

Electrical Conductivity Meter for non-magnetic metals DC-11M

- **Non-destructive Eddy Currents test**
- **Direct measurement in %IACS units**
- **Portable micro-controlled instrument**
- **Automatic calibration**
- **Holds last measurement**



The conductivity meter model DC-11M by Zappitec is a versatile instrument to measure electrical conductivity which includes latest technology advances to offer a tool that's easy to use and doesn't require special training.



The DC-11M is a portable equipment to measure electrical conductivity in non-magnetic metals.

Through a simple non-destructive test, it measures alloys and non-ferrous metals with speed and precision.

No complicated calculations or measurements are needed.

Simply place the sensor tip on a flat surface of the part to be measured. The conductivity reading will immediately appear on the equipment's display.

The Electrical Conductivity is an important property of materials useful in several situations.

Some examples:

- Electrical conductivity determination in high current conductors, connectors, electrodes, terminals and short circuit rings
- Purity determination in some metals (Copper, Aluminium, Gold, Zinc among others)
- Approximate analysis of certain binary alloys (for example Sn-Pb)
- Phosphorus determination in copper
- Control of thermal treatment in Aluminum and Copper-Zirconium alloys
- Monitoring solid precipitation processes in Cu-Cr alloys
- Homogeneity evaluation in cast, forged, sintered or stamped parts
- Segregation verifications in cast metals
- Detects surface inclusions or cracking
- Easy alloy separation by composition or thermal treatment



Calibration is straightforward with the three standards supplied with the equipment, assuring precision and repeatability in conductivity determinations.

Consult us about the standards that are best suited for your specific application. We can supply standards of brass, bronze, copper and copper alloys.

The conductivity meter is an essential tool for the quality control of raw materials and finished product in foundries, connector and electrical contact manufacturers.

Zappitec uses standards from Boeing Standards Company, recognized by the National Bureau of Standards, USA.



Features

- ✓ Micro-controlled instrument, light, portable and rugged, conditioned in high resistance protective case with handle
- ✓ 3 conductivity standards included
- ✓ Instantaneous measurements in %IACS units (optionally in MS/m by special order)
- ✓ Sensors with ceramic protection for extended durability and abrasion resistance
- ✓ 10mm diameter sensors allow measurement in small surfaces
- ✓ Easy to operate without special training
- ✓ Powered by common 9V alkaline cells providing about 40 hours of continuous operation
- ✓ 4 minutes auto shut-off
- ✓ Lift off compensation system allows measurement through oxides and thin coatings

Specifications

- 3 ½ digits LCD screen
- Measurement range: 5 to 110 %IACS
- Precision: $\pm 1\%$
- Resolution: 0.1 %IACS
- Operating frequency: 60KHz
- Minimum sample thickness:
 - 0.8mm for Copper
 - 1.0mm for Aluminum
 - 2.5mm for Lead
- Minimum measurement diameter: 10mm
- Operating temperature: 10 to 35 °C
- Power supply: 9V alkaline battery
- Weight with case: approximately 1800g
- Dimension with case: 250x280x120 mm

