## MI 3200 TeraOhm 10 kV





# 10 kV Insulation, Voltage & Faultfinding tester



- Automated testing PI, DD, DAR calculations with automated resistance ranging (AR). All data is displayed during one single measurement.
- Fault Finding Fully programmable Step-Voltage and Withstanding Voltage test functions to assist in diagnosing faults in insulation.
- **R(t) graph** Real time resistance against time graph plotting facility to graphically illustrate the response of a material to an applied test voltage.
- Faster testing High 5 mA charging current quickly charges capacitive loads.
- Accurate Selectable noise rejection filters (up to 5 mA) and shielded cables as standard ensure accurate readings.
- Safe High CAT IV, 600 V voltage protection
- **Portable** Lightweight 5,5 kg design with carry handle.

The new MI 3200 TeraOhm 10 kV insulation tester is a portable instrument intended to measure insulation resistance through the use of high voltage DC test voltages up to 10 kV. The large LCD screen allows real-time R(t) graphs to be displayed. Results can be stored and downloaded to a computer via USB and RS232 connections with the help of the optional HVLink software. The high quality instrument, shielded test leads and quality accessories included in the standard set enables you to perform your testing effectively.



Tel.: 01924245000









## **APPLICATION:**

- Testing insulation resistance of rotating machinery and cables,
- Production line periodic testing and maintenance.
- Troubleshooting and analysis of all kinds of insulation problems.
- Effective readings in high noise environments such as high voltage substations and switchyards.
- Diagnostic testing

#### **STANDARDS:**

Instruments operation: IEC/EN61557-2

Electromagnetic compatibility: EN 61326 class B

Safety:

EN 61010-1 (instrument) EN 61010-031(accessories)



Web: www.metrel.co.uk

E-mail: info@metrel.co.uk

## **Technical Specification**

Test Voltage Range	INSULATION		
Voltage steps  Voltage ramp test  Ves  Calculation of DD, DAR, PI  Step voltage testing  Withstanding voltage test  Timer  Leakage current measurement  Capacitance measurement  Ves  Auto adjustment function  Audible warnings  Auto ranging  Voltage  Voltage  Voltage  Voltage  Voltage  Voltage  Ves  Short circuit / charge current  Jes  Auto adjustment function  Ves  Auto and justment function  Ves  Auto ranging  Ves  Voltage  Voltag	Test Voltage Range	500 - 10000 V	
Voltage steps  Voltage ramp test  Ves  Calculation of DD, DAR, PI  Step voltage testing  Withstanding voltage test  Timer  Leakage current measurement  Capacitance measurement  Ves  Auto adjustment function  Audible warnings  Auto ranging  Voltage  Voltage  Voltage  Voltage  Voltage  Voltage  Ves  Short circuit / charge current  Jes  Auto adjustment function  Ves  Auto and justment function  Ves  Auto ranging  Ves  Voltage  Voltag	Measuring range	10 ΤΩ	
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Step voltage testing     yes       Withstanding voltage test     yes       Timer     yes       Leakage current measurement     yes       Short circuit / charge current     5 mA       Guard terminal     yes       Auto adjustment function     yes       Audible warnings     yes       Auto ranging     yes       Shielded test leads included     yes       VOLTAGE     voltage       Voltage AC/DC     up to 600 V AC and DC       ACCURACY     up to 600 V AC and DC       Insulation     5 % +3d (to 1 TΩ), 15 % +3d (to 10 TΩ)       Voltage     3 % +4 V       Capacitance     5 % +2d       DISPLAY     R(t) graphs plotting facility       R(t) graphs plotting facility     yes       Back light     yes       Graphic display     LCD       MEMORY, SOFTWARE AND COMMUNICATION       USB / RS232 downloading     yes       Memory size     128 kB       Software     Optional "HVLink" software       SAFETY AND PROTECTION     P       IP     44       Safety category     CAT IV, 600 V       POWER SUPPLY       Rechargeable batteries     Included       In-built battery charger     yes       Low battery indication     yes <td>Calculation of DD, DAR, PI</td> <td colspan="2"></td>	Calculation of DD, DAR, PI		
Timer yes Leakage current measurement yes Short circuit / charge current 5 mA Guard terminal yes Auto adjustment function yes Autio angling yes Auto ranging yes Shielded test leads included yes Voltage Voltage Voltage Capacitance  Display R(t) graphs plotting facility yes Back light yes Graphic display LCD MEMORY, SOFTWARE AND COMMUNICATION USB / RS232 downloading yes Memory size SAFETY AND PROTECTION IP A4 Safety category POWER SUPPLY Rechargeable batteries Included In-built battery charger Lob MEMORY, irre Included In-built battery cindication yes Battery life Inductor Included In-built battery cindication Ves Insulation Ves Sarey Satery And PROTECTION Included In-built battery charger Ves Battery life A h at 10 kV  DIMENSIONS Ves  Meight  Safety Cargeon Ves Satery And PROTECTION Ves Included In-built battery indication Ves Satery Ves Satery Included In-built battery indication Ves Satery Life A h at 10 kV  DIMENSIONS Ves  Weight  Satery And PROTECTION Ves Satery Life A h at 10 kV  DIMENSIONS Ves Satery And PROTECTION Ves Satery Life Satery Li			
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Guard terminalyesAuto adjustment functionyesAudible warningsyesAuto rangingyesShielded test leads includedyesVOLTAGEVOLTAGEVoltage AC/DCup to 600 V AC and DCACCURACYInsulation5 % +3d (to 1 TΩ), 15 % +3d (to 10 TΩ)Voltage3 % +4 VCapacitance5 % +2dDISPLAYYesR(t) graphs plotting facilityyesBack lightyesGraphic displayLCDMEMORY, SOFTWARE AND COMMUNICATIONUSB / RS232 downloadingyesMemory size128 kBSoftwareOptional "HVLink" softwareSAFETY AND PROTECTIONIPIP44Safety categoryCAT IV, 600 VPOWER SUPPLYRechargeable batteriesIncludedIn-built battery chargeryesLow battery indicationyesBattery life4 h at 10 kVDIMENSIONSWeight			
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Memory size 128 kB  Software Optional "HVLink" software  SAFETY AND PROTECTION  IP 44  Safety category CAT IV, 600 V  POWER SUPPLY  Rechargeable batteries Included In-built battery charger yes Low battery indication yes  Battery life 4 h at 10 kV  DIMENSIONS  Weight 5.5 kg			
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SAFETY AND PROTECTION  IP		128 kB	
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Low battery indication yes Battery life 4 h at 10 kV  DIMENSIONS  Weight 5.5 kg	In-built battery charger	yes	
DIMENSIONS Weight 5.5 kg			
Weight 5.5 kg	Battery life	4 h at 10 kV	
	DIMENSIONS		
	Weight	5.5 kg	
	Dimensions		



Intuitive keypad and connectivity to PC through RS 232 and USB



Dot matrix LCD and connector panel for high quality shielded test leads 12 kV (included in standard set)

metrología electrónica, S.L.

Tel: +34 91 569 8006 info@denver.es - www.denver.es

### ORDERING INFORMATION

MI 3200

Standard set



Instrument TeraOhm 10 kV Mains cable 10 kV shielded test lead with tip, 2 m 10 kV shielded test lead, 2 m (black, red) 10 kV alligator (black, red) Guard test lead 2 m with alligator clip (green) 6 x 1.2 V NiMH batteries Handbook "Modern insulation testing" on CD Instruction manual on CD Product verification data

## **OPTIONAL ACCESSORIES**

Photo	Order No.	Acc. decription
	A 1288	6 x 1.2 V NiMH batteries type D
	A 1275	PC SW HVLink PRO with USB and RS232 cable
W////	S 2029	10 kV shielded test lead set, 8 m (black, red)
11/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1	S 2030	10 kV shielded test lead set, 15 m (black, red)
**	S 2036	10 kV alligator set (black, red)



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