

# High Voltage Insulation Tester

## Mi 20KVe



Illustrative Image

### Features

- Insulation resistances up to 4 TΩ
- 4 test voltages: 5 kV - 10 kV - 15 kV - 20 kV
- Guard terminal
- Rechargeable battery
- Multiple scales for accuracy improvement
- Taut-band analog meter
- Portable, accurate & rugged
- IP65 protection

### Description

The **Mi20KVe** high-voltage insulation tester is a truly portable device that allows the measurement of insulation resistances using test voltages up to 20 kV. It employs a state-of-the-art technology for the safe measurements of insulation resistances up to 4,000,000 MΩ with four test voltages: 5 kV - 10 kV - 15 kV and 20 kV. Readings are performed through an easy-to-read analog indicator, having a broad scale.

This equipment is specially well suited to test insulation 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. 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 insulation tester 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 110 V / 220 V. In order to protect the equipment, the cabinet is water and dust resistant. Protection grade is IP65 (with closed lid), and the equipment is supplied with a complete kit of high voltage test leads.

# Technical specifications

ELECTRICAL	
<b>Test voltages</b>	5 kV - 10 kV - 15 kV - 20 kV
<b>Maximum resistance reading</b>	1 TΩ @ 5 kV 2 TΩ @ 10 kV 3 TΩ @ 15 kV 4 TΩ @ 20 kV
<b>Short circuit current</b>	500 μA ± 5 %
<b>Test voltages accuracy</b>	± 2 % of nominal test voltages on R ≥ 10 GΩ
<b>Megohmmeter accuracy</b>	Class 2 (± 2 % of full scale deflection)
<b>Internal current limiting resistance</b>	10 MΩ @ 5 kV 20 MΩ @ 10 kV 30 MΩ @ 15 kV 40 MΩ @ 20 kV
FEATURES	
<b>Analog indicator</b>	Scale with up to 98 mm length, with extra fine pointer and mirror, thus avoiding parallax errors. Taut band system.
STANDARDS	
<b>Safety class</b>	IEC 61010-1
<b>EMC</b>	IEC 61326-1
<b>Electrostatic immunity</b>	IEC 61000-4-2
<b>Electromagnetic irradiation immunity</b>	IEC 61000-4-3

ENVIRONMENTAL	
<b>IP rating</b>	IP65 (with closed lid)
<b>Operating temperature</b>	-5 °C to 50 °C
<b>Storage temperature</b>	-25 °C to 60 °C
<b>Humidity range</b>	95 % RH (non condensing)
POWER SUPPLY	
<b>Rechargeable battery</b>	Sealed lead acid battery, 12 V - 7 Ah
<b>Battery charger</b>	For 100-130 V~ or 220-240 V~ mains supply
MECHANICAL	
<b>Weight</b>	Approx. 9.8 kg, including battery and accessories
<b>Dimensions</b>	378 x 308 x 175 mm

## Included accessories

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

## 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



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