MEGABRAS

www.megabras.com

Digital insulation tester

MD15KVR

CAT III 600 V | LFP | 2 YEAR WARRANTY | CE

Remote control by App

Illustrative Image

Features

- Insulation resistances up to 15 TΩ
- Step voltage test, dielectric discharge and ramp test
- Remote control through an Android app
- Automated tests: Absorption index, polarization index, capacitance, leakage current and AC/DC voltmeter
- Switchable filter to remove external noise interference
- Auto-range
- Built-in printer
- USB interface
- 16,000 readings memory
- Software for data management
- Powered by rechargeable LFP battery
- IP65 protection

Description

The digital insulation tester model **MD15KVR** is MEGABRAS cutting edge insulation analyzer equipment and it is one of the most complete and sophisticated available in the international market. Its proven technology provides safe, reliable and accurate measurements of insulation resistances up to 15 TΩ, with 4 preselected test voltages, 500 V - 5 kV - 10 kV - 15 kV. Other test voltages may be selected in steps of 25 V or 500 V.

A state-of-the-art microprocessor controls the equipment operation and enables the incorporation of advanced features which make measurements easier: auto-range selection, AC/DC voltmeter, automatic measurement of absorption index, polarization index, leakage current and capacitance, timer enabling programming of test duration, configurable pass-fail test, dielectric discharge, ramp test, step voltage test, built-in printer, real time clock and calendar.

The **MD15KVR** is powered by a rechargeable LFP battery. The cabinet is strong and lightweight, easy to carry, impact-resistant and suitable to be used under severe weather conditions. Thus the megohmmeter supplies very reliable and accurate measurements both in laboratory and out in the field.

LFP Rechargeable battery

Expected lifetime

2000 charge / discharge cycles (average).

Low self-discharge

When the equipment is not in use, battery charge decreases with time at a much lower rate than other battery technologies.

Safety

In contrast to other lithium battery technologies commonly used, LFP batteries are thermally and chemically stable, significantly improving battery safety.

Remote control by Android™ App

Increased safety and comfort: Set up, start and stop tests in an even safer and more comfortable way

Automatic reports: Generate test reports directly on the App

Smartphone / tablet features: Incorporate smartphone features into your reports (photo, GPS coordinates and test location map)

- Android, Google Play and the Google Play logo are trademarks of Google LLC

Modbus® Protocol

This equipment implements the Modbus® open protocol. All configuration, real-time control, monitoring of measurements, and retrieval of test information can be performed using commercial tools such as LabVIEW® and PLCs, or even through dedicated software and own development. In this way, the entire measurement and analysis process can be automated according to the application's needs. Complete documentation with accessible and controllable parameters is provided, as well as clarification of doubts about the use through technical support.

- Modbus is a registered trademark of Schneider Electric USA, Inc.
- LabVIEW is a registered trademark of National Instruments Corporation

Technical specifications

ELECTRICAL	MD15KVR
Test voltages	500 V, 5 kV, 10 kV, 15 kV directly, one button selectable 50 V to 15 kV in 25 V or 500 V steps. DC, negative
Maximum resistance reading	15 TΩ @ 10 kV up to 15 kV 10 TΩ @ 5 kV up to 9.99 kV 5 TΩ @ 1 kV up to 4.99 kV 1 TΩ @ 525 V up to 999 V 500 GΩ @ 500 V
DC voltmeter	15 V up to 1,000 Vdc Accuracy: ± (5 % of reading + 3 digits)
AC voltmeter	15 V up to 1,000 Vrms. Accuracy: ± (5 % of reading + 3 digits)
Leakage current measurement	1 nA up to 1,500 µA Accuracy: ± (10 % of reading + 3 digits)
Capacitance measurement	50 nF up to 10 µF @ 500 V 50 nF up to 5 µF @ 1,000 V 30 nF up to 2 µF @ 2,500 V 30 nF up to 1 µF @ 5,000 V 30 nF up to 680 nF @ 10,000 V 30 nF up to 680 nF @ 15,000 V Accuracy: ± 10 % of reading ± 3 digits
Short circuit current	Max. 2 mA
Test voltage accuracy	± 3 % of nominal test voltages on 10 GΩ
Insulation tester basic accuracy	± 5 % of reading 1 MΩ to 1 TΩ @ 15 kV ± 20 % of reading 1 TΩ to 15 TΩ @ 15 kV (for lower test voltages, the upper limit will be reduced proportionally) ± 20 % of reading ± 5 digits 10 kΩ to 100 kΩ ± 10 % of reading ± 5 digits 100 kΩ to 1 MΩ
FEATURES	
Advanced features	• Dielectric discharge • Ramp test • Automated polarization index calculation • Automated dielectric absorption ratio calculation • Programmable pass-fail test • Step voltage test • 16,000 readings memory • Switchable filter to remove external noise interference
Filter function	Minimizes interference in resistance measurements
Display	Alphanumerical LCD display, 4 lines / 20 characters (Big Number)
Built-in printer	Prints elapsed time, actual voltage and resistance measured each 15 seconds
Built-in chronometer	Shows elapsed time in mm:ss format. Count starts automatically for each measurement
COMMUNICATION	
Protocol	Modbus
USB	For configuration, control and download the stored values
Bluetooth	For configuration, control and download the stored values

SOFTWARE	
Desktop (PC/Notebook)	MegaLogg 3 software: for remote control, allowing to configure, run tests and generate reports
Android (Smartphone/ Tablet)	BlueLogg app: for remote control, allowing to configure, run tests and generate reports
STANDARDS	
Safety class	IEC 61010-1
Overvoltage protection	CAT III - 600 V
EMC	IEC 61326-1
Electromagnetic irradiation immunity	IEC 61000-4-3
Electrostatic immunity	IEC 61000-4-2
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	LFP, 12 V - 6000 mAh
Battery charger	AC Adapter (12 V - 2 A)
MECHANICAL (OF THE INSTRUMENT)	
Weight	Approx. 6.3 kg
Dimensions	450 x 360 x 190 mm

Included accessories

- 2 measuring test leads
- GUARD test lead
- AC Adapter
- USB cable
- User manual
- MegaLogg 3 software (download)
- BlueLogg App (download)
- Carrying bag

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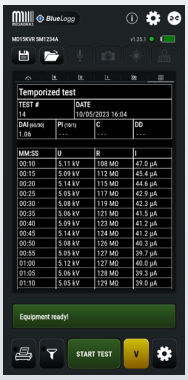
Smartphone App

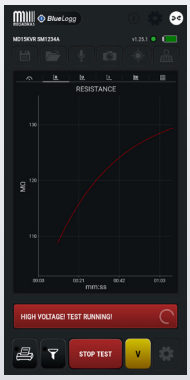
BlueLogg

Remote control by App

MEGABRAS equipment that has Bluetooth® interface can be controlled remotely via an Android™ smartphone / tablet running the BlueLogg application. Set the parameters, start / stop a test, save the data and generate reports.

- Real-time measurement
- Test details
- Test Start / Stop





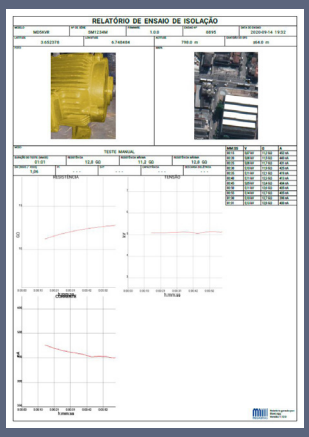
Increased safety

BlueLogg communicates with the equipment through a Bluetooth® connection, allowing remote control of the tests, further increasing user safety in tests with potential risks.

Smartphone features and automatic reporting

Record voice annotation for each measurement, generate automatic test reports directly on the App. Incorporate smartphone / tablet features into the report (photo, GPS coordinates and test location map).

- Voice annotation
- Pictures
- GPS coordinates
- Map



Using the remote control does not require Internet connection (the Internet is only necessary if you want to see a map of the test site or send reports by email).

GET IT ON Google Play

- Android, Google Play and the Google Play logo are trademarks of Google LLC
- Bluetooth is a registered trademark of the Bluetooth SIG, Inc. Worldwide

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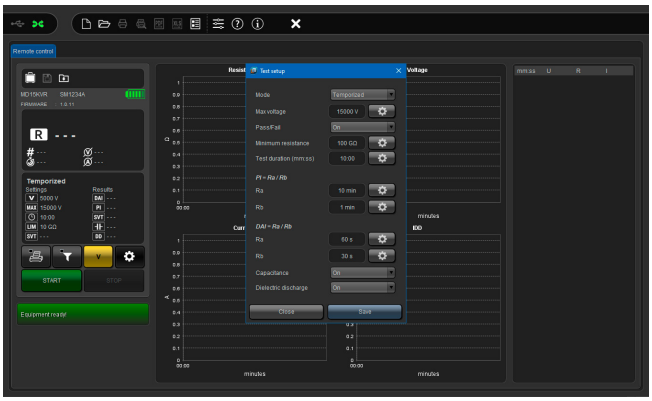
Desktop software

MegaLogg 3

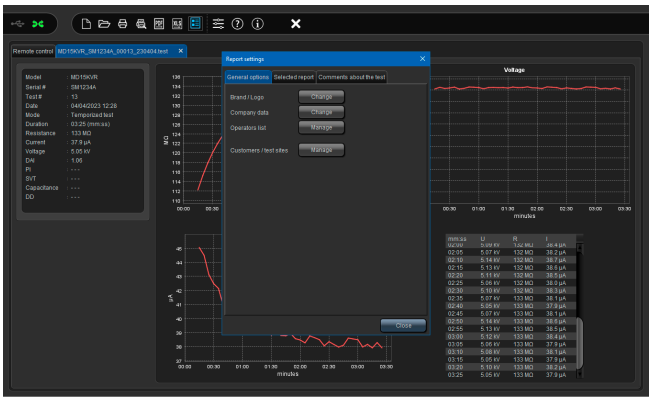
Software for remote control and reporting

MegaLogg 3 communicates with the equipment through a USB connection. Set the parameters, start / stop a test, save the data and generate reports.

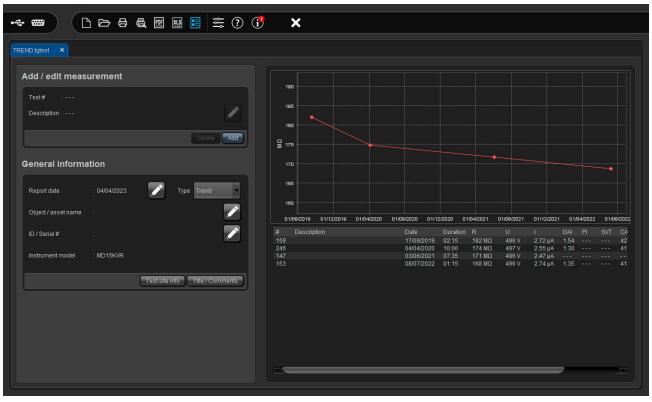
Available for download at: **www.megabras.com/megalogg**



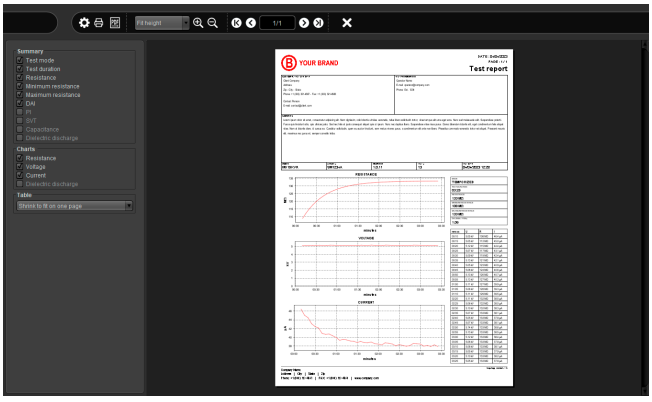
Test settings



Report settings



Trend analysis (insulation testers and micro-ohmmeters)



Report generation

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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