



5 kV and 10 kV Insulation Analyzers

DESCRIPTION

One of the most complete and sophisticated digital insulation testers available with proven technology to provide safe, reliable and accurate measurements of insulation resistance up to either 5 TΩ or 10 TΩ. Powerful software allows for further analysis of tests results, including features such as graphical representation and automatic report generation.

A state-of-the-art microprocessor controls the equipment operation and enables the incorporation of advanced features which make measurements easier: auto-range selection, 4000 readings memory, AC/DC voltmeter, automatic measurement of Absorption Index and Polarization Index, leakage current and capacitance measurement, timer enabling programming of test duration, configurable Pass-Fail test, Step voltage test, built-in printer, real time clock and calendar.

Built-in chronometer, indicating elapsed time, in minutes and seconds, since the test started, up to 90 minutes.

Measured values are transmitted through the USB interface and are printed in the built-in printer as a registration of the performed test. Furthermore, the measured values are stored in a non-volatile internal memory. Up to 4000 measurements may be stored, to be transferred afterward to a computer. The software allows a further analysis of the test results, including a graphical representation and automatic report generation. The real time clock and calendar, and the sequential test number, facilitates the identification of each test, and the organization of a predictive maintenance system by trend analysis.

Models PM5A2 and PM10A

- Rechargeable battery
- Lightweight and ruggedly constructed
- Reliable and accurate measurements in the laboratory or in the field
- Simple set up and operation

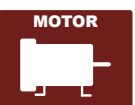
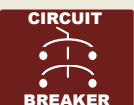
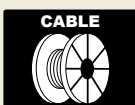
TESTING APPLICATIONS

- Insulation resistances up to 5 TΩ or 10 TΩ
- Automated tests:
 - Absorption index
 - Polarization index
 - Capacitance
 - Leakage current
 - AC/DC voltmeter – True RMS
- Step voltage test



DESIGN FEATURES

- Microprocessor-controlled
- Auto-range
- Digital & Bargraph reading
- Chronometer up to 90 minutes
- Built-in printer
- Real time clock and calendar
- 4000 readings memory
- USB interface
- Software for data management
- Rechargeable battery (LifePO4)
- IP54 protection
- High voltage indicator
- Automatic discharge of potential



	MODEL PM5A2	MODEL PM10A
TEST VOLTAGES	500 V – 1 kV - 2.5 kV – 5 kV directly, one button selectable 500 V to 5 kV in 25 V, 100 V or 500 V steps DC, negative	500 V – 1 kV - 5 kV – 10 kV directly, one button selectable 500 V to 10 kV in 25 V, 100 V or 500 V steps DC, negative
MAX RESISTANCE READING	5 TΩ @ 5 kV	10 TΩ @ 10 kV
DC VOLTMETER	10 V up to 1000 VDC Accuracy: ±(5% of reading + 3 digits)	15 V up to 600 VDC Accuracy: ±(5% of reading + 3 digits)
AC VOLTMETER	10 V up to 1000 V RMS Accuracy: ±(5% of reading + 3 digits)	15 V up to 600 V RMS Accuracy: ±(5% of reading + 3 digits)
OVERVOLTAGE CATEGORY	CAT. III - 600 V	
LEAKAGE CURRENT MEASUREMENT	1 nA up to 3 mA ±(10% of reading + 3 digits)	1 nA up to 1500 μA ±(10% of reading + 3 digits)
CAPACITANCE MEASUREMENT	50 nF up to 10 μF @ 500 V 50 nF up to 5 μF @ 1000 V 30 nF up to 2 μF @ 2500 V 30 nF up to 1 μF @ 5000 V Accuracy: ±10% of reading ± 3 digits	50 nF up to 10 μF @ 500 V 50 nF up to 5 μF @ 1000 V 30 nF up to 2 μF @ 2500 V 30 nF up to 1 μF @ 5000 V 30 nF up to 680 nF @ 10,000 V Accuracy: ±10% of reading ± 3 digits
SHORT CIRCUIT CURRENT	Maximum 3 mA	Maximum 2 mA
TEST VOLTAGES ACCURACY	±3% of nominal test voltages on 10 GΩ	
EQUIPMENT BASIC ACCURACY	±5% of reading 1 MΩ to 1 TΩ @ 5 kV ±20% of reading 1 TΩ to 5 TΩ @ 5 kV (for lower test voltages, the upper limit will be reduced proportionally) ±20% of reading 10 kΩ to 100 kΩ ±10% of reading 100 kΩ to 1 MΩ	±5% of reading 1 MΩ to 1 TΩ @ 10 kV ±20% of reading 1 TΩ to 10 TΩ @ 10 kV (for lower test voltages, the upper limit will be reduced proportionally) ±20% of reading ±5 digits 10 kΩ to 100 kΩ ±10% of reading ±5 digits 100 kΩ to 1 MΩ
POWER SUPPLY	Internal rechargeable battery (LiFePO4 12.8 V - 6000 mAh)	
BATTERY CHARGER	12 V - 2 Amp	18 V - 2 Amp (Input 90 – 260~ 45-65 Hz)
DIMENSIONS	13" (340 mm) L x 11 ½" (295 mm) W x 6" (152 mm) H	16" (406 mm) L x 13" (330 mm) W x 7" (174 mm) H
WEIGHT	10 lbs (4.3 kg)	14 lbs (6.3 kg)

ENVIRONMENTAL PROTECTION (with closed lid)	IP54
SAFETY CLASS	In accordance with IEC61010-1
E.M.C.	In accordance with IEC 61326-1
ELECTROMAGNETIC IRRADIATION IMMUNITY	In accordance with IEC 61000-4-3
ELECTROSTATIC IMMUNITY	In accordance with IEC 61000-4-2
OPERATING TEMPERATURE RANGE	-5°C to 50°C
STORAGE TEMPERATURE RANGE	-25°C to 65°C
HUMIDITY RANGE	95% RH (non-condensing)

ACCESSORIES INCLUDED

- 2 Measuring test leads
- 1 GUARD test lead
- 1 AC Adapter
- 1 USB cable
- 1 Protective bag
- 1 User guide
- 1 Software

High Voltage • High Current • High Power Test Systems and Components



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