

# MANUAL

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## TOM 100 TERA – Ohmmeter

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L.C. TERA – Ohmmeter for surface and down conductor measurement

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## Product description

With the *TERA*-Ohmmeter TOM 100 you get a Low Cost measure instrument to measure the surface- and the specific volume resistance.

The measuring electrode is a plastic plate with 100mm x 100m and two Aluminum sheets. On this are two conductive rubber strips with 10cm length in a distance from 10 cm. There is also a lead weight with 2kg included.

With the TOM 100 you get reproducible measurements. If you want measure conform to the standard, than use our *TERA* – Ohm Meter TOM 600.

The measuring value is from  $10^3$  Ohm up to  $10^{12}$  Ohm.

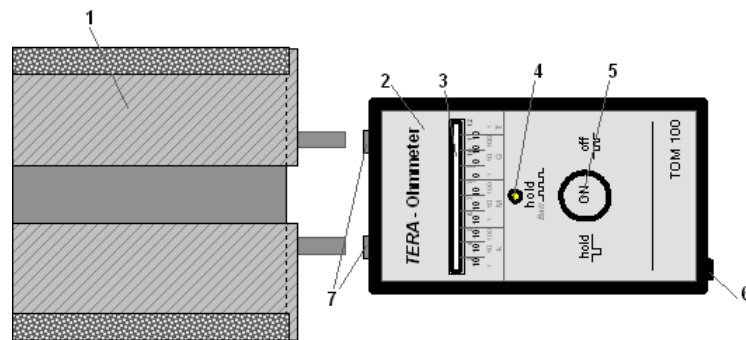
The result is displayed with 10 colored LED's.

The measuring voltage is 100V !

The internal resistance of the TOM 100 is 100kOhm, that's why you don't need a lower measuring voltage !

Optionally you can get a simple instrument to measure the relative humidity and air temperature.

## Legend



- |                       |                   |
|-----------------------|-------------------|
| 1 Measuring electrode | 5 function/on key |
| 2 TOM 100             | 6 Grounding plug  |
| 3 Display 10 x LED    | 7 Input plugs.    |
| 4 Hold LED            |                   |

Since the electrode is a square with 100mm x 10mm the measured value is the specific square resistor per m<sup>2</sup>.

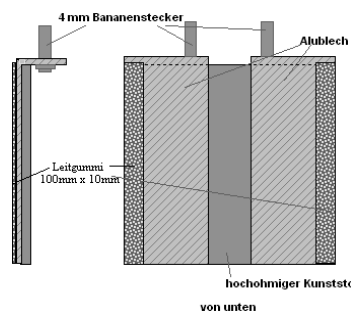
To get a reproducible pressing on the surface place the lead weight with 2kg on the electrode. This weight together with the conductive rubber strips enables a reproducible measurement. Optional we offer a L.C. Relative humidity and temperature measuring instruments to add these values to the resistor measure.

## Specifications

### Instrument

<b>Dimensions (L x B x H):</b>	70mm x 122mm x 26mm
<b>Weight :</b>	130g
<b>Measuring Voltage:</b>	100 V
<b>Battery:</b>	9V NiMH-Battery
<b>Working time:</b>	10h

### Electrode



<b>Dimensions (L x B):</b>	110mm x 100mm
<b>Distance between the rubbers:</b>	100mm

### Weight

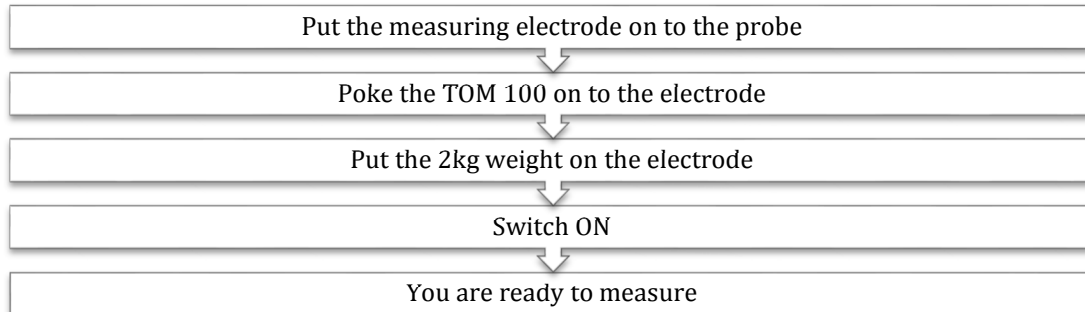
<b>Dimensions (L x B x H):</b>	Appr. 100mm x 100mm x 35mm
<b>Material:</b>	Isolated lead
<b>Weight:</b>	2 kg

## Operating Instruction

### Preparation of the unit

To use the measurement do the following steps:

#### Surface Resistance :



#### Specific volume resistance :

- Connect the TOM 100 only to one plug of the electrode.
- Connect the other one to ground.
- Switch on the unit.

You also can use the instrument without the electrode with the included cords.

#### Display :

LED 10 <sup>3</sup> flashes	$R = < 1 \times 10^3$
LED 10 <sup>n</sup> shines alone	$R = 0,75 \dots 1,25 \times 10^n$
LED 10 <sup>n-1</sup> and 10 <sup>n</sup> shines	$R = 0,25 \dots 0,75 \times 10^n$
LED 10 <sup>12</sup> flashes	$R = > 10^{12}$

#### Example:

10 <sup>5</sup> and 10 <sup>6</sup> shines	$R = 0,25 \dots 0,75 \times 10^6$ (250kΩ.... 750kΩ)
10 <sup>6</sup> shines alone	$R = 0,75 \dots 1,25 \times 10^6$ (750kΩ.... 1,25MΩ)

### Scope of delivery

- Measuring unit
- 9V-Alkaline-Battery
- Measuring electrode
- Weight 2kg
- 2 pce. Silicon cable 1,5m
- Manual
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### Optional



Temperature and relative humidity Instrument TFA 100