determine the roughness values.









Model	Microsurf10A	Surftest 10	Surfprof 09
Range	Ra: 0 ~ 16um	Ra: 0 ~ 10um	0 ~ 800um peak-to-valley Surface Profile
Probe	Integrated	Flexible	Flexible

**Ra value is the avg value of peak and valley heights. Different parameters represent different statistics for determining roughness. Profile is the peak-to-valley height at the specific point the probe pin touches. Roughness is over an area, while profile is at a point. Profile is generally measured on blast cleaned surfaces.*

HARDNESS TESTERS

Hardness Testers help measuring hardness of various materials in different units. Hardness helps to ascertain the strength of materials and surface finish.

Metal Hardness









Model	Hardmaster-P	HT WB 01	HT WB 01D	BIT 01P
Type	Leeb Hardness	Webster Hardness	Webster Hardness	Barcol Impresssor
Applications	General metal	Aluminium and alloys, copper, brass	Aluminium and alloys, copper, brass	Softer metals, pure Aluminium and alloys
Principle	Rebound	Penetration depth	Penetration Depth	Penetration Depth
Units	HL/ HRB/ HRC/ HB/ HV	HW, HBa/ HB/ HRF/ HV/ HRH/ HRB/ HRE	HW, HBa/ HB/ HRF/ HV/ HRH/ HRB/ HRE	HBa, HW/ HB/ HRF/ HV/ HRH/ HRB/ HRE
Avg and max hold	•	-	•	•

Rubber Hardness





RHT A
Shore A

RHT D
Shore D

A: For soft Vulcanize rubber, natural rubber, nitriles, thermoplastic elastomers, thermosets, etc.

D: For Hard Rubber, thermoplastic elastomers, harder plastics, and rigid thermoplastics etc.

We can supply OO and other scales on request.

Sand Mold Hardness



HT SM
Available in A/ B/C

A: For fine sand mold/core in manual or mechanical low and medium pressure molding

B: For fine and coarse sand mold/core in manual or mechanical low and medium pressure molding

C: For sand mold in high pressure molding

Textile Hardness



Measure winding density of textile, yarn package, bobbins, beams, spools, cones, etc.

HT TEX
Available in 2P5/5/10

2P5: 2.5mm dia indenter. For closely wound bobbins of synthetic, finished fibers.

5: 5mm dia indenter. For loosely wound bobbins of synthetic fibers, closely wound fibers, yarns, etc.

10: 10mm dia indenter. For very loosely wound bobbins of thick yarns, such as carpet yarns, etc.

Soil Hardness



HT SOIL 01
Soil Hardness

Measure penetration resistance of soil to estimate compaction coefficient and soil hardness in kg/ N upto a depth of 30cm. Compacting soil can prevent water infiltration, which reduces fertiliser utilisation rate, affect plant growth, even leads to crop yield reduction.

GLOSS METERS

Gloss Meters help determine the glossiness, or shininess, of a surface by measuring the specular reflectance values of light at single/ different angles in GU(Gloss Unit) values. Shiny surfaces have high gloss value while matte surfaces have low gloss values. This helps to ascertain the surface finish and uniformity across product batches.





Model	GLS 09	GLS 09M	Microgloss
Range	Upto 200GU	Upto 200GU	Upto 2000GU
Angle	60°	20°/ 60°/ 85°	Simultaneous 20°/ 60°/ 85°

Surface finishes are generally categorised into matte, semi or high gloss. To determine the correct angle of measurement, first measure the gloss value at mid angle like 60°. If the value is 10-70GU, the surface is semi-glossy.
If the value is <10GU, then its matte(low glossy), and determine gloss value at 85°.
If the value is >70GU, then its high glossy surface, and determine the gloss value at 20°.

ELECTRICAL TESTERS

LINE TESTERS

Line testers detects the presence of AC voltage in wires. It has to be touched in the vicinity of the wire to detect AC line, like NCV. The pen type structure makes it ergonomic and portable.





Model	CD 1	CD 2	CD 3
Range	90V ~ 1000V AC	24 ~ 600V AC	12 ~ 1000V AC with high and low sensitivity setting
Indication	Light, beep	Light, beep	LCD display graph, light, beep

V- Voltage; A- Ampere; Ω- Resistance, F- Capacitance, I- Inductance, °C- Temperature, Hz- Frequency

DIGITAL MULTIMETERS








Model	31TRMS	603+	603A+	171TRMS+	451 LCR	DM 620
Parameters	750V AC, 1000V DC, 10A AC/DC (ua/ma/A), Ω, F, °C, Hz	750V AC, 1000V DC, 10A AC/DC, Ω, F, Hz, hFe, IR	750V AC, 1000V DC, 10A AC/DC, Ω, F, °C, Hz, hFe, IR	1000V AC/DC, 20A AC/DC, Ω, F, °C, Hz	700V AC, 1000V DC, 10A AC/DC, Ω, F, I, Hz, hFe	1000V AC/DC, 10A AC/DC, Ω, F, °C, Hz
True RMS	•	-	-	•	•	•
Count	1999	1999	1999	5999	1999	50,000

DIGITAL INSULATION TESTERS




DIT 918
2.5kV, 50GΩ

DIT 3125A Eco
5kV, 1000GΩ

These measure the insulation resistance of wires, transformer coils, etc to make sure electrical leakage is below the rated value. It generates user-set voltage, measures current and calculates the resistance. Very low resistance, near to 0, indicates 'short circuit', whereas very high resistance, 'OL'(overload) indicates either solid insulation or open circuit.

DIGITAL EARTH RESISTANCE TESTERS



DET 1503
Upto 2000Ω

This measures the resistance of grounding system of electrical circuits to ensure safe and effective grounding. It generates a known current to measuring electrodes, and measures the voltage between them to calculate the resistance. Proper grounding is critical for electrical safety as it provides a path for the fault current to flow to the ground, preventing shock and damage.

CAPACITANCE METER



DCM 1501
Upto 20mF

Measure the capacitance value of capacitors, easily and conveniently. Measuring range is 200pF ~ 20mF, with zero adjustment knob.

V- Voltage; A- Ampere; Ω- Resistance, F- Capacitance, °C- Temperature, Hz- Frequency

DIGITAL CLAMP METERS

AC Current Only






Model	125A+	225A+	1250A	2250T
Range	600A 36mm jaw dia	600A TRMS 36mm jaw dia	1000A TRMS 52mm jaw dia	1000A TRMS 52mm jaw dia
Parameters	AC/ DC V, Ω, diode, continuity	AC/DC V, Ω, F, °C, Hz, diode, continuity	AC/DC V, Ω, F, Hz, diode, continuity	AC/DC V, inrush, Ω, F, °C, Hz, diode, continuity
Count	1999	3999	1999	3999

AC & DC Current Both





Model	725A+	4250T	2003TRMS
Range	600A TRMS 36mm jaw dia	1000A TRMS 52mm jaw dia	2000A TRMS 55mm jaw dia
Parameters	AC/DC V, Ω, F, °C, Hz, diode, continuity	AC/DC V, inrush, Ω, F, °C, Hz, diode, continuity	AC/DC V, Ω, F, diode, continuity
Count	3999	3999	1999

Power Clamp Meter



AC V: 15 ~ 600V TRMS
AC A: 40 ~ 1000A TRMS
Frequency: 20 ~ 500Hz
Power factor: 0.3~1
Active Power, apparent power, reactive power, phase angle, active energy, 55mm jaw

INSPECTION TOOLS

INFRARED THERMOMETERS

Non-contact method of measuring temperature.



Model	MT 2C	MT 4xL	MT 12A	MT 16	MT 18	MT 24
Raneg	-50 ~ 380°C	-32 ~ 550°C	-18 ~ 1150°C	-18 ~ 1650°C	200 ~ 1850°C	200 ~ 2400°C with K-type
DS Ratio	12:1	12:1	20:1	50:1	50:1	80:1
Emissivity	Fixed 0.95	Fixed 0.95	Adj. 0.1~1	Adj. 0.1~1	Adj. 0.1~1	Adj. 0.1~1

Emissivity(EMS): Every material has its own emissivity index, infrared radiation energy emitted depending on material properties, calculated based on Stephen-Boltzmann's law. It has to be set in the IRT for accurate values, as incorrect EMS will give incorrect readings.

DS Ratio: Distance to spot (DS) ratio informs about optimal distance to measure temperature. It tells how big the spot size of measurement will be depending on distance of measurement. If DS ratio is 12:1, then at 12m or 12inch distance, 1m or 1inch diameter spot size measurement will be taken for estimating temperature. Bigger the DS ratio, more accurate values at long distances, as small spot size will give precise measurements.

Generally, temperature measurement exceeding 1600C, require shorter thermopile, sensitive to shorter spectral range (1.1~3.7um), for accurate measurements. Our MT 24 has such thermopile, specifically applicable to foundries, fusion welding, forging, molten metal temperature, etc.

THERMAL IMAGERS

Thermal Imagers help in thermographic studies and assessing real-time hot spots of electronics, panels, monitor temperature changes inside objects like walls, etc. The thermal images are fused with visual images, which can be saved for reports, with other data.



Model	DTI 350	DTI 500
Resolution	Visual: 640x480 Thermal: 32x32	Visual: 640x480 Thermal: 160x120
Temperature Range	-20 ~ 350°C	-20 ~ 500°C
Field of View(FoV)	33x33°	51x63.5°

VIBRATION METERS

Vibration Meters use pieze-electric transducers to measure vibrations of metal objects in acceleration(A), velocity(V) and displacement(D) values.






Model	VM 8200P	VM 8200+	VM 8200mkII+	VB 8202A
Range	A: 0.1~199.9 m/s2 V: 0.1~199.9 mmv/s D: 0.001~1.999 mm	A: 0.1~200 m/s2 V: 0.01~200 mm/s D: 0.001~2 mm	A: 0.1~400 m/s2 V: 0.01~400 mm/s D: 0.001~4 mm	A: 0.1~400 m/s2 V: 0.01~400 mm/s D: 0.001~4 mm Simultaneous display

**Acceleration values (A) are equivalent peak values, Velocity (V) are RMS values, Displacement(D) are peak-to-peak values. Probe comes with a neodynium magnet, which has to be attached to metal bodies. Any insulation/ air gap between sensor and object to be tested will lead to incorrect readings, as even a minimal hand shake is picked up by the sensor as vibrations.*

TACHOMETERS

Tachometers measure revolutions-per-minute(RPM) of rotating objects.





Model	DT 2234BL	DT 2235BL	TM 4005
Type	Laser, using reflective tape	Contact	Laser+Contact, surface speed
Range	2.5~99,999 rpm	0.5~19,999 rpm	Laser: 2.5~99,999rpm Contact: 2.5~19,999rpm Surface speed: 0.05~1999.9m/min

STROBOSCOPES

Stroboscopes use strobing light to help study motion and frequency of rotating objects, including rpm.




DT 2239
Upto 12,000 FPM

DT 22359A
Upto 40,000 FPM

LASER DISTANCE METERS

These use Time-of-flight principle of laser travel to estimate distance, area, volume, etc.

Features:
- Distance, area, volume mode
- Pythogorean distance calculation
- Measuring units in m/ ft/ inch
- Bi-axis spirit level
- 20 points data storage and recall
- Negative display for better readability in sunlight
- Silent operation




DM 40
40m

DM 100
100m

MOISTURE METERS

These detect water content in different materials using electrical conductivity principle to calculate moisture value in %.







Model	MM 2	MM 2A+	GMM 7002A
Type	Wood/Paper/Wall	Wood/paper products	Grains
Range	4~90%	2~70% with temperature and humidity	5~30%



Model	MM W	MM S+	MM P	MM SOIL	MM G	MM GC
Type	General purpose	Concrete, paper, wood,	Paper	Soil	Grains	Grains
Sensor	Pin	Scan + Pin	Blunt pins	Thin pins	Pin	Covered Cup type
Range	0~80%	0~80%	0~50%	0~80%	6~30%	0~50%

Moisture value is subjective and can vary on the sample with place and ambient conditions. Portable moisture meters help to judge moisture in a fast and convenient way. The pins are placed in the sample, a small current is generated and resistance is measured across the pins. Low resistance means high moisture content, as electricity can easily pass between electrodes, and vice versa. But repeatability depends on lot of factors like pin penetration depth, sample purity, conductivity, etc. Our moisture meters have modes, which change the sensitivity of electrodes. These modes are linked to material type, based on their density. But this can change depending on material composition. We suggest measuring moisture of one sample using oven-dry method to ascertain accurate moisture value, and then setting the mode(or code) of the moisture meter, which gives nearest to that value, using trial and error. Then that mode (or code) can be used for all samples of that material type.

DIGITAL FORCE GAUGES

These help to measure push and pull force conveniently, with digital display for accurate values. A load cell is used, and the force applied is converted into measurement units of N, kgf, gf, and lbf. We have a wide range from 10N~10,000N, with dual display, data storage and data logging.



From 10N~1,000N our force gauges have big pulling hook, flat tip, cone tip, V-shaped groove and wedge tip

Model	Range
DFG 1D	9.8N/ +-1kgf
DFG 2D	19.6N/ +-2kgf
DFG 5D	49N/ +-5kgf
DFG 10D	98N/ +-10kgf
DFG 20D	196N/ +-20kgf
DFG 50D	490N/ +-50kgf
DFG 100D	980N/ +-100kgf



From 200N~10,000N our force gauges have sensor with M12 screw hole and 2 suspension links for enduring greater force.

Model	Range
DFG 200D	1,960N/ +-200kgf
DFG 500D	4,900N/ +-500kgf
DFG 1000D	9,800N/ +-1,000kgf

Dual display helps to conveniently read push and pull force values, without having to rotate the instrument. With real time reading, peak value helps to estimate the max force applied.

Vehicle Brake Force Tester DFG VB 01





Handbrake force sensor



Pedal force transducer

This helps measure pedal force and hand-brake force of vehicles as an indicator for tolerable brake performance. Proper braking force is critical for safety evaluation. Range is upto 980N/ 100kgf.

Muscle Strength Force Tester DFG MS 01D





This helps in measuring muscle strength, by measuring push force against the specific muscle. Special load cell is built with padded attachments, which has to be pushed against a muscle to measure the its strength. Range is upto 490N/ 50kgf.

DIGITAL TORQUE TESTERS

Torque measurement is important to measure the turning force of parts and components for product testing and research purposes. Ideal for measurement of tightening/ loosening a screw, turning a rotary switch, etc. Our torque testers are versatile, as with standard 3 jaw chuck, many other fixtures and jigs can be attached for specific material testing.





Model	TRSNT 01	TRSNT 05	TRSNT 20
3-jaw chuck size	0.6~6mm	1.5~13mm	3~16mm
Range	1Nm/ 0.1kgfm	5Nm/ 0.5kgfm	20Nm/ 2kgfm

**A torque wrench is a hand-held tool that tightens nuts and bolts to a specific torque value, while a torque meter measures the torque force/ turning force of a parts and components, like screws, nuts, bolts, etc. It can help estimate the correctness of torque applied.*

The standard accessory is 3-jaw chuck or Jacob's chuck, which can grip a wide variety of samples, including wires, round-bars, etc. to measure the turning force. This 3-jaw chuck is mounted on a 1/2 inch. square head, which has the load cell inside. Different types of fixtures and attachments can be mounted on this sq. head as per the application.





DIGITAL BELT TENSION TESTERS

These help to measure tensions of belts, wires, ropes, tapes, etc. as a means of mechanical strength test. Proper tension ensures longetivity of belts.



Model	BTT 750	BTF 01	BTT IR 500	BTT IR 800
Type	Mechanical sensor	Acoustic, microphone	Laser, flexible & integrated sensor	Laser, flexible & integrated sensor
Range	0~750N	10~680Hz	10~500Hz	10~800Hz

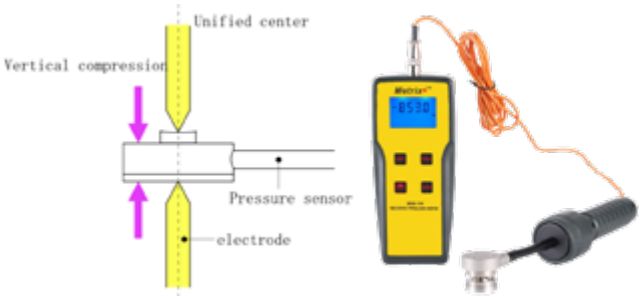
**Tension checking should always be carried out in accordance with the vehicle manufacturers' instructions. In low tension ranges, a bigger vibration may be generated more easily, which may cause measurement errors. If the tension value cannot be obtained, the belt may be too loose to make a clear frequency signal. For more accurate tension values, try to tighten the belt.*

BTF 01- This measures vibrating frequency of free belt, by converting acoustic sound pressure to electric signals. By measuring the vibrating frequency, tension can be calculated after setting belt parameters of span, width and mass with formula T=4xMxWxS2xF2x10-9. Measurement distance should be approx. 10mm.

BTT IR 500/ 800- This has an infrared sensor and laser, which calculates the natural vibrating frequency of the belt, using reflective tapes and time of flight principle for laser. The frequency value can be used to measure the tension of the belt using the formula, T=4xmxL2xf2, setting the mass and free belt length. Measurement distance should be approx. 3-20mm.

WELDING PRESSURE GAUGES

The pressure applied by electrodes in spot welding is a critical parameter to ensure proper welding result, and this meter can measure that pressure to verify proper working of the spot-welding machine.



Model	Range
WPM 10	98N/ 10kgf
WPM 100	980N/ 100kgf
WPM 1K	9,800N/ 1,000kgf
WPM 5K	49,000N/ 5,000kgf

CABLE TENSION TESTERS

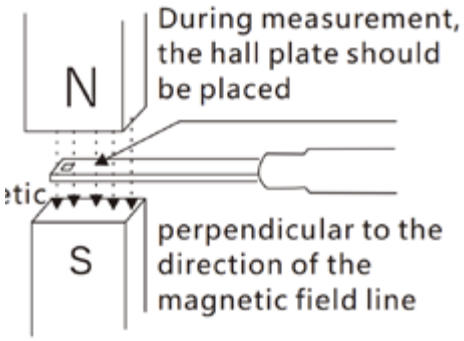
Cable/ rope tension testers or Side pressure tensiometers help to measure the tension exerted by pre-tensionised, non-moving big wires like transmission tower cables, power line wire, elevator ropes, overhead cables, ropes, cables, zip-lines, etc.



Model	Range
SPT 500	4,900N/ 500kgf
SPT 1K	9,800N/ 1,000kgf
SPT 5K	49,000N/ 5,000kgf
SPT 10K	98,000N/ 10,000kgf

DIGITAL GAUSS METERS

These help to measure magnetic field intensity of both static magnetic fields(DC) and dynamic magnetic fields(AC). Suitable for radiation magnetic field, magnetic remanence, earth magnetic field, all kinds of magnetic induction intensity, etc.





Sensor protective sheath





Model	GSS 200	GSS 400
Frequency Range	10~200Hz	1~400Hz
Range	0-200mT-2000mT	0-200mT-2000mT
Accuracy	2-5%	1%

SCREEN TENSION TESTER STM 01

Woven wire mesh is common for most screen printing applications. Screen Testion Meter is useful for production of precise screen and steel mesh. For eg. if the screen tension is not uniform, it will affect the printing quality leading to non-uniform printing. This is a critical testing tool suitable for wire mesh, steel mesh, ultra high tension wire mesh, high precision polyester net, nylon mesh, etc.





Features:
- Range 7~40 N/cm
- Sturdy sensor with calibration plate included
- Backlit display and auto power off

WATER ACTIVITY METER WAM 01

Measure the water activity(amount of free water) in foods like fruits, vegetables, etc. to check food quality, safety and estimate shelf life.







Features:
- Range 0 ~ 1.0 aw, with 0.03aw accuracy
- Ultra-portable weighing only 100g
- Temperature measurement and display

OPEN CHANNEL FLOW METERS

These are useful to measure liquid flow rate in open channels. Suitable in hydrological stations, factories and mines, environmental protection monitoring station, farmland irrigation and drainage, hydrogeology survey and other departments. Its rugged sensor structure allows for use in sewage environment to measure polluted water flow rate.

These are equipped with Hall velocity rotation sensor, to measure the water flow rate in open channels, using velocity area method of open channel flow measurement. When measuring flow velocity, the flow velocity of rotary rotor is driven by water power and the flow rate can be measured with a formula.





Model	FLOWM 05	FLOWM 10
Range	0.01 ~ 5 m/s	0.01 ~ 10 m/s
Sensor length	0.6m long with 2 extensions	1.8m long with 6 extension rods

COLOR METER COL 45

This uses tri-stimulus aborption of light at 45°/0° geometry, with white LED lamp to measure color in 6 color spaces.



Features:
- Six color spaces (L*,a*,b*), (L*, C*ab, hab), (Y, x, y), (X, Y, Z), (R, G, B) or (WI, YI, Tw)
- Color difference measurement
- Range L* 5 to 100, RGB 0~255
- Data storage and recall
- 4 line big backlit LCD

WALL SCANNER WD 09

This helps to detect metal objects, rebars, AC live wires, wooden objects, etc. inside walls upto a depth of 5".



Features:
- Metal/ AC live wire/ Wood detection modes
- Sensitivty adjustment
- LED, sound, depth measurement and scanning indications
- Positioning hole to mark areas helpful for drilling applications

ULTRASONIC LEAK DETECTOR

This helps to detect compressed gas/ air leaks (min. 4bar leak pressure) in HVAC, refrigeration systems, engine seals, etc.



ULD 30

Features:
- LED and audible tone indication
- Includes plastic tube to increase sensitivity of detection
- This only detects source of leak, as compressed air leak emits ultrasonic waves, detected by this
-Includes tube to improve sensitivity of detection

ULTRASONIC TRANSMITTER

This emits ultrasonic waves at frequency of 40kHz, to be used with ULD 30, increasing its detection range.



ULD 30 TX

This increases detection range of ULD 30 helpful to detect leaks in air-tight systems like conduit and pipes, windshield, door frames, window frames, HVAC systems, etc.

ENVIRONMENTAL TESTERS

ANEMOMETER AVM 05

This helps to measure air velocity, air flow, and temperature, using fan type sensor.



Features:
- Range 0.4~45m/s
- Flexible fan type probe
- Convertible units m/s, km/ hr, ft/min, knots
- Air flow in CMM and CFM
- Data storage and logging
- Backlit display

LUX METER LX 1336A

This helps to measure light intensity in lux/ FC using light sensitive, correctly filtered sensor.



Features:
- Range 0~5,00,000lux
- Automatic range conversion
- Flexible probe
- 400-700nm spectral sensitivity
- Data logging
- Backlit display

IRRADIANCE METER

This meter measures the UV light intensity in mW/cm2 using photo sensor, precisely corrected by spectrum and angle characteristics to a specific wavelength.



Features:
- Range 2.000/ 20.00/ 200.0 mW/cm2
- Backlit display with data hold
- Data logging

Model	Spectral Peak (Curve)
UV 72A	365 ± 5nm(Curve 315-400)
UV 72B	297 ± 5nm(Curve 280-315)
UV 72C	254 ± 5nm(Curve 200-280)
UV 72AB	340 ± 5nm(Curve 290-390)
UV 72AV	395 ± 5nm(Curve 340-420)
UV 72AV 420	420 ± 5nm(Curve 395-445)
UV 72F	365 ± 5nm(Curve 200-400)
UV 72MB	Multi-band (315-400)(280-315)(200-280)(340-420)

TEMPERATURE & HUMIDITY METERS



Temp: -40~70°C
RH: 20~90%RH



Temp: -20~70°C
RH: 0~100%RH
DP: -20~50°C
(Dew point)
WB: -20~50°C
(Wet bulb)



Temp:
-50~1000°C
(depending
on probe)

Model	TH 01	HT 9B	DT 305S
Type	Ambient TH	Ambient TH, DP, WB	K-type

SOUND LEVEL METERS

This helps to estimate ambient sound level/ noise level in decibels (dBs) by measuring sound pressure levels using microphone.



Model	SL 4001	SL 4005	SL 4005A	IMSL 4005	INSL 4005	IISL 4005	NSA 01
Type	Basic, A, C 30~130dB	A, C, F, Lp, Leq, Ln, 30~130dB	A, C, Lin, Graph, 25~130dB	A, C, Lin, Impulse 25~130dB	A, C Integrating data 25~130dB	A,C, Lin Impulse & integrating data 25~130dB	A, C, Lin 1/1, 1/3 octave filter, Impulse & integrating data, 30~130dB

Sound is a phenomenon caused by fluctuations in air pressure. To imitate the sound heard by human ears, lots of filters, frequency weightings, time weightings are used to analyse sound levels.

- 'A' frequency weighting is the most common, as it adjusts the values according to sensitivity of human ears, 20Hz ~ 20kHz.
- 'Impulse' time weighting, helps to measure sharp sound peaks like gunshot, fireworks, etc.
- Integrating sound data helps to measure and monitor across a big time spectrum for analysis. Our integrating sound meters can helps store and monitor either 800 groups of measurement (with different time periods) or 6 days of data (hourly) with various statistics.
- Octave bands offer a filtering method of splitting the audible spectrum into smaller segments called octaves, allowing you to identify different noise levels across individual frequencies.

INDOOR AIR QUALITY (IAQ) METERS

This helps to estimate ambient CO2 levels and other parameters to assess indoor air quality. Our meters use Dual-beam NDIR technology for reliability over extended periods of time.







Model	MCO 27	MCO 90C	MCO 906CP
Parameters	CO2: Upto 10,000PPM Temp: 0~50°C, RH: 0~99%	CO2: Upto 5,000PPM Temp: 0~50°C, RH: 0~99%	CO2: Upto 9,999 PPM, CO: Upto 1,000PPM, PM 2.5 & PM 10: Upto 999 ug/m3, Barometer: 50~110kPa Temp: 0~50°C, RH: 0~99%
Features	3 color backlit display	SD card, data logging	SD card, data logging, RS485



DIGITAL STORAGE OSCILLOSCOPES

DSOs are useful to analyse electrical signals for research, repairing, monitoring and signal analysis.







Model	1014D	1013D	DS215
Range	Benchtop 100MHz 2-Ch, 1GSa/s Signal Generator	Tablet Touch-screen 100MHz 2-Ch, 1GSa/s	Handheld 3.5” HD screen 50MHz 2-Ch, 250MSa/s Signal Generator

Digital Phospor Oscilloscopes

Digital Phosphor Oscilloscopes (DPOs) offer advantages over traditional Digital Storage Oscilloscopes (DSOs) by providing real-time, intensity-graded visualization of signals, making it easier to identify rare events, transients, and understand signal patterns, similar to the way analog oscilloscopes display signals.





Model	DPOX180H	DPOS350P
Range	Handheld 180MHz 2-Ch, 500MSa/s Signal Generator	Tablet Touch-screen 350MHz 2-Ch, 1GSa/s Signal Generator, Spectrum Analyser

3-in-1 DSO + SG + DMM







Model	2C53P	2C53T	2C53TS
Range	Handheld 50MHz 2-Ch, 250MSa/s Signal Generator, Multimeter	Handheld 10MHz 2-Ch, 50MSa/s Signal Generator, Multimeter	Handheld 50MHz 2-Ch, 250MSa/s Signal Generator, Multimeter

Mini series

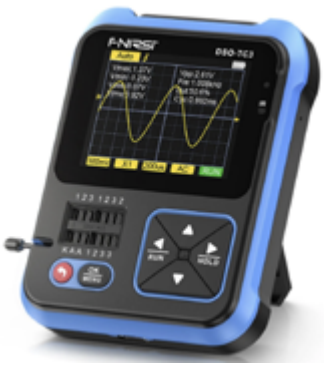






Model	DSO 152	DSO 153	DSO 510
Range	Handheld 200kHz 1-Ch, 2.5MSa/s	Handheld 1MHz 1-Ch, 5MSa/s Signal Generator	Handheld 10MHz 1-Ch, 48MSa/s Signal Generator

3-in-1 DSO + SG + Transistor Tester





Model	DSO TC3	DSO TC4
Range	Handheld 50kHz 1-Ch, 10MSa/s Signal Generator, Transistor Tester	Handheld 10MHz 1-Ch, 48MSa/s Signal Generator, Transistor Tester

SIGNAL GENERATORS







Model	SG 002	SG 003	SG 004
Range	4 ~ 20mA	0~24V, 0~24mA, Pulse waves, Frequency, Process calibrator	0~24V, 0~24mA, Pulse waves, Frequency, Process calibrator, Thermal resistance

DIGITAL MULTIMETERS

V- Voltage; A- Ampere; Ω- Resistance, F- Capacitance, I- Inductance, °C- Temperature, Hz- Frequency







Model	DMT 99	DST 201	DST 210
Range	10,000 Counts True RMS AC/DC V, AC/ DC A, Ω, F, °C, Hz	19,999 Counts True RMS AC/DC V, AC/ DC A, Ω, F, °C, Hz	19,999 Counts True RMS AC/DC V, AC/ DC A, Ω, F, °C, Hz
DSO Range	-	1MHz 1-Ch, 5MSa/s Signal Generator	10MHz 1-Ch, 48MSa/s Signal Generator

DIGITAL CLAMP METER



Model	DMC 100
Range	10,000 Counts True RMS AC/DC V, AC/ DC 600A, Ω, F, °C, Hz

SOLDERING IRONS & STATIONS







Model	HS-01	HS-02	DWS 200
Range	80 ~ 420°C optional 6 iron tips	100 ~ 450°C optional 6 iron tips	Station 200W, 100 ~ 450°C, induction sleeper rack, helping hands, PID temperature control, 2.8" TFT screen

TRANSISTOR TESTERS





Model	LCR ST1	LCR P1
Range	Tweezer type, 22mF Capacitance, 10uH Inductance, 10MΩ Resistance, diode frequency, ESR, 1.14" color screen	Handheld, 100mF Capacitance, 1mH Inductance, 50MΩ Resistance, diode frequency, FETs, ESR, 1.44" color screen

BATTERY TESTER HRM 10

This measures internal resitance to estimate battery health.



Features:
- Upto 100V, 200Ω Simultaneous display
- True 4-wire, 1kHz AC Sine
- Sorting function, Data export
- Lithium, Lead-acid, alkaline batteries, etc.

DC POWER SUPPLY DPS 150

Programmable DC power supply, 30V, 5A, 150W, with 100W power adaptor (sold separately).



RADIATION DETECTORS





Model	ERD 10	GC 01	GC 03
Type	EMF Tester	Nuclear Radiation	EMF + Nuclear
Range	EF: 1V/m~1999V/m MF: 0.01uT~99.99uT	Geiger Miller Counter 0.0 ~ 10,000uSv/h	Geiger Miller Counter Nuclear: 0.0 ~ 999.99uSv/h EF: 1V/m~1999V/m MF: 0.01uT~99.99uT

REFRACTOMETERS

These measure sugar concentration in solutions, by measuring a few drops of the solution, in brix unit.




Model	JBM 10	JBM 20
Range	0~32% brix	0~55% brix

NIGHT VISION DEVICES

These help see and capture images/ videos in dark environments.




Model	NVS 20	NVS 40
Type	Monocular	Binocular
Range	300m, 6X zoom 1.54” HD display 7 level IR	300m, 6X zoom 3” HD display 7 level IR

GAS DETECTOR GD 02

Combustible Gas Detector, with extended tube and 2.0” HD color screen



FORMALDEHYDE SFD 02 DETECTOR

Measure TVOC, HCHO to assess air quality.



GAS DETECTORS



Model	AS 8800C	ST 9700	ST 8100B	ST 8904	AT 8500	AS 8908	ST 8310A
Type	Combustible gas, all epxlosive gases, upto 5PPM	CO gas, upto 1000PPM	O2 gas, 0~25% VOL, temp, humidity	Multi-gas 02: 0~30% VOL CO: 999PPM H2S: 500PPM Combustible gas: 100% LEL	NH3 gas, upto 50PPM, temp, humidity	O3 (Ozone), 1.00PPM	CO2 monitor, upto 5000PPM, temp, humidity, clock, calendar

WATER QUALITY TESTERS



Model	PH828+	PH818T	AR8211+	AR8212+	AR8406	AR8407
Type	pH, 0~14.00pH, solution temp compensation	Penetrating pH with longer probe, 0~14.00pH, solution temp compensation	Conductivity: 0~1999us, TDS: 0~1999ppm	Salinity, 0~50ppt	Dissolved O2 meter, 0~30mg/L, temperature upto 40C	Multi-functional Dissolved O2, pH, nitrite, ammonia nitrogen

ANEMOMETERS

Hot wire anemometer has a smaller sensor, useful for measuring air flow inside pipes, tubes, etc.





Model	ST 9606	AR 866A
Range	Fan-type 0.3~30m/s Temp display	Hot wire type 0.3~45m/s Temp display

EARTH CLAMP TESTERS

Grounding resistance tester using clamp-on type meter, with loop resistance and leakage current tests.





Model	ST 4100	ST 4800
Range	0.01~500Ω	0.01~1200Ω 0.00mA~30.0A

LUX METER ST 9620

Mini lux meter with in-built sensor head and upto 2L lux range, temperature display.



EMF TESTER ST 1393

Electric field: upto 1999V/m,
Magnetic field: upto 199.9uT
Simultaneous display



METAL DETECTOR

AR 954

Hand-held metal detector, 13kHz, 2.5” depth, light and sound



HV INSULATION

ST 3128

Upto 10kV, 3000GΩ High Voltage Insulation Tester



RCD (ELCB) TESTER

AR 5406

Earth Leakage Circuit Breaker Tester upto 500mA



INFRARED THERMOMETER

AS 862A

Range:
-50~900°C
DS: 12:1
Adjustable Emissivity 0.1~1
Data storage, alarms, Max/min, backlit display



TERMS

 This symbol suggests the meter supports data logging to PC and Bluetooth (if available), with paid optional accessory.

• This brochure aims to provide overview specifications of a product. All individual product catalogs with detailed technical specifications are available on our website www.metrixinstrument.in
• Prices are latest as per January 2025 pricelist, supersedes all other prices and pricelist.
• Prices are for reference, only for our authorised channel partners, having our authorisation certificate.
• All prices, mentioned in this catalog, are excluding all taxes and other charges, as applicable.
• All prices, models and specifications are subject to change without prior notice.

PRE-SALES

• 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 various optional accessories and spares, enhancing specifications of corresponding products. We also take on projects to build specialised products, helping you tackle any measurement challenge. Please contact us with your exact application requirements, for us to suggest suitable products, accessories and collaborate on projects.

SALES

• 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.
• 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.
• Bulk discount is available on select products. Please email us with your requirements on sales@metrixinstrument.com
• In case of any product being out of stock, we take maximum lead time of 4-6 weeks to deliver the product. Please confirm availability before ordering.
• If a product/ model is not present in this brochure, it is discontinued.

AFTER SALES SUPPORT

• 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.
• Kindly read through the instruction manuals provided with the product for understanding its operation. Products will be void of warranty if they are used outside their operating and permissible ranges, as it might permanently damage the hardware or firmware. Please mail us if instruction manuals are required.
• For after sales support, contact us on support@metrixinstrument.com. Product images/ videos, detailed issue and Purchase tax invoice is mandatory for verification.

We post videos on our youtube channels on product operation, know-hows and demos. Connect to our Youtube and other social media channels and subscribe to our mailing list to get updated on latest news and offers from this link:

Metrix+ Connect

WEBSITE

CONNECT

Metrix+ **is an Indian brand, established with the aim of providing reliable testing and measurement solutions.**

Metrix+™

MEASUREMENT MADE SIMPLE

