


MI541

SMART MEGOHMMETER

- ✓ INSULATION RESISTANCES UP TO 500.000MΩ
- ✓ 3 TEST VOLTAGES: 100, 250 AND 500V
- ✓ ONLY ONE EASY-TO-USE SCALE
- ✓ RECHARGEABLE BATTERY
- ✓ 1,2mA SHORT-CIRCUIT CURRENT
- ✓ GUARD TERMINAL
- ✓ SOUND ALARM PROGRAMMING
- ✓ DESIGNED TO TEST TELEPHONY CABLES BY INSULATION
- ✓ GOOD INSULATION BEEP
- ✓ AUTO-POWER-OFF BEEP
- ✓  MARK


MEGABRAS
www.megabras.com



The MEGABRAS MI-541 electronic megohmmeter is a quick, of great versatility, robust and easy to use equipment. It uses vanguard technology, of great efficacy, that provides reliable, safe and accurate insulation resistances up to 500.000MΩ with 3 test voltages: 100, 250 and 500V.

The microprocessor applied facilitates the instrument operation, and allows the introduction of functions such as "Auto-scale", and "Programming".

Among this megohmmeter most important features, we can detach the sound alarm programming in order to facilitate the acceptance of cables by insulation.

This is a very useful function to measure multiple cables isolation. When the task is checking a telephony cable having a lot of pairs (for example, 1200), it is necessary to reduce measurement times. This may be achieved by programming the MEGABRAS MI-541. In such a way that when cables with top isolation are of a certain satisfactory value, the alarm sounds allowing the technician to measure the following pair of cables without having the need of waiting for the equipment pointer to reach a value. As generally, cables due to their associated capacity make isolation reading to increase along the time. For example, if it is necessary to measure a 1 km-cable which isolation is satisfactory above 15.000MΩ, then the alarm has to be programmed for that value. And when the megohmmeter's alarm starts, the operator will know that that cable has a good isolation and he can measure the next one without waiting.

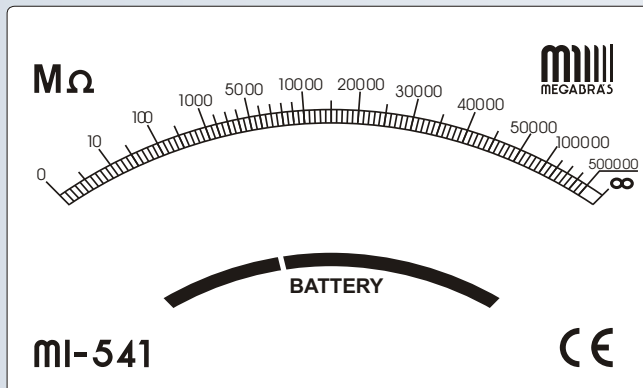
Others features are: the 1,2mA short-circuit current and the negative voltage in reference to the zero potential terminal (**R**), for humidity detection in the installations by the Evershed effect.

Because of its reduced dimensions and weight, power supply autonomy and mechanical robustness, this equipment is suitable for use in field services under rigorous ambient conditions. It is easy to transport, very simple to operate, and resistant to the severe handling conditions, that unavoidably include frequent hits, very high and low temperatures, intense vibrations during transportation by wavy roads, prolonged exposure to direct solar radiation, effects of the dust, sand and other particles drawn by the wind, etc. It all without altering the accuracy, comparable to the best laboratory instruments.

MI 541 - TECHNICAL SPECIFICATIONS

MEASUREMENT RANGE

The current-detector sensibility of this megohmmeter allows making reliable readings of high-value resistances. It will undertake insulation resistance test up to 500.000M for all testing voltages, reading turns to be clear and well suited to the service of telephone cables, as its range has enlarged sections between 1.000M and 50.000M .



NOMINAL TEST VOLTAGES D.C

100V 250V 500V

GUARD TERMINAL

Allows to measure very high value resistances, eliminating the effect of surface leakage currents.

SHORT-CIRCUIT CURRENT

The equipment has a maximum current of 1,2mA ± 0,20mA.

MEGOHMMETER ACCURACY

The MI-541 megohmmeter is a class 2 instrument, referred to the scale length.

INDICATOR INSTRUMENT

Analogue. Scale with 95 mm long mirror, with extra-fine pointer, thus avoiding parallax error. The suspension system is "Taut-Band", which allows to eliminate the attrition error.

TEST VOLTAGES STABILITY

±5%. Due to the measurement system used, the output voltage error does not affect the electric resistance value

POWER SUPPLY

Internal rechargeable Ni-Cd battery (7,5 V nominal) with intelligent battery charger.

AUTO-POWER-OFF

After 5 minutes of non-utilization, the instrument automatically switches off.

HEADPHONES OUTPUT

The headphones may be very useful when measurement is performed in the street where street noises may cover the alarm.

CABINET AND CASE

The cabinet is made of plastic material with high dielectric toughness and impact resistance. A robust case provides suitable and safe transportation of the equipment and its accessories. The megohmmeter can be operated without leaving its case.

DIMENSIONS

260 x 150 x 99mm (cabinet exterior without case).

SUPPLIED ACCESSORIES

Each megohmmeter includes:

- ✓ Set of test cables for the **-V terminal, + R terminal and Guard terminal.**
- ✓ Synthetic leather case.
- ✓ User manual.
- ✓ Battery charging with supply between 90 and 240 VAC.
- ✓ Ni-Cd rechargeable battery (included with the equipment).

ENVIRONMENTAL CONDITIONS OF OPERATION

The ambient temperature may vary between 0°C and +50°C, with humidity reaching the saturation limit, without affecting the instrument functioning.

Technical modifications reserved.



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