

MI 3201 TeraOhm 5 kV Plus

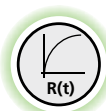


Advanced 5 kV Insulation Tester with Diagnostics Tools



- **Diagnostic tools** - Polarization index (PI), Dielectric discharge (DD) and Dielectric Absorption Ratio (DAR) with automated resistance ranging. All parameters can be measured and displayed in one single measurement.
- **Step voltage test** - Insulation resistance will be measured at five different, equality sequenced test voltages for profound insulation system diagnostics.
- **R(t) graph** - Real time resistance against time graph plotting facility to graphically illustrate the response of a material to an applied test voltage.
- **High charging capacity** - With 5 mA charging current insulation systems up to 50 μ F can be quickly charged and tested.
- **High EM (noise) immunity** - Built in noise rejection filters and shielded test leads supplied in a standard set make the instrument suitable for accurate insulation testing in environments with high EM interferences like HV switchyards or similar.
- **High protection level** - CAT IV / 600 V overvoltage category for industrial environments.
- **Lightweight and user-friendly design** - TeraOhm 5 kV Plus is packed in a handy, rugged carrying case weighing only 3 kg.

The new TeraOhm 5 kV Plus insulation tester has all necessary features for a profound insulation diagnostics. Automated calculation of PI, DD and DAR, combined with a possibility to perform a step voltage test make the instrument suitable for the most demanding customers and applications. Large LCD display allows real time R(t) graphs to be displayed. Windows compatible HVLink PRO PC Software and either RS232 or USB communications ports serve for connecting the instrument to the PC and management of the recorded test data.



TYPICAL APPLICATIONS:

- power transformers
- high voltage cables
- rotating machines
- surge arrestors
- measuring transducers

STANDARDS:

Instruments operation:
IEC/EN61557-2

Electromagnetic compatibility:
EN 61326 class B

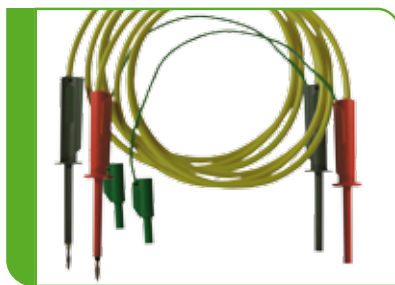
Safety:
EN 61010-1 (instrument)
EN 61010-031(accessories)

Technical Specification

INSULATION	
Test voltage range	250 ... 5000 V
Measuring range	5 k Ω ... 10 T Ω
Voltage steps	up to 5 kV, step by 25 V
Voltage ramp test	yes
Automatic discharge after test	yes
Calculation of DD, DAR, PI	yes
Step voltage testing	yes
Withstanding voltage test	yes
Timer	yes (up to 100 min)
Leakage current measurement	yes
Capacitance 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 test AC/DC	up to 600 V AC and DC
ACCURACY	
Insulation	5% + 3d (to 1 T Ω), 15% + 3d (to 10 T Ω)
Voltage	3% + 4 V
Capacitance	5% + 4 nF
DISPLAY	
R(t) graphs plotting facility	yes
Backlit	yes
Graphic display	LCD
MEMORY, SOFTWARE AND COMMUNICATION	
USB / RS232 downloading	yes
Memory size	128 kB
Software	optional HVLink PRO PC Software
SAFETY AND PROTECTION	
IP	40
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 5 kV
DIMENSIONS	
Weight	3 kg
Dimensions	310 x 130 x 250 mm



Real time resistance against time graph plotting facility



Shielded test leads 10 kV included in standard set

ORDERING INFORMATION

MI 3201

Standard set



Instrument TeraOhm 5 kV Plus

Carrying bag

Mains cable

10 kV shielded test lead with probe, 2 m, 2 pcs (black, red)

10 kV crocodile clip, 2 pcs (black, red)

Guard test lead, green, 2 m

Crocodile clip, green

6 x 1.2 V NiMH batteries, C type

Handbook "Guide to modern insulation testing" on CD

Instruction manual

Calibration certificate

OPTIONAL ACCESSORIES

Photo	Order No.	Acc. description
	A 1275	PC SW HVLink PRO with USB and RS232 cable
	S 2029	10 kV shielded test lead, 8 m, 2 pcs (black, red)
	S 2030	10 kV shielded test lead, 15 m, 2 pcs (black, red)
	S 2036	10 kV crocodile clip, 2 pcs (black, red)



Measuring and Regulation Equipment Manufacturer

METREL d.d.

Ljubljanska 77

SI-1354 Horjul

Tel: + 386 (0)1 75 58 200

Fax: + 386 (0)1 75 49 226

E-mail: metrel@metrel.si

<http://www.metrel.si>

Note! Photographs in this catalogue may slightly differ from the instruments at the time of delivery. Subject to technical change without notice.