ResTest Drum

The solution for simple linear resistance measurement directly on the drum

DESCRIPTION

The ResTest Drum was designed, together with a Swiss partner, for high degree of accuracy to measure very low resistance values. It is battery operated with a lithium-ion battery that allows over 2000 test measurements without recharging. With its specifically designed clamp for the cable industry, it allows resistance measurement directly on the production or delivery drums.

It is a high precision, fully automatic, microprocessor based system. This system is designed for highly accurate on-site readings with laboratory precision.

It applies a preset current level, selected by the user. The measurement results are automatically displayed within few seconds on the easy-to-read liquid crystal display and can be stored or printed out. The ResTest Drum is a lightweight system that comes complete with its own rugged waterproof field case.

KEY FEATURES

- User Friendly
  - Large LCD display with back light
  - Built in panel-mount printer
  - Single push button operation, response time less than 2 seconds

- High Accuracy
  - Automatic measurements of low resistance from 0.1µΩ ... 400kΩ
  - Pure filtered DC power source for the highest accuracy readings
  - Cable length correction for Cable Manufacturer

- Easy to operate
  - Automatic current reversal mode for highest accuracy
  - Single or continuous measurements with automatic data storage
  - User can preset a number of tests, at various timed intervals, for automatic data storage
  - Microprocessor based system with internal storage for over 2000 test results
  - Lightweight and portable

- Fast measurements
  - Printing and storage of test results while the test system is measuring
  - Complete automatic calibration system and system diagnostics
## TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Measuring parameters</th>
<th>Ohmmeter</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current Range</strong></td>
<td><strong>Measuring Range</strong></td>
</tr>
<tr>
<td>10 A F/R*</td>
<td>0.1 μΩ   ... 40 mΩ</td>
</tr>
<tr>
<td>10 A</td>
<td>1 μΩ     ... 40 mΩ</td>
</tr>
<tr>
<td>1 A F/R*</td>
<td>01 μΩ    ... 1 Ω</td>
</tr>
<tr>
<td>1 A</td>
<td>10 μΩ    ... 1 Ω</td>
</tr>
<tr>
<td>0.1 A</td>
<td>100 μΩ   ... 10 Ω</td>
</tr>
<tr>
<td>10 mA</td>
<td>1 mΩ     ... 400 Ω</td>
</tr>
<tr>
<td>1 mA</td>
<td>10 mΩ    ... 400 kΩ</td>
</tr>
</tbody>
</table>

* F/R = automatic Forward / Reverse current measurements

Resistance Range: 0.1μΩ to 400kΩ

Test Current user selectable: 10, 1, 0.1, 0.01, 0.001 A DC

**Overall accuracy:**
The overall accuracy of the measurement depends on the measurement conditions. With typical estimated values for temperature accuracy of 0.3°C (corresponding to 0.12% accuracy of the material resistivity for Copper and Aluminium) and length accuracy of 0.2%, the overall accuracy of the measurement is 0.3%.

**Maximum conductor Ø** 50 mm / 2”

**Environmental Conditions**

<table>
<thead>
<tr>
<th></th>
<th>Operating</th>
<th>Storage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature:</td>
<td>-10°C to +60°C</td>
<td>-20°C to +70°C</td>
</tr>
</tbody>
</table>

**Supply voltage**

Lithium Battery power source, runs for more than 5 hours continuously at 10 amps

**Interface**

Standard Centronics (parallel) interface and RS232 (serial) interface.

**Components**

- Special Drum Cable Clamps (2x3m)
- TP X1, External temperature probe
- Instruction Manual
- 2 Paper Rolls for printer

**Dimensions**

Size L: 410 mm (16.1”) W: 337 mm (13.3”) H: 178 mm (7”)

**Weight**

Less than 5.9kg (13Lbs.)

**Article No**

33.1000.0001.0