

PDRM-10A

Ohmmeters



0.01 $\mu\Omega$ resolution in a unit weighing just 860 g

PDRM-10A

Fully automatic 10 A digital micro-ohmmeter

amperis

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Product description



PDRM-10A micro-ohmmeter taking a field measurement



Display showing a real-time resistance reading

Class-leading range and resolution

The PDRM-10A measures resistances from $0.01\ \mu\Omega$ to $200\ \Omega$ with a resolution of $0.01\ \mu\Omega$, automatically selecting the injection current between 5 mA and 10 A according to the type of contact being measured, without user intervention.

Four-wire Kelvin method

Current is injected through two conductors connected to the ends of the resistance, while an independent circuit measures the voltage drop with the voltage electrodes positioned inside the current electrodes. This method removes the influence of the resistance of the measuring cables themselves.

Advanced filtering for demanding environments

An internal microprocessor compensates for the effect of thermocouples and parasitic voltages, and the input channels are heavily filtered to allow reliable measurement even in the presence of strong magnetic fields.

Lightweight, rugged design

Weighing 860 g and measuring $203 \times 114 \times 51$ mm, the unit operates between -20°C and 50°C , with a 128×64 pixel liquid-crystal display and a backlight that switches off automatically after 30 seconds.



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Applications and accessories

Applications

- Quality control of castings.
- Control of joints and arc welds.
- Exothermic weld control.
- Electrode control in aluminium plants.
- Inspection of contacts, switches and fuses.
- Verification of grounding connections in substations.

Operating modes and factory kit

The unit offers a standard measurement mode and a differential mode, with automatic shutdown after two minutes of inactivity to extend battery life. The factory kit includes the micro-ohmmeter, a set of rechargeable NiMH batteries, a charger, the user manual and the calibration certificate.

Accessories available

Probe for duck-elbow grounding connections, two-hand Kelvin clamps with interchangeable spring-loaded tips (also in a heavy-duty version), 35 mm booster-type clamps and 19 mm dolphin-type clamps, probe for non-destructive testing of exothermic welds, custom-length cables, four-point personal grounding tester, 9.5 $\mu\Omega$ reference resistance, protective case, hard-shell transportation case and replacement battery and tip kits.



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PDRM-10A – MEASUREMENT DATA

Measurement method	Four-wire (Kelvin)
Measurement range	0.01 $\mu\Omega$ to 200 Ω
Resolution	0.01 $\mu\Omega$
Accuracy	$\pm 0.1\% \pm 2$ digits on all scales
Injection current	Automatic selection: 5 mA, 250 mA or 10 A
Display	128 $\times$ 64 pixel backlit LCD
Power supply	6 rechargeable AA NiMH batteries; 220 V/12 V, 1 A charger
Autonomy	Over 12,000 measurements at 10 A; over 10,000 at other currents
Environmental conditions	Operating -20/+50°C · Charging 0/+50°C · Storage -40/+50°C · Humidity 0-95% non-condensing
Weight and dimensions	0.86 kg; 203 $\times$ 114 $\times$ 51 mm

Specifications subject to change without notice.
The kit includes a factory calibration certificate.



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