







LRM-10™

10 Amp high precision micro-ohmmeter

LRM-10[™] Contact Resistance measurement kit

The LRM- 10^{TM} is a lightweight and portable micro-ohmmeter designed to measure very low resistances from 0.01 $\mu\Omega$ to 200 Ω . It is the most accurate in its category.

ADVANTAGES

- Much lighter and handier than other equipment in its category
- Shock resistant, it is suitable for all types of applications: work site or laboratory
- The LCD display is equipped with a backlight to allow work in any conditions
- Weak current injection for applications that require small measurement contacts
- Many accessories are available for your application such as exothermic welding (Cadweld®), measurements on very small surfaces, etc...

The LRM-10 ™ uses a four cable measurement method which consists of a Current injecting channels (+I, -I) and a Voltage sensing channel (+V, -V). The instrument accurately measures the current injection while simultaneously senses the voltage drop across the DUT, the resistance is then calculated. The current injection measurement along with high impedance voltage sensing input channel, eliminates the error induced by test lead resistances. The instrument's microprocessor eliminates gaps, noises & parasite voltages influence on the resistance measurements. Thanks to its unique filtering system, the LRM-10 ™ can be used in spite of the presence of intense magnetic fields.

OPERATION

Electrical interconnections, such as sockets, switches, circuit breaker contacts, cable joints, battery inter-cell connections and other connection devices, are affected by factors like residual contact force, vibrations, and corrosion. These factors generally succeed in compromising the integrity of contact interfaces, and eventually lead to degradation and failure of all electrical connections. The time-to-failure varies widely depending on the connection types and environment. Failure is always preceded by a significant increase in contact resistance at the electrical interfaces.

APPLICATIONS

- Circuit breakers contact resistance
- Battery strap connection resistance
- Switches contacts resistance
- Tap Changer contact resistance
- Cable/Bus bar inspection
- Power fuses inspection
- Ground bonding inspection
- Flectrical sockets resistance
- Lightning rod integrity
- Railway bond resistance

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TECHNICAL SPECIFICATIONS	
Measuring range	$0.01\mu\Omega$ to 200Ω
Display	LCD display 128 x 64
Current	10A, 250mA, 5mA
Resolution	$0.01\mu\Omega$
Power supply	Six AA NiMH batteries
Autonomy	> 12 000 measurements at 10A > 10 000 measurements for the other currents
Operation temperature	-20°C to 50°C (-4°F to 122°F)
Charging temperature	0°C to 50°C (32°F to 122°F)
Storage temperature	-40°C to 50°C (-40°F to 122°F)
Humidity	0 to 95% non-condensing
Weight	0.86 kg (1.9 lbs)
Dimensions	203 x 114 x 51mm (8 x 4.5 x 2 inches)

HIGHLIGHTS

- Uses the four point measuring method
- Automatic current adjustment from 5mA to 10A
- Automatic stop mechanism of the instrument after 2 min. in idle mode
- Automatic stop mechanism of the backlighting system after 30 sec
- The LCD (Liquid Crystal Display) displays the results in letters that are easy to read
- A set of standard connecting cables with alligator clips comes with the instrument

INCLUDED:

- LRM-10[™] instrument
- Set of standard cables and clips
- \bullet LRM-4015-HD $^{\scriptscriptstyle\mathsf{TM}}$, Double Hands probes
- Nylon Mesh Protective bag
- Battery charger
- Rechargeable batteries
- User Manual
- Calibration certificate





DRM-4012™ Cadweld probe



LRM-4015HD™

Included double hand probes



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