

Code: UT-511

 INSULATION RESISTANCE METER **UT-511** UNI-T


The meter UT-511 is a specialized device designed to measure insulation resistance in the range from  $0.1\text{M}\Omega$  to  $10\text{G}\Omega$ .

**Attention!** High voltage is required to correctly measure the insulation resistance value. During the measurement one should be particularly careful and strictly follow the recommendations included in the device manual.

Resistance measurement:	<ul style="list-style-type: none"> <li>Test voltage 100 V : <math>0.1\text{ M}\Omega</math> ... <math>500\text{ M}\Omega</math></li> <li>Test voltage 250 V : <math>0.5\text{ M}\Omega</math> ... <math>1.99\text{ G}\Omega</math></li> <li>Test voltage 500 V : <math>1\text{ M}\Omega</math> ... <math>3.99\text{ G}\Omega</math></li> <li>Test voltage 1000 V : <math>2\text{ M}\Omega</math> ... <math>10\text{ G}\Omega</math></li> </ul>
Measuring accuracy:	<ul style="list-style-type: none"> <li><math>100\text{ k}\Omega</math> ... <math>100\text{ M}\Omega \pm (3\% + 5)</math></li> <li><math>&gt; 100\text{ M}\Omega \pm (5\% + 5)</math></li> </ul>
Open circuit voltage:	Test voltage + 20 %
Test current:	<ul style="list-style-type: none"> <li><math>1\text{ mA}</math> ... <math>1.2\text{ mA}</math> @ <math>100\text{ k}\Omega</math> / <math>100\text{ V}</math></li> <li><math>1\text{ mA}</math> ... <math>1.2\text{ mA}</math> @ <math>250\text{ k}\Omega</math> / <math>250\text{ V}</math></li> <li><math>1\text{ mA}</math> ... <math>1.2\text{ mA}</math> @ <math>500\text{ k}\Omega</math> / <math>500\text{ V}</math></li> <li><math>1\text{ mA}</math> ... <math>1.2\text{ mA}</math> @ <math>1\text{ M}\Omega</math> / <math>1000\text{ V}</math></li> </ul>
Short-circuit current:	~ $2\text{ mA}$
AC voltage measurement:	$30\text{ V}$ ... $750\text{ V} \pm (2\% + 3)$ @ $1\text{ V}$
DC voltage measurement:	$30\text{ V}$ ... $1000\text{ V} \pm (2\% + 3)$ @ $1\text{ V}$
Automatic change of measuring ranges:	✓
RS-232:	—
USB:	—





## DATA SHEET

Main features:	<ul style="list-style-type: none"><li>• Bargraf,</li><li>• Possibility to perform a comparative measurement,</li><li>• Warning of using high voltage during the measurement,</li><li>• Polarization index measurement (PI),</li><li>• Maximum duration of the measurement: 30 min,</li><li>• Save to 18 measurement results in the device memory,</li><li>• Large, readable LCD display with backlight,</li><li>• Low battery level alarm,</li><li>• Aesthetic and solid construction</li></ul>
Operation temp.:	0 °C ... 40 °C
Permissible relative humidity:	≤ 85 % (non-condensing)
Power supply:	<ul style="list-style-type: none"><li>• 8 x 1.5V, type R14/LR14 battery - included,</li><li>• 15 V DC / 600 mA (power adapter not included)</li></ul>
Weight:	0.92 kg
Dimensions:	202 x 155 x 91 mm
Manufacturer / Brand:	UNI-T
Guarantee:	2 years