

RMO-G

Microohmmeters



RMO300G

Up to 800 A with both sides grounded and remote control

RMO-G

Portable micro-ohmmeter with BSG safety

amperis

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Contact resistance measurement in environments with high safety requirements.

Product overview



RMO300G: current and sense terminals on the front panel

Safety in the foreground

The series measures with both ground connections of the breaker in place: a current clamp powered by the instrument itself records the current diverted through the groundings and the device compensates it. The optional remote control unit starts and stops the test from a distance, and the plastic case endures field work with IP67 protection with the lid closed.

Seven models up to 800 A

From the RMO100G to the RMO800G, the ripple-free DC current rises and falls in automatically regulated ramps that remove magnetic transients; the 800 A model is the most powerful portable micro-ohmmeter of its class.

Main features

- Range from 0.1 $\mu\Omega$ to 999.9 m Ω , expandable up to 6 Ω .
- Typical accuracy of $\pm(0.1\%$ of reading + 0.1% of full scale).
- Optional high-precision module: 0.01 $\mu\Omega$ resolution.
- 100 A test current continuously on every model.
- Four test modes: SINGLE, CONTIN, BSG and DTRtest.
- Memory for 500 time- and date-stamped measurements.
- Optional 58 mm thermal printer and Bluetooth.



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Applications and software



Contact resistance measurement on a breaker at the substation

Applications

- Medium- and high-voltage breakers, live tank and dead tank.
- GIS bays, disconnectors and switchgear with both sides grounded.
- Busbars, cable splices, welded joints and fuses.
- Manufacturing, commissioning and maintenance per IEEE C37.09 and IEC 62271-100.
- Pass/fail criterion with R_{max} limit.

PC software for control and analysis

The included PC software drives the test over USB or RS232, records results at configurable intervals in continuous mode, downloads the memory with search filters and generates fully configurable reports.

High output power

The high output voltage keeps the measuring range at high currents and accepts thin or long cables: the RMO100G tests at 100 A with 20 m cables of 16 mm², and the RMO800G generates up to 700 A with 10 m / 95 mm² cables.



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RMO-G — MEASUREMENT DATA

Resistance range	0.1 $\mu\Omega$ – 999.9 m Ω (RMO100G to RMO600G); 0 – 499.9 m Ω (RMO800G); expandable up to 6 Ω
Resolution	0.1 $\mu\Omega$ (up to 999.9 $\mu\Omega$); 1 $\mu\Omega$ (up to 9.999 m Ω); 10 $\mu\Omega$ (up to 99.99 m Ω); 0.1 m Ω (up to 999.9 m Ω)
Resolution on optional ranges	0.01 $\mu\Omega$ (0 – 99.99 $\mu\Omega$, with high-precision module); 1 m Ω (expanded range up to 6 Ω)
Typical accuracy	$\pm(0.1\%$ of reading + 0.1% of full scale)
Test current	Selectable, up to 800 A DC depending on model; ripple < 1%
High-precision module (optional)	1 to 30 $\mu\Omega$ with 0.01 $\mu\Omega$ resolution
Current clamp for BSG	30/300 A, powered by the instrument itself
Memory	500 time- and date-stamped measurements

Specifications valid at +25 °C with the recommended accessories.

The manufacturer reserves the right to change the specifications without prior notice.



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RMO-G — TECHNICAL SPECIFICATIONS

	RMO100G	RMO200G	RMO300G	RMO400G	RMO500G	RMO600G	RMO800G
Maximum current	100 A	200 A	300 A	400 A	500 A	600 A	800 A
Duration at maximum current	Continuous	150 s	90 s	50 s	30 s	20 s	5 s
Consumption at 230 V AC	1190 VA	1815 VA	2400 VA	3570 VA	3970 VA	4720 VA	5010 VA
Full-load voltage (230 V)	7.15 V	6.80 V	7.20 V	6.70 V	5.95 V	5.90 V	4.70 V
Weight	8 kg	8 kg	8 kg	9 kg	9 kg	11 kg	11.5 kg

Common: dimensions 405 × 165 × 330 mm (RMO100G to RMO500G without printer) or 480 × 190 × 385 mm (RMO600G, RMO800G and models with built-in printer); supply 90 – 264 V AC, 50/60 Hz; backlit 4 × 20 character LCD; USB (optional RS232 and Bluetooth); IP67 with the lid closed; operation -20 to +55 °C; storage -40 to +70 °C; humidity 5 – 95% non-condensing; altitude up to 2000 m. In CONTIN mode the standard version reaches 600 A (800 A for 5 s upon request). Standards: IEEE C37.09 and IEC 62271-100; safety EN 61010-1; EMC EN 61326-1. Specifications valid at +25 °C.



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