MEGABRAS

www.megabras.com

200 A digital micro-ohmmeter

MPK 204e

2 YEAR WARRANTY

Illustrative Image

Features

- Microprocessor controlled
- Alphanumerical display
- Resolution down to: 0,1 μΩ
- Resistance reading up to: 200 Ω
- Up to 200 A test current
- Kelvin-type (4 - wires) measurement
- Powered by internal battery (up to 10 A) or mains supply
- Direct reading (up to 4½ digits)
- Overheating protection
- Serial data output (USB)

Description

The **MPK204e** high current micro-ohmmeter is a portable, microprocessor-controlled instrument, used to accurately measure very low contact resistances of breakers and switches, busbars, transformers winding and engines, etc, with test currents from 1 mA to 200 A. It employs the 4 terminals-method to avoid measurement errors caused by test leads and their contact resistances. Resistances readings are shown in the alphanumeric display with up to 4½ digits-resolution. It allows to measure resistances up to 200 Ω, with a resolution of up to 0.1 μΩ.

Using its internal rechargeable battery, measurements with up to 10 A test current may be carried out without connecting the equipment to mains power. Powered by to mains power, it allows to measure with any test current up to 200 A.

Measurement accuracy is guaranteed by an state-of-the-arts signals amplification system, offset-free and of high long-term stability. Test current may be adjusted by the operator in every one of the scales and their values are measured using an analog indicator (bar-graph), making it easy to measure resistances with a significant inductive component, as in the case of big transformers windings.

The high-current generation system is based on modern technology that allows to significantly decrease both its weight (16 kg) and size. The cabinet is made of plastic material highly resistant to impacts and to environmental challenges. Internal thermal sensors in all sensitive components avoid any damaged caused to the instrument due to overheating.

This is a strong but lightweight equipment, and may be easily carried by one person. It is water-resistant (IP65 with closed lid) and can be used under severe weather conditions offering an excellent performance working both in the laboratory and out in the field.

Technical specifications

ELECTRICAL	MPK204e
Test current	1 mA, 10 mA, 100 mA, 1 A, 10 A, 200 A Each current may be continuously adjustable from 0 to 100%
Resistance ranges	200 A 0-199.9 µΩ 0.1 µΩ 200 A 0-1999 µΩ 1 µΩ 10 A 0-1999 µΩ 1 µΩ 10 A 0-19.999 mΩ 1 µΩ 1 A 0-19.99 mΩ 10 µΩ 1 A 0-199.99 mΩ 10 µΩ 100 mA 0-199.9 mΩ 100 µΩ 100 mA 0-1999.9 mΩ 100 µΩ 10 mA 0-1999 mΩ 1 mΩ 10 mA 0-19.999 Ω 1 mΩ 1 mA 0-19.99 Ω 10 mΩ 1 mA 0-199.99 Ω 10 mΩ For each test current, ranges are automatically selected for optimal reading.
Basic accuracy	R < 0.5 mΩ: ± (0.50 % of reading + 2 ULSD*) R ≥ 0.5 mΩ: ± (0.20 % of reading + 2 ULSD*) * Units of the Least Significant Digit.
FEATURES	
Measurement principle	Four-terminal, U/I
Test current measurement	The current is digitally measured and a bar-graph shows the result. The bar-graph indication is specially useful when measuring inductive loads, so that the operator can verify easily when the test current has been stabilized.
Thermal protection	Protects all sensitive components, avoiding any damage due to overheating.
Continuous operation time	• At 200 A this equipment may be used continuously for approx. 3 minutes before the thermal protection activates • At 10 A or less, there is not a limited time for continuous operation
Advanced features	Digital direct reading of very low resistances in the alphanumerical display, with up to 4½ digits. Very fast and accurate measurements.
Serial data output	USB

STANDARDS	
Safety	IEC 61010-1
ENVIRONMENTAL	
IP rating	IP65 (with closed lid)
Operating temperature	-5 °C to 50 °C
Storage temperature	-25 °C to 70 °C
Humidity	95 % RH (non condensing)
POWER SUPPLY	
Mains-powered or internal battery	• **Internal battery**: rechargeable, sealed lead-acid (for up to 10 A test current) • **Mains supply**: 220-240 V~ (for up to 200 A test current)
Battery charger	For 220-240 V~ mains supply
MECHANICAL (OF THE INSTRUMENT)	
Weight	Approx. 16 kg
Dimensions	502 x 394 x 190 mm

Included accessories

- 2 Combined current and potential leads for 10 A (1.8 m)
- USB cable
- Power cord
- User manual
- Case for the accessories

Optional accessories

- 2 Combined current and potential leads - 19.68 ft (6 meters)
- 2 Combined current and potential leads - 26.24 ft (8 meters)
- 2 Combined current and potential leads - 32.80 ft (10 meters)
- 2 Combined current and potential leads - 39.37 ft (12 meters)
- 2 Combined current and potential leads - 49.21 ft (15 meters)

Global Presence

MEGABRAS equipment are used in more than 40 countries around the world

Test & Measurement equipment

- Digital transformer ratiometer
- Earth ground testers
- Hipots
- Insulating glove tester
- Insulation testers
- Kilovoltmeters
- Micro-ohmmeters
- Power quality analyzers
- Vibration meter

MEGABRAS IND. ELETRÔNICA LTDA.

Rua Gibraltar, 172 - Santo Amaro
CEP 04755-070 - São Paulo - SP
Brazil

For more information

Phone : +55 (11) 3254-8111 / 5641-8111
E-mail : megabras@megabras.com
Site : www.megabras.com