

# Electronic Insulation Tester

## Mi5500e



Illustrative image

### Features

- Insulation resistances up to 10 TΩ
- 4 test voltages: 500 V - 1 kV - 2.5 kV - 5 kV
- Guard terminal
- Rechargeable battery
- Multiple scales for accuracy improvement
- Taut-band analog meter
- High accuracy
- IP65 protection

### Description

The **Mi5500e** general purposes insulation tester is a truly portable equipment suitable to measure insulation resistances using test voltages up to 5 kV. It employs high-reliable, state-of-the-art technology for accurate measurements of ultra high insulation resistances up to 10,000,000 MΩ with four test voltages: 500 V - 1 kV - 2.5 kV - 5 kV. Readings are performed through an easy-to-read analog indicator having a broad scale.

Many experienced technicians consider that insulation measurement are best performed with analog instruments, because they get useful information from the pointer displacement along the time. This equipment is specially indicated for that people, because it is a true analog, simple to use, cost effective, insulation resistance tester.

Insulation of low and medium voltage in electrical systems, transformers, motors, cables, electro-medical equipment and installations, distribution networks, etc., the measurement are easily performed with great reliability, using this instrument.

In order to maximize the operator's safety, this equipment was made within a plastic cabinet of high breakdown strength. A light indicator warns about dangerous voltages presence both in the equipment and in the element under testing, and switches-off automatically when the discharge process has finished. This insulation tester has a GUARD terminal that allows to remove the effects of parasitic resistances and surface currents on the insulation resistances to be measured.

Due to its reduced size and weight, its power autonomy and mechanical strength, this equipment is suitable for working out in the field, under severe weather conditions. It is battery powered with an internal, rechargeable battery. In order to easily carry the cabinet, it is closed and water-, dust- and sand-resistant. It provides an IP65 protection (with closed lid) and is supplied with a complete kit of test leads.

# Technical specifications

ELECTRICAL		Mi5500e
Test voltages	500 V - 1 kV - 2.5 kV - 5 kV	
Maximum resistance reading	1 TΩ @ 0.5 kV 2 TΩ @ 1 kV 5 TΩ @ 2.5 kV 10 TΩ @ 5 kV	
Short circuit current	1 mA ± 2 %	
Test voltages accuracy	± 2 % of nominal test voltages on R ≥ 1 GΩ	
Megohmmeter accuracy	Class 2 (± 2 % of full scale deflection)	
Internal current limiting resistance	500 kΩ @ 500 V 1 MΩ @ 1 kV 2.5 MΩ @ 2.5 kV 5 MΩ @ 5 kV	
FEATURES		
Analog indicator	Class 1. Scale with up to 98 mm length, with extra fine pointer and mirror, thus avoiding parallax errors. Taut band system.	
STANDARDS		
Safety class	IEC 61010-1	
EMC	IEC 61326-1	
Electrostatic immunity	IEC 61000-4-2	
Electromagnetic irradiation immunity	IEC 61000-4-3	

ENVIRONMENTAL	
IP rating	IP65 (with closed lid)
Operating temperature	-10 °C to 50 °C
Storage temperature	-25 °C to 70 °C
Humidity range	95 % RH (non condensing)
POWER SUPPLY	
Rechargeable battery	Sealed lead acid battery, 12 V - 2.3 Ah
Battery charger	100 - 240 V~ mains supply
MECHANICAL (OF THE INSTRUMENT)	
Weight	Approx. 3.9 kg
Dimensions	274 x 250 x 124 mm

## Included accessories

- 2 Measuring test leads
- GUARD test lead
- 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



### 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  
Fax : +55 (11) 5641-9755  
E-mail : [megabras@megabras.com](mailto:megabras@megabras.com)  
Site : [www.megabras.com](http://www.megabras.com)