

# MPK105x



## PORTABLE DIGITAL MICRO-OHMMETER UP TO 100 A

- ✓ ALPHANUMERICAL DISPLAY
- ✓ DIRECT READING (UP TO 4½ DIGITS)
- ✓ RESOLUTION: 0.1  $\mu\Omega$
- ✓ RESISTANCE READING: UP TO 300 m $\Omega$
- ✓ U/I (4-WIRES) MEASUREMENT
- ✓ OVERHEATING PROTECTION
- ✓ INTERNAL MEMORY FOR UP TO 50 REGISTERS WITH 80 READINGS EACH
- ✓ BUILT-IN PRINTER

The **MPK-105x** high-current micro-ohmmeter is a portable, microprocessor-controlled instrument. Has optimized filters and protections for measurements in electrical substations. Can be used to accurately measure very low contact resistances of high voltage circuit-breakers and switches, busbars, etc., with test currents up to **100A**. It employs the 4 terminals-method (U/I measuring principle) to avoid errors caused by test leads and their contact resistances.

Measurement accuracy is guaranteed by a state-of-the-arts signal amplification system, offset-free and of high long-term stability. Resistances readings are shown in the alphanumeric display with up to 4½ digits-resolution. It allows to measure resistances up to **300m $\Omega$** , and the best resolution is **0.1 $\mu\Omega$** .

Test current may be adjusted by the operator and his value is measured using an analogue indicator (bargraph).

It has an internal memory for up to 50 registers with 80 readings each. The serial data output (USB) may be connected to a computer to download the stored values.

The high-current generation system is based on modern technology that allows to significantly decrease both its weight (approx. 11kg) 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 damage 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 and can be used under severe weather conditions (IP54 with closed lid) offering an excellent performance working both in the laboratory and out in the field.

# MPH105x:: TECHNICAL SPECIFICATIONS

## TEST CURRENT

Up to 100 A (True DC).  
The current may be continuously adjustable from 10% to 100% in 1 A steps.

## RESISTANCE RANGES

From 0.1  $\mu\Omega$  up to 300 m $\Omega$ .

## MEASUREMENT PRINCIPLE

Four-terminal, U/I.

## PROTECTIONS

Overcurrent, short-circuit and overheating.

## PROGRAMMABLE TEST TIME

Allows to setup the test time from 5 seconds up to 120 seconds.

## BASIC ACCURACY

$\pm 1$  % of reading  $\pm 1$  digit.

## ADVANCED FEATURES

Digital direct reading of very low resistances in the alphanumeric display, with up to 4½ digits.  
Very fast and accurate measurements.

## BUILT-IN PRINTER

Allows print the measured values.

## BUILT-IN MEMORY

Capacity to store 50 registers with 80 readings each.

## SERIAL DATA OUTPUT

USB.

## MEGALOGG2 SOFTWARE

Friendly, easy to use software. With automatic report generator, including the operator's commentaries.

## ENVIRONMENTAL PROTECTION

IP54 (with closed lid).

## SAFETY CLASS

Meets the requirements of IEC 61010-1.

## POWER SUPPLY

Mains: 90-240 V~ 50/60 Hz.

## OPERATING TEMPERATURE RANGE

-5°C to 50°C.

## STORAGE TEMPERATURE RANGE

-10°C to 60°C.

## HUMIDITY RANGE

95 % RH (non condensing).

## EQUIPMENT WEIGHT

Approx. 11 kg.

## ACCESSORIES WEIGHT

Approx. 20.5 kg.

## DIMENSIONS

502 x 394 x 190 mm.

## INCLUDED ACCESSORIES

- 2 Combined current and potential leads - up to 15 m.
- 1 Power cord.
- 1 Ground cable.
- 1 Communication cable.
- 1 Built-in thermal printer.
- 1 Case for the accessories.
- 1 License to use the software MegaLogg2.
- 1 User guide.

Subject to technical change without notice. This catalogue is not a contractual document.



**MEGABRAS INDÚSTRIA ELETRÔNICA LTDA.**  
Rua Gibraltar, 172 - Santo Amaro - CEP 04755-070  
São Paulo - SP - Brazil  
Phone +55 11 5641-8111 - Fax +55 11 5641-9755  
megabras@megabras.com - [www.megabras.com](http://www.megabras.com)



I13020501