

MI 3205 TeraOhmXA 5kV



**Professional
insulation testing
with powerful
diagnostic tools**

NEW



MI 3205 TeraOhm XA 5kV is a portable battery (Li-ion) or mains powered test instrument with excellent IP protection (IP65 case closed and IP54 case open), intended for diagnosing of Insulation Resistance by using high test voltages of up to 5 kV. It is designed and produced with the extensive knowledge and experience acquired through many years of working in this field.

Measuring functions:

- Insulation Measurement;
- Diagnostic Test (PI, DAR, DD);
- Step Voltage Test;
- Withstanding Voltage Test (DC) up to 5 kV.

Key features:

- Insulation resistance up to 15 T Ω ;
- Adjustable test voltage (50 V...5 kV) 50 V and 100 V step;
- Programmable timer;
- Capacitance measurement;
- Charging rate for capacitive load < 1,5 s / μ F at 5 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@300 V) and additional averaging of the result (5, 10, 30, 60);
- CAT IV / 600 V;
- Increased working nominal altitude to 3000 m;
- High power Li-ion battery pack (14.8V, 4.4Ah);
- 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 and varistors.

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

INSULATION

Test Voltage range	50 V ... 5 kV
Measuring range	10 kΩ ... 15 TΩ
Voltage steps	50 V (50 V ... 1 kV) and 100 V (1 kV ... 5 kV)
Step voltage test	in 5 steps
Timer	Max. 100 min
Short circuit / charge current	6.5 mA ±10 %
Charging rate for capacitive load	< 1.5 s / μF at 5 kV
Discharging rate for capacitive load	< 0.12 s / μF at 5 kV

ACCURACY

Insulation	±(5 % of reading + 3 digits) up to 1T
Test voltage	±(15 % of reading + 1 digit) from 1T ... 15T
Capacitance	±(5 % of reading + 3 digits)
DISPLAY	
Graphic display	320 x 240 dot matrix LCD with backlight

MEMORY, SOFTWARE AND COMMUNICATION

USB and RS232 COM ports	galvanic separated, 9600 bps
Bluetooth interface	115 kbps
Memory size	4 MB
Software	HVLink PRO PC Software

SAFETY AND PROTECTION

IP	65 (case closed) / (54 case open)
Safety category	CAT IV / 600 V
Working nominal altitude	3000 m

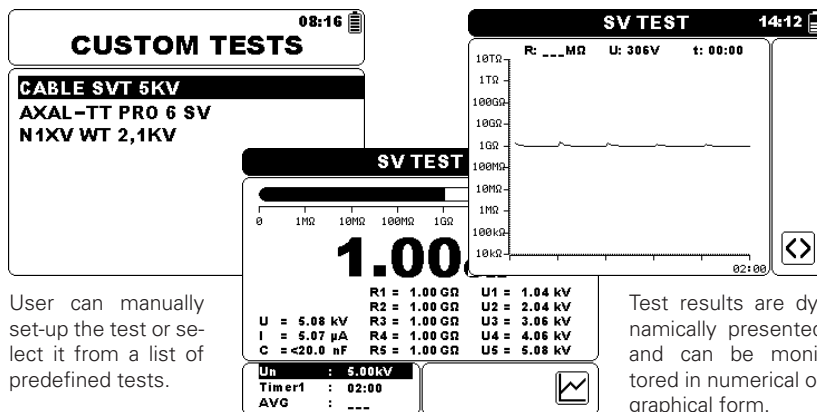
POWER SUPPLY

Rechargeable batteries	14.4 V DC (4.4 Ah Li-Ion)
Battery life	7 h continuous testing 100 MΩ at 5 kV

DIMENSIONS

Weight	6.5 kg
Dimensions (w x h x d)	360 x 160 x 330 mm

Typical measurement procedure



User can manually set-up the test or select it from a list of predefined tests.

Test results are dynamically presented and can be monitored in numerical or graphical form.

Ordering information

Standard set

MI 3205

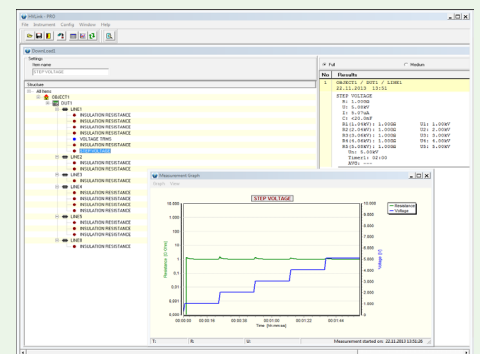


- Instrument MI 3205 TeraOhmXA 5 kV
- 10 kV shielded test lead with probe, 2 m
- 10 kV shielded test lead, 2 m, 2 pcs (black, red)
- 10 kV crocodile clip, 2 pcs (black, red)
- Guard test lead, green, 2 m
- Crocodile clip, green
- Mains cable
- PC SW HVLink PRO with USB and RS 232 cable
- Handbook "Guide to modern insulation testing" on CD
- Instruction manual on CD
- Calibration certificate

Optional accessories

Photo	Order No.	Acc. decription
	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)

PC software HVLink PRO



With the help of HVLink PRO, which is included in the standard set, the stored results can be downloaded to PC where they can be reviewed, analysed and reported.



METREL®

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.