DVpower

Product Catalog

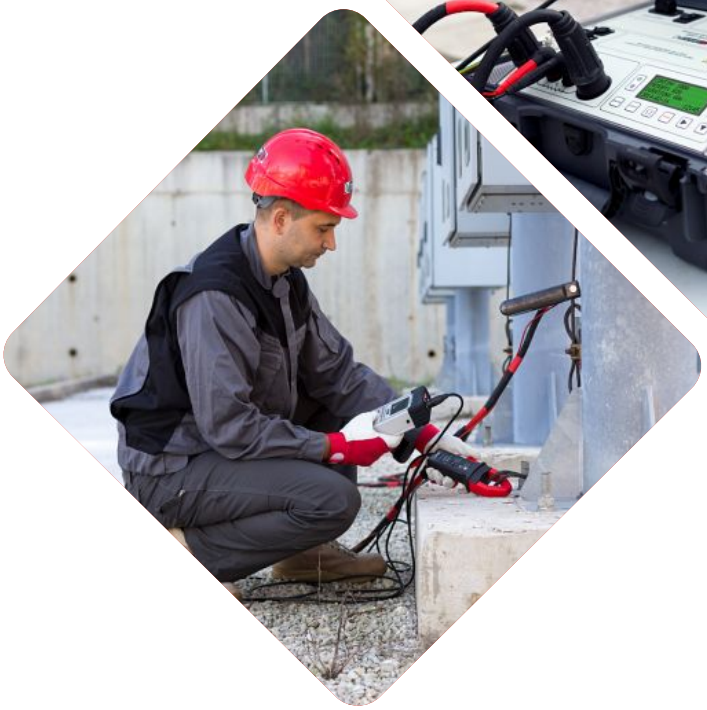
Smart test devices for reliable electric power systems

Safety

Test Equipment


10 A


RMO-EH series
10 A
Memory
Press OMEGA to measure
DVpower
Micro OhmMeter
MEM
SET
ENTER



Content

About Us

The brand “DV Power”, with headquarters in Stockholm (Sweden), has since 2000 developed light and ingenious test solutions for transformers, circuit breakers, batteries and electrical safety.

The company was founded by a group of engineers with **extensive** knowledge and experience in the power electronics technology area.

Today, our DV Power products are sold all over the world – in over 110 countries.

We remain committed to extensive research and development. Thanks to our customers who continuously provide us with valuable feedback and diverse case studies, we are able to design even better products that meet their needs.

Our success is solely based on extensive research, development and fast commercial application.

The IBEKO Power AB company is certified according to ISO 9001:2015 and ISO 14001:2015 standards.

About Safety Test Equipment

The ground grid integrity (continuity) and protective earth bonding tests are the most relevant testing methods for measuring the electrical characteristics of the substation grounding systems.

Using the DV Power’s Electrical Safety Test Equipment it is very convenient to inspect and verify the condition of the grounding grid without the need to de-energize the substation.

All specifications herein are valid at an ambient temperature of + 25 °C and standard accessories. Specifications are subject to change without notice.

Ground Grid Tester

GGT Series

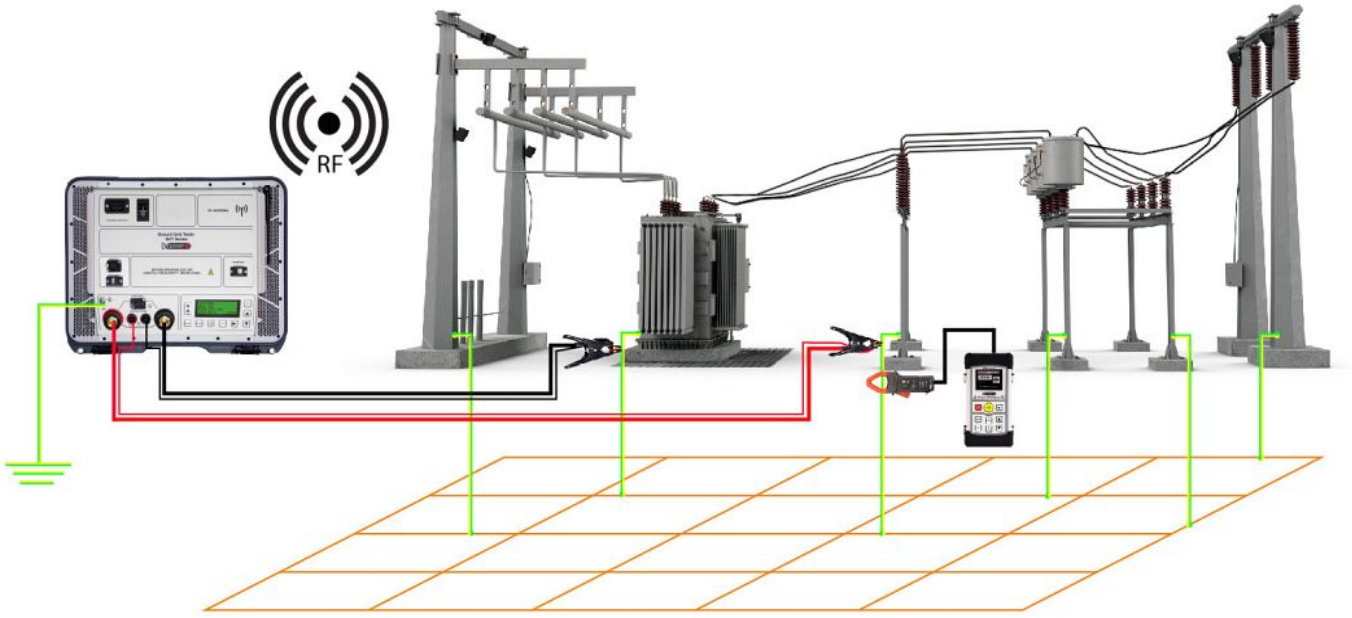
Applications

- Ground grid integrity testing according to IEEE Std. 80-2013
- Standalone or wireless control of the test by GGT-M remote module
- Grounding current flow inspection with the use of current clamps on GGT-M remote module (“down current” measurement)
- Contact resistance measurement of HV switchgears according to IEC 62271-1:2017 (current up to 300 A DC)
- Testing in both sides grounded (BSG) conditions (separate current clamp input for BSG)
- Contact resistance measurement of dead-tank circuit breakers (DTR test mode)
- Resistance change monitoring for checking quality of connections or welding joints (CONTIN mode)
- Railway joints and aircraft electrical systems bonding tests

Main Features of GGT300 (GGT300-N0-03)

- Test current range: 5 – 300 A DC
- Resistance range: 0,1 µΩ – 999,9 mΩ
- Typical accuracy: ± (0,1 % rdg + 0,1 % F.S.)
- Wireless communication between GGT series and GGT-M remote module
- Current clamp inputs for grounding current inspection

Ground grid integrity test using a high current DC source



Ground Grid Tester

Accessories

Current cables and heavy duty sense cables

Grounding cable

GGT-M remote module

Plastic cable case

Test shunt

Current clamp 30 / 300 A

Remote control with GGT-M module

Handheld Electrical Safety Testers

Micro-Ohmmeter - RMO10EH

Applications

- Resistance measurement of wind turbine lightning conductors with test currents up to 10 A
- Lightning protection systems testing installed on different objects
- Rail vehicle, lines, and rail track joints testing
- Bus bar joints, cable resistance, welding joints, disconnecting switches resistance checking, etc.
- On-board aircraft electrical systems – bonding tests
- Earthing systems continuity verification
- Oil and gas pipelines bonding

Main Features of RMO10EH (RMO10EH-N-02)

- Test currents: 1 mA – 10 A DC
- Measuring range: 0,1 μΩ – 3 kΩ
- Typical accuracy: ± (0,2 % rdg + 0,2 % FS)
- Response time: less than 3 seconds
- Battery operated (Li-Po 1 300 mAh battery)
- Built-in memory: 10 000 results
- Test cables: up to 200 m (on reel) with duplex probes (with trigger button) or clamps
- Dimensions: 226 mm x 116 mm x 50 mm (8.9 in x 4.5 in x 1.9 in)
- Weight: 0,95 kg (2.1 lbs)

Accessories

Cable reel (up to 200 meters)

Flexible duplex probes

Cable with SCT clamps (black)

Cable with SCT clamps (red)

Cable bag

Test shunt

Wind Turbines Testing

Wind turbines – lightning protection systems testing

Due to the increase in height of the wind turbines and exposed location, the risk of direct lightning strikes and corresponding damage becomes considerable. To protect the wind turbines, the structure must have a very low resistance path to the ground. It begins with the receptors placed on the blades and continues with internal conductors that lead the path into the ground.

Wind turbines – lightning protection systems testing using RMO-EH Series

Wind Turbine Foundation Grounding Testing

Before the concrete casting and cabling works of the wind farms, the continuity of the grounding conductors should be checked. Usually, those are the 50 mm^2 copper-based conductors, interconnected between the inner terminal lugs and outside grounding electrodes. The resistance values of the connections are mostly less than 5 mΩ. For such an application, we recommend our GGT series.

Wind turbine foundation

Low Resistance Ohmmeter

Handheld Ohmmeter - RMO10H

Applications

- Cables and wire resistance and cable connections checking
- Switches, busbars, relays, welding joints resistance measurement
- Lightning protection and protective bonding systems verification
- Railway lines, vehicles, and rail track joints testing
- Quality control during manufacturing of components and panels
- Bonds and joints checking in aircraft manufacturing industry

Main Features of RMO10H (RMO10H0-N-02)

- Regulated test current up to 10 A DC
- Best resolution: 0,1 μΩ
- Battery-powered / Internal memory
- Typical accuracy ± (0,2 % rdg + 0,2 % FS)
- Measuring range 1 μΩ – 3 kΩ
- Pass / fail assessment
- Dimensions: 226 mm x 116 mm x 50 mm (8.9 in x 4.5 in x 1.9 in)
- Extremely lightweight – 0,95 kg (2.1 lbs)

Accessories

Test lead set with flexible duplex probes (one with trigger button)

Test lead set with small TTA clamps

Test lead extension

Transport bag

Battery Ground Fault Detector

BGF Series

Applications

- Detection of unacceptable contact of the battery's energized conductor with metal/chassis
- Reliable detection and localization of cell-to-ground short-circuit
- Insulation failure detection of batteries
- Alarms when the ground fault is detected

Main Features of BGF (BGF100-NN-00)

- Max voltage measurement range ± 600 V DC
- Handheld and simple to use (1-click to test)
- Automatically measures, time stamps, and stores results
- Easy transfer of measured data to software
- Bluetooth communication with PC
- Dimensions: 223 mm x 116 mm x 50 mm (8.77 in x 4.56 in x 2.1 in)
- Weight: 0,7 kg (1.5 lbs)

Accessories

Sense cables 2 x 10 m with banana plugs

Dolphin clip (red and black)

Grounding cable set 1 x 5 m with dolphin clip

Sense cables with test probe

Transport bag

Power supply adapter

Protective Earth (Bonding) Resistance Meters

RMO-E Series

Applications

- Testing the protective bonding (grounding) of equipment according to IEC 61010-1:2001
- Switchgear resistance measurement according to IEC 62271-1
- Resistance change monitoring (CONTIN mode)
- Contact quality checking

Main Features of RMO100E (RMO100E-N-01)

- Test currents: 1 – 100 A DC
- Resistance range: 0,1 µΩ – 25 Ω
- Typical accuracy: ± (0,1 % rdg + 0,1 % F.S.)
- Resolution: up to 0,1 µΩ

Accessories

Current & sense cables with TTA clamps

Current cables with battery (B1) clamps

Current cables with alligator (A3) clamps

Extension cables

Sense cables with alligator clamps (A2)

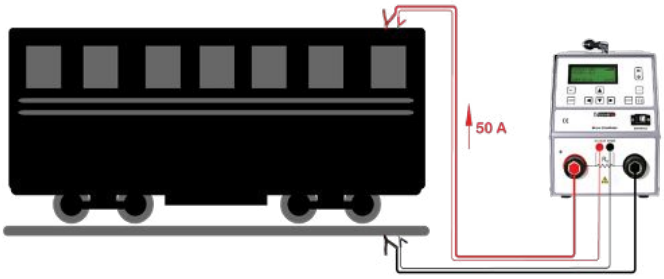
Extension sense cables

Protective Earth (Bonding) Resistance Meters

Rail Vehicle Body Resistance Measurement

In accordance with the IEC 61991 standard, the resistance between the vehicle body and the rails must not exceed 50 mΩ for locomotives and passenger trains and 150 mΩ for wagons. This is to prevent dangerous voltages and avoid serious injuries. The resistance values are to be measured with a constant current of 50 A, where the applied voltage should not exceed 50 V. The measurement should be carried out with a clean wheel / rail interface. For this application, the RMO-E and GGT devices are recommended.

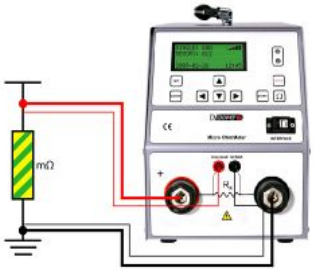
Rail vehicle body resistance measurement



Ground Grid Bonding Test

The ground grid bonds should be inspected during the construction stage to avoid possible earth resistance rising to an unacceptable level. The continuity test with GGT or RMO-E micro-ohmmeters will indicate whether some of the many joints have slight weaknesses. In this case, bad connections that might not be visually seen will be detected. A low resistance path to earth helps to protect signaling and other low voltage equipment from being damaged by lightning strikes.

Bonding resistance measurement



Postal Address

IBEKO Power AB
Lejonstigen 9
181 32 Lidingö
Sweden

DV Power Inc. (US office)

311 Altamonte Commerce Blvd, Unit 1618
Altamonte Springs, FL 32714
USA

E-mail

sales@dv-power.com
support@dv-power.com
USAsupport@dv-power.com

Support Contact

Local Support (Scandinavia)
+46 8 731 78 24

Germany
+49 175 101 01 78

Asia, Africa, Australia, Europe and Middle East Support
+46 70 092 50 00

Latin America Support
+46 70 009 21 46

USA and Canada (Toll Free number)
+1 800 599 8113

DV Power Inc. (US office)
+1 407 714 1722

WhatsApp
+46 70 092 50 00