

Metriso 3000 – TEST-KIT

(Part No.: 7100.3000.MK)

- Suitable for resistance to ground and point-to-point resistance measurements according to IEC 61340-4-1 Ed. 2.0 and IEC 61340-2-3
- Suitable for measuring the electrical resistance of footwear and flooring in combination with a person according to IEC 61340-4-5.
- Integrated data logger for 50.000 test values and USB communication port for data transmission
- Clip-on humidity and temperature sensors
- Display language changeable to German / English / French / Spanish
- Report generating software "ETC" for data acquisition, recording and managing. A complete test report can be generated and archived.
- Menu driven measurement with ESD test point selection and automatic limit value allocation.
- A barcode scanner can be used to identify test points before testing
- Low ohmic measurement range 1Ω - $10k\Omega$ to measure the resistance of grounded objects
- Built-in $10\text{ M}\Omega$ test resistor to check the instrument before use
- Includes two Probes Model 850 according to IEC 61340-4-1 Ed. 2.0 / IEC 61340-2-3 and a handheld probe according to IEC 61340-4-5



Clip-on humidity and temperature sensor



Probe Model 850



Handheld probe Model 45

Technical Information

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Technical data:

Test voltage: DC 10V, 100V, 500V
Test range:
Resistance: 1Ω to 1,2TΩ
Temperature: -10°C to +70°C
Humidity: 10% to 90%
Operation: Battery operated or with rechargeable batteries
Probes: 2 x Model 850
1 x Handheld probe Model 45
Size: 225 x 130 x 140 mm (WxHxD)
Weight (complete kit): 9 kg

Supplied with:

- Digital high resistance tester Metriso 3000
- USB cable
- Software "ETC" on CD-ROM
- Humidity and temperature sensor
- 2 probes Model 850 acc. to IEC 61340-4-1 /2-3
- 1 handheld probe Model 45 acc. to IEC 61340-4-5
- Connecting cables
- Conductive carrying case
- User's manual in German / English / French

Technical specifications

| Meas. Qty. | U _M ² | Range | Measuring Range | Resolution | Intrinsic Error ¹ | Measuring Uncertainty | Overload Capacity |
|------------------|---|-------------------|---------------------|------------|-------------------------------|-----------------------|-------------------|
| R _{ESD} | 10 V ³ 100 V 500 V 3 3 | 10 kΩ | 1.0 kΩ ... 9.99 kΩ | 0.01 k | ±(5% rdg. + 10 d) | ±(7% rdg. + 10d) | 500 V AC/DC TRMS |
| | | 100 kΩ | 10.0 kΩ ... 99.9 kΩ | 0.1 k | ±(5% rdg. + 3 d) ⁵ | ±(7% rdg. + 3 d) | |
| | | 1 MΩ ⁴ | 100 kΩ ... 999 kΩ | 1 k | ±(5% rdg. + 3 d) | ±(7% rdg. + 3 d) | |
| | | 10 MΩ | 1.00 MΩ ... 9.99 MΩ | 10 k | ±(5% rdg. + 3 d) | ±(7% rdg. + 3 d) | |
| | | 100 MΩ | 10.0 MΩ ... 99.9 MΩ | 100 k | ±(5% rdg. + 3 d) | ±(7% rdg. + 3 d) | |
| | | 1 GΩ | 100 MΩ ... 999 MΩ | 1 M | ±(5% rdg. + 3 d) | ±(7% rdg. + 3 d) | |
| | | 10 GΩ | 1.00 GΩ ... 9.99 GΩ | 10 M | ±(5% rdg. + 3 d) | ±(10% rdg. + 3 d) | |
| | | 100 GΩ | 10.0 GΩ ... 99.9 GΩ | 100 M | ±(8% rdg. + 3 d) | ±(10% rdg. + 3 d) | |
| | | 1 TΩ | 100 GΩ ... 999 GΩ | 1 G | ±(25% rdg. + 5 d) | ±(50% rdg. + 20 d) | |
| U AC/DC | | 100 V | 10.0 V ... 99.9 V | 0.1 V | ±(2.5% rdg. + 3 d) | ±(5% rdg. + 3 d) | 500 V AC/DC TRMS |
| | | 500 V | 100 V ... 499 V | 1 V | | | |
| R | Display range as of 01.0 Ω | 100 Ω | 1.0 ... 99.9 Ω | 0.1 Ω | ±(2.5% rdg. + 3 d) | ±(5% rdg. + 3 d) | 500 V AC/DC TRMS |
| | | 1 kΩ | 100 ... 999 Ω | 1 Ω | | | |
| | | 10 kΩ | 1.00 ... 9.99 kΩ | 10 Ω | | | |

Power supply:

The instrument is supplied including the batteries (8 x 1,5 V mignon cells)

Product video link:

<http://www.warmbier.com/videos/>



- ▶ 1 year limited warranty
- ▶ Recommended calibration interval: 2 years

We believe all the information in these pages including technical data to be reliable. However we make no warranties expressed or implied and assume no liability regarding any use of this information.

V0619

Technical Information

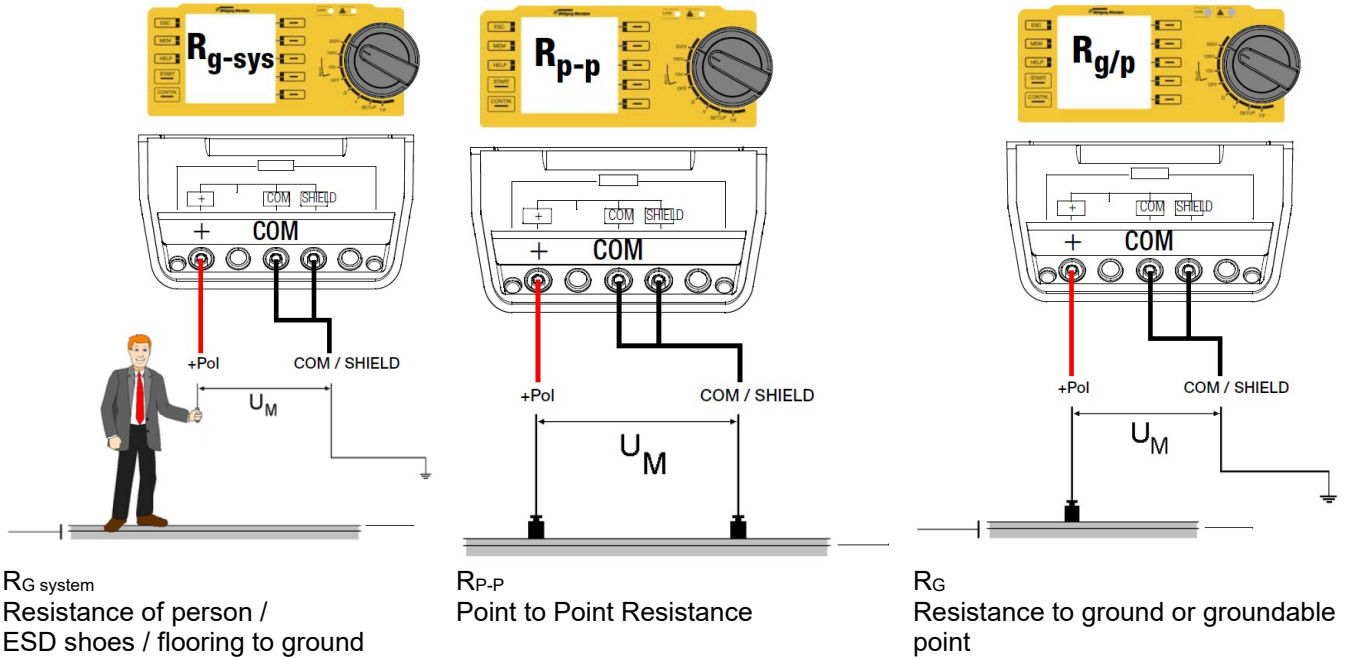
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Possible measurements with the MetrISO 3000 Test-Kit



Accessories (optional):



Part No.
7100.3000.SC.2D
1D/2D Barcode Scanner



Part No.
7100.3000.Z502H
Battery-Pack MetrISO3000
8 LSD-NiMH rechargeable



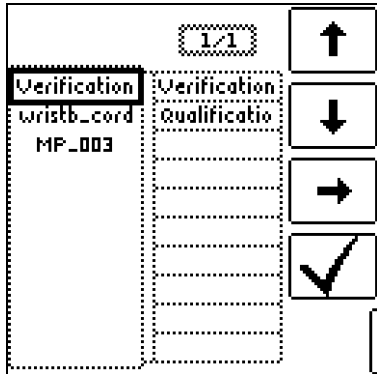
Part No.
7100.2000.TR50
50m Cable reel with unroll handle for floor measurement



Part No.
7100.3000.Z502R
Charger for battery pack
MetrISO3000 (EU/US/UK)

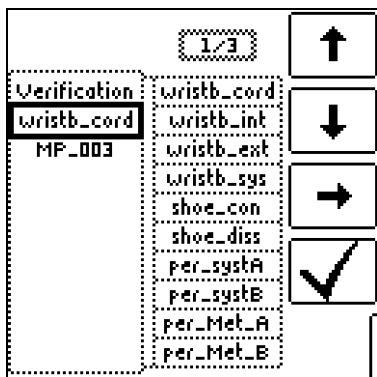


Menu driven Measurement



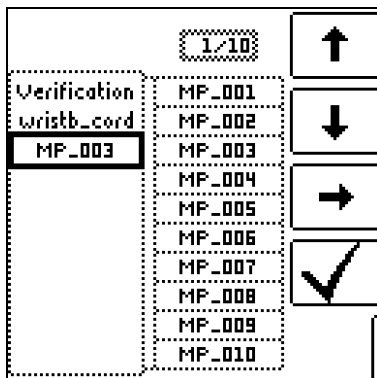
1. Measurement type selection

Select *Qualification* or *Verification* for the ESD control element



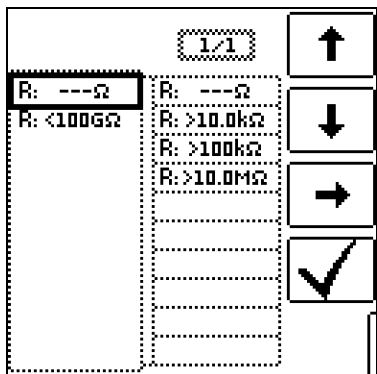
2. ESD control element selection

Example: Wrist strap.
The upper limits are already predefined in the instrument.



3. Number of measurements

Enter the amount of measurements.



4. Lower Limit

If required, a *lower* limit value can be entered.



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ETC - Report Assistant



Report no.
20180616093939

Test report

| Master data | | | |
|------------------------------------|--|--|---------------------|
| Customer no. | C0000001 | Date of measureme | 16.06.2018 |
| Customer | Fa. Mustermann Elektronik AG Untere Giesswiesen 21 78247 Hilzingen | Order no. | 20180616093939 |
| Representative | Max Meier | Contractor | Warmbier |
| | | Tester | Pfeifle |
| Test objects | | | |
| Test object/-location | ESD areas | Object description | different buildings |
| | | Part number | |
| | | Charge | |
| | | Number of units | 2 |
| Testing | | | |
| Beginning of testing | 31.07.2017 | End of testing | 31.07.2017 |
| Performed in accordance wit | IEC 61340-2-3 | Reason for testing | Verification |
| Instruments used | Metriso 3000 T/F Sensor Z550B | Wolfgang Warmbier;Metriso 3000;XE1556;01.11.00 | |
| Signature | | | |
| Representative | | Tester | |
| Hilzingen | 16.06.2018 | Hilzingen | 16.06.2018 |
| <i>Location</i> | <i>Date</i> | <i>Location</i> | <i>Date</i> |
| | <i>Signature</i> | | <i>Signature</i> |

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| Measurements | | | | | |
|-----------------------|--------------|--------|---------------------|--------------|--------|
| Building | | | | T | H |
| B0000002 Building_A34 | | | | 24.1 °C | 60.3 % |
| E0000005 ESD Chair 23 | | | | | |
| Measurement type | Control item | MP | Measured value | Limit values | Passed |
| RES D | chair Rg | MP_001 | 429 MOhm 98.7 V | < 1 GOhm | Yes |
| RES D | chair Rg | MP_002 | 245 MOhm 98.7 V | < 1 GOhm | Yes |
| RES D | chair Rg | MP_003 | 355 MOhm 98.7 V | < 1 GOhm | Yes |
| E0000006 ESD Chair 34 | | | | | |
| Measurement type | Control item | MP | Measured value | Limit values | Passed |
| RES D | chair Rg | MP_001 | 85.2 MOhm 98.7 V | < 1 GOhm | Yes |
| RES D | chair Rg | MP_002 | 78.2 MOhm 98.7 V | < 1 GOhm | Yes |
| RES D | chair Rg | MP_003 | 76.2 MOhm 98.7 V | < 1 GOhm | Yes |
| E0000007 ESD Chair 54 | | | | | |
| Measurement type | Control item | MP | Measured value | Limit values | Passed |
| RES D | chair Rg | MP_001 | 5.3 GOhm 98.7 V | < 1 GOhm | No |
| RES D | chair Rg | MP_002 | 3.39 GOhm 98.7 V | < 1 GOhm | No |
| RES D | chair Rg | MP_003 | 4.71 GOhm 98.7 V | < 1 GOhm | No |