DIGITAL MICROOHMMETERS

- PME-10
- PME-100

SMC EURO

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PME-10 / PME-100

Digital Microohmmeters

APPLICATIONS

The PME-10 and PME-100 microohmmeters are used to accurately measure the contact resistances of switches, circuit breakers, motor and transformers windings and other applications which require measurement of low resistance values.

DESCRIPTION

The instrument measures the voltage drop at the tested section while a known amount of DC current is injected. The resistance value is immediately calculated and shown by a 3 1/2 digit liquid crystal display directly in Ohms, milliOhms or microOhms, depending on the scale selected.

The measurement is carried out using the 4-wire method, also referred to as 'Kelvin Connection', to eliminate the influence of connections. The internal rechargeable battery supplies the necessary working power and up to 10A pure DC injection for extremely accurate measurements of resistance as small as 2 milliOhms. For smaller resistance values, the PME-100 can inject up to 100A DC when powered from the AC mains.

Easy to use, ideal for field, laboratory, and production line applications.

TECHNICAL SPECIFICATION

Voltage Supply:	127/220V, 50-60 Hz
DC Supply:	Lead-lead dioxide battery, shielded, rechargeable, 2V.
Accuracy:	±0,25% of scale ±1 digit.
Measurement response time:	6 seconds with resistive circuits. For highly inductive circuits it is necessary to wait for reading stabilization.
Reading sampling time:	25 ms.
Temperature range:	Accuracy range: 20 - 30° C Working range: 0 - 50° C
Dimensions:	Height: 175 mm/7" - Width: 380 m/15" - Depth: 335 mm/13"
Weight:	PME-100: 11.5 Kg / 25 lb - PME-10: 6.5 Kg / 15 lb

MEASUREMENTS

		SCALE	MEASUREMENT RANGE	RESOLUTION	RATING CURRENT (±20%)	BATTERY CHARGE DURATION
PME-100	PME-10	200Ω	0 to 199.9Ω	100mΩ	1 µA	130 hours
		20Ω	0 to 19.99Ω	10mΩ	1 mA	130 hours
		2Ω	0 to 1.999Ω	1mΩ	10 mA	130 hours
		200mΩ	0 to 199.9mΩ	100µΩ	100 mA	100 hours
		20mΩ	0 to 19.99mΩ	10µΩ	1A	30 hours
		2mΩ	0 to 1.999mΩ	1µΩ	10A	3 hours*
		2,000µΩ	0 to 1.999µΩ	1µΩ	100A	**
		200µΩ	0 to 199,9µΩ	100nΩ	100A	**

* In this scale, when the PME 100 is connected to the mains power supply, the battery will have a 6 hour charge duration, as the measurement current is provided by the supply module and battery. The battery does not recharge in this scale, as occurs in the other scales.

** In this scale, the PME 100 operates only with the mains power supply.

CHARACTERISTICS

- Accuracy: ±0.25% of the scale ± 1 digit.
- Direct reading in Ohms, milliOhms or microOhms depending on the scale selected.
- Built-in rechargeable battery.
- Case: ABS.

STANDARD ACCESSORIES

- Voltage Supply Cable.
- 2 current test leads 8m.
- 2 High Current injection leads 14 m. (PME-100).
- 2 Potential cables 14 m. (PME-100).
- 2 Hand Spikes.
- Spare fuses.
- Instructions manual.
- 1 aluminum transport case for cables and equipment.

DISTRIBUTED BY

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