



ELECTRICAL TEST INSTRUMENTS

Insulation Analyzers

1 KV DC-15 KV DC



INSULATION ANALYZERS

1 kV DC-15 kV DC

Design Features

- Microprocessor-controlled
- Rechargeable battery
- Auto-range
- External Noise rejection

Capabilities

- Perform multiple testing functions
- Simple set-up and operation
- Reliable and accurate measurements in the laboratory or in the field

Testing Applications

Model PM1A

- Insulation Resistance testing up to 200 GΩ
- Pass / Fail test
- Low Resistance and Continuity measurement
- AC/DC Voltmeter up to 600 V True RMS
- Automatic Polarization Index



Model PM5A3

- Insulation Resistance testing up to 5 TΩ
- AC/DC Voltmeter up to 1000 V True RMS
- Pass / Fail test
- Automated tests:
 - Absorption Index
 - Polarization Index
 - Capacitance
 - Leakage Current
 - Step Voltage
 - Ramp



Model PM10A3

- Insulation Resistance testing up to 10 TΩ
- AC/DC Voltmeter up to 600 V True RMS
- Pass / Fail test
- Automated tests:
 - Absorption Index
 - Polarization Index
 - Capacitance
 - Leakage Current
 - Step Voltage
 - Ramp



Model PM15A3

- Insulation Resistance testing up to 15 TΩ
- AC/DC Voltmeter up to 1000 V True RMS
- Pass / Fail test
- Automated tests:
 - Absorption Index
 - Polarization Index
 - Capacitance
 - Leakage Current
 - Step Voltage
 - Ramp



MODEL	PM1A	PM5A3	PM10A3	PM15A3
TEST VOLTAGES	250 V - 500 V - 1000 V DC, negative	500 V – 1 kV - 2.5 kV – 5 kV directly, one button selectable 500 V to 5 kV in 25 V or 500 V steps	500 V – 1 kV - 5 kV – 10 kV 500 V to 10 kV	500 V – 5 kV – 10 kV – 15 kV directly, one button selectable 50 V to 15 kV in 25 V or 500 V steps
Accuracy	-0 / +15% for resistances between 10 MΩ and open circuit	DC, negative ±3% of nominal test voltages on 10 GΩ	DC, negative ±3% of nominal test voltages on 10 GΩ	DC, negative ± 3 % of nominal test voltages on 10 GΩ
RESISTANCE MEASUREMENT Accuracy	10 kΩ to 200 GΩ ±5% of reading ±2 digits	maximum 5 TΩ @ 5 kV	maximum 10 TΩ @ 10 kV	maximum 15 TΩ @ 10 kV up to 15 kV
LEAKAGE CURRENT MEASUREMENT Accuracy	maximum 1.5 mA ±0.3 mA	maximum 3 mA ±(10% of reading + 3 digits)	maximum 1.5 mA	1 nA up to 1,500 μA ±(10% of reading + 3 digits)
	LOW RESISTANCE & CONTINUITY MEASUREMENT 0.05 Ω to 150 Ω Accuracy ±5% of reading ±2 digits Test Current up to 200 mA Continuity Indicator activates at R < 5 Ω ±0.5 Ω	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	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 30 nF up to 680 nF @ 10,000 V	CAPACITANCE MEASUREMENT same as the PM10A3, plus 30 nF up to 680 nF @ 15,000 V Accuracy: ±10 % of reading ± 3 digits
BUILT-IN TIMER	up to 15 minutes	up to 90 minutes	up to 90 minutes	up to 90 minutes
METERING Accuracy Protection	0-600 V AC/DC ±3% of reading ±2 digits CAT. III - 600 V	15-1000 V AC/DC ±(5% of reading +3 digits) CAT. III - 600 V	15-1000 V AC/DC ±(5% of reading + 3 digits) CAT. III - 600 V	15-1000 V AC/DC ±(5% of reading + 3 digits) CAT. III - 600 V
INPUT	Internal Rechargeable Battery			
BASIC ACCURACY	R ≤ 50 GΩ ±5% of reading ±2 digits R > 50 GΩ ±10% of reading ±2 digits	±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	±5% of reading 1 MΩ to 1 TΩ @ 15 kV ±20% of reading 1 TΩ to 15 TΩ @ 15 kV
OPERATING TEMP. STORAGE TEMP. HUMIDITY	-5°C to 50°C -10°C to 60°C <95%, non-condensing	-5°C to 50°C -25°C to 65°C <95%, non-condensing	-5°C to 50°C -25°C to 70°C <95%, non condensing	-10°C to 50°C -25°C to 70°C <95%, non condensing
UNIQUE FEATURES	Hand-held device Guard terminal Hold memory ISO 17025 Calibrated	Digital & bar graph reading 16,000 readings memory Automatic discharge of potential Remote control via Android device USB interface Software for data management Built-in printer Real time clock & calendar ISO 17025 Calibrated	Alphanumerical LCD display, 4 lines / 20 characters (Big Number)	Built-in printer prints elapsed time, actual voltage and resistance measured each 15 seconds
DIMENSIONS	4" L, 7.75" W, 1.75" H 102 mm L, 195 mm W, 46 mm H	13.6" L, 10.7" W, 6.3" H 345 mm L, 272 mm W, 159 mm H 9.48 lbs (4.3 kgs)	17.5" L, 14.2" W, 7.5" H 450 mm L, 360 mm W, 190 mm H 13.88 lbs (6.3 kgs)	
WEIGHT	1 lb (0.5 kgs)			
ACCESSORIES included	1 Guard test lead, 1 Power supply Carrying bag, User guide	2 Measuring test leads, 1 AC adapter, 1 USB cable, Protective bag, User guide, Software		

Specifications are subject to change without notice. Doble is an ISO 9001 & ISO/IEC 17025 & 17034 Certified Company. Doble is an ESCO Technologies Company. PUBLISHED: MAY, 2026



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