

# HIGH VOLTAGE MEGOHMMETER



- INSULATION TEST UP TO 2.000.000M $\Omega$
- **4 TEST VOLTAGES: 1kV,**2kV, 5kV AND 10kV
- **☑** GUARD TERMINAL
- RECHARGEABLE BATTERY
- MULTIPLE SCALES FOR PRECISION IMPROVEMENT
- PORTABLE, ACCURATE & RUGGED
- **☑** IP-54 PROTECTION

The MI-10KVe High-Voltage Megohmmeter is a truly portable device that allows the measurement of insulation resistances using test voltages up to 10kV. It employs a state-of-the-art technology for the safe measurements of insulation resistances up to  $2.000.000M\Omega$  with four test voltages: 1kV - 2kV - 5kV and 10kV. Readings are performed through an easy-to-read analogue indicator, having a broad scale.

This equipment is specially well suited to test isolation resistances in transmission lines and medium voltage distribution systems, whether aerial or underground, as it allows to perform testing with voltages near to the operational value. Besides, it is an excellent auxiliary when detecting cable failures.

In order to maximize the operator's safety, this equipment was made within a plastic cabinet of high dielectric strength, with no metallic accessible parts. A light indicator warns about dangerous voltages presence, both in the equipment and in the element under testing, and switches off only when the discharge process has finished. This megohnmmeter has a GUARD terminal that allows to avoid the effects of parasitic resistances and surface currents on the insulation resistances under test.

Due to its reduced size and weight, its power autonomy and mechanical strength, this megohmmeter is suitable for working out in the field, under severe weather conditions. It is powered with a rechargeable battery, with a charger for 110V/220V. In order to protect the equipment, the cabinet is water and dust resistant. Protection grade is IP54, and the megohmmeter is supplied with a complete kit of high voltage test leads.



# MI 10KVe - TECHNICAL SPECIFICATIONS

# **TEST VOLTAGES (T.V.)**

1 kV, 2 kV, 5 kV, 10 kV

# **MAXIMUM RESISTANCE READING**

 $200\,G\Omega$  @  $1\,kV\,T.V.$   $400\,G\Omega$  @  $2\,kV\,T.V.$   $1\,T\Omega$  @  $5\,kV\,T.V.$   $2\,T\Omega$  @  $10\,kV\,T.V.$ 

#### SHORT CIRCUIT CURRENT

1 mA

# **TEST VOLTAGES ACCURACY**

 $\pm 2\%$  of nominal test voltages on R  $\geq$  10G $\Omega$ 

# **MEGOHMMETER ACCURACY**

Class 2 (±2 % of full scale deflection)

#### INTERNAL CURRENT LIMITING RESISTANCE

 $\begin{array}{cccc} 1\,\text{M}\Omega\,\textcircled{@} & 1\,\text{kV}\,\text{T.V.} \\ 2\,\text{M}\Omega\,\textcircled{@} & 2\,\text{kV}\,\text{T.V.} \\ 5\,\text{M}\Omega\,\textcircled{@} & 5\,\text{kV}\,\text{T.V.} \\ 10\,\text{M}\Omega\,\textcircled{@} & 10\,\text{kV}\,\text{T.V.} \end{array}$ 

# **ANALOGUE INDICATOR**

Up to 98 mm scale length, taut band, with mirror

#### **ENVIRONMENTAL PROTECTION**

IP54 with closed lid.

#### **SAFETY CLASS**

In accordance with IEC 61010

# **ELECTROSTATIC IMMUNITY**

In accordance with IEC 61000-4-2

#### **ELECTRO MAGNETIC IRRADIATION IMMUNITY**

In accordance with IEC 61000-4-3

#### **POWER SUPPLY**

Internal rechargeable 12 V 7 Ah sealed lead acid battery

# **BATTERY CHARGER**

For 110-127 or 220 V.a.c. mains supply

# **OPERATING TEMPERATURE RANGE**

-5°C to 50°C

# STORAGE TEMPERATURE RANGE

-25°C to 65°C

#### **HUMIDITY RANGE**

95% RH (non condensing)

#### **WEIGHT**

Approx. 9,5 kg, including battery and accessories

#### **DIMENSIONS**

378 x 308 x 175mm

#### **INCLUDED ACCESSORIES**

- 2 Measuring test leads (1.80 m)
- 1 GUARD test lead (1.80 m)
- 1 Charger power cord
- 1 User guide
- 1 Carrying bag

### **CE MARK**

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