

MI 3210 TeraOhmXA 10 kV

MI 3210 TeraOhm XA 10 kV is a portable, battery or mains powered test instrument with excellent IP protection (IP65), intended for diagnosing of Insulation Resistance by using high DC test voltages of up to 10 kV. Because of its robustness (CAT IV protection) and high immunity to radiated RF fields it is best suited for industrial environment.

MEASURING FUNCTIONS:

- Insulation Measurement;
- Diagnostic Test (PI, DAR, DD) ;
- Step Voltage Test;
- Withstanding Voltage Test (DC) up to 10 kV;
- Voltage and frequency measurement up to 550 V TRMS.

KEY FEATURES:

- Insulation resistance up to 20 TΩ;
- Adjustable test voltage (50 V...10 kV) 50 V and 100 V step;
- Programmable timer;
- Capacitance measurement;
- Charging rate for capacitive load < 3 s / μF at 10 kV;
- Automatic discharge of test object after completion of measurement;
- Guard terminal
- High voltage breakdown detection;
- Custom defined tests
- Auto adjustment function
- Measurement results in numerical and graphical form;
- PC software HVLink PRO for downloading and analyzing of the test results and test report printing;
- Isolated RS232 and USB communication ports, BT interface;
- High quality accessories including shielded test leads in standard set;
- High EM interferences protection: Input AC current noise rejection (1 mA@600 V) and additional averaging of the result (5, 10, 30, 60);
- CAT IV / 600 V;
- Mains and rechargeable battery power supply.



APPLICATION:

- Power transformers;
- Measuring transducers in distribution networks;
- Testing insulation resistance of rotating machinery and cables;
- Production line periodic testing and maintenance;
- Troubleshooting and analysis of all kinds of insulation problems;
- High voltage generators;
- Surge arrestors.

STANDARDS:

Electromagnetic compatibility:
EN 61326 class A

Safety:
EN 61010-1 (instrument)
EN 61010-2-030
EN 61010-2-033
EN 61010-031(accessories)

TECHNICAL SPECIFICATION:

Function	Measuring range	Resolution	Accuracy
Insulation resistance	0.01 MΩ ... 9.99 MΩ	10 kΩ	±(5% of reading + 3 digits)
	10.0 MΩ ... 99.9 MΩ	100 kΩ	±(5% of reading + 3 digits)
	100 MΩ ... 999 MΩ	1 MΩ	±(5% of reading + 3 digits)
	1.00 GΩ ... 9.99 GΩ	10 MΩ	±(5% of reading + 3 digits)
	10.0 GΩ ... 99.9 GΩ	100 MΩ	±(5% of reading + 3 digits)
	100 GΩ ... 999 GΩ	1 GΩ	±(5% of reading + 3 digits)
	1.0 TΩ ... 9.9 TΩ	100 GΩ	±(5% of reading + 3 digits)
Test voltage	0 V ... 999 V	1 V	
	1.00 kV ... 9.99 kV	10 V	±(5% of reading + 3 digits)
Insulation leakage current	10.0 kV ... 14.0 kV	100 kV	
	1.00 mA ... 5.00 mA	10 μA	
	100 μA ... 999 μA	1 μA	±(5% of reading + 3 digits)
	10.0 μA ... 99.9 μA	100 nA	
	1.00 nA ... 9.99 nA	10 nA	
	100 nA ... 999 nA	1 nA	
	10.0 nA ... 99.9 nA	100 pA	±(10% of reading + 0.15 nA)
Dielectric absorption ratio (DAR)	0.01 ... 9.99	0.01	±(5% of reading + 2 digits)
	10.0 ... 100.0	0.1	
Polarization index (PI)	0.01 ... 9.99	0.01	±(5% of reading + 2 digits)
Dielectric discharge (DD)	10.0 ... 100.0	0.1	
	0.01 ... 9.99	0.01	±(5% of reading + 2 digits)
Voltage AC/DC	5.0 V ... 99.9 V	0.1 V	
	100 V ... 550 V	1 V	±(2% of reading + 2 digits)
Frequency	10 Hz ... 500 Hz	0.1 Hz	±(0.2% of reading + 1 digits)
Capacitance	20.0 nF ... 999 nF	1 nF	
	1.00 μF ... 9.99 μF	10 nF	±(5% of reading + 2 digits)
	10.0 μF ... 50.0 μF	100 nF	
Power supply	12 V DC (3.4 Ah Lead – Acid)		
Display	320 x 240 dots matrix display with backlight		
Overvoltage category	CAT IV / 600 V		
Protection class	Double insulation		
COM port	RS232, USB and Bluetooth		
Dimensions	345 x 160 x 335 mm		
Weight	6.5 kg		

STANDARD SET:

- Instrument MI 3210 TeraOhmXA 10 kV
- 10 kV shielded test lead with probe, 2 m
- 10 kV shielded test lead, 2 m, 2 pcs (black, red)
- 10 kV crocodile clip, 2 pcs (black, red)
- Guard test lead, green, 2 m
- Crocodile clip, green
- Mains cable
- PC SW HVLink PRO with USB and RS 232 cable
- Handbook "Guide to modern insulation testing" on CD
- Instruction manual on CD
- Calibration certificate

