

Metriso 3000 – TEST-KIT

(Part No.: 7100.3000.MK.870)

- 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 870 according to IEC 61340-4-1 Ed. 2.0 / IEC 61340-2-3 and a handheld probe according to IEC 61340-4-5



Probe Model 870



Clip-on humidity and temperature sensor



Extension for Elektrode 870



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 870
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 870 acc. to IEC 61340-4-1 /2-3
- 1 Extension for Probe 870
- 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, battery life expectancy:

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.

V0618

Technical Information

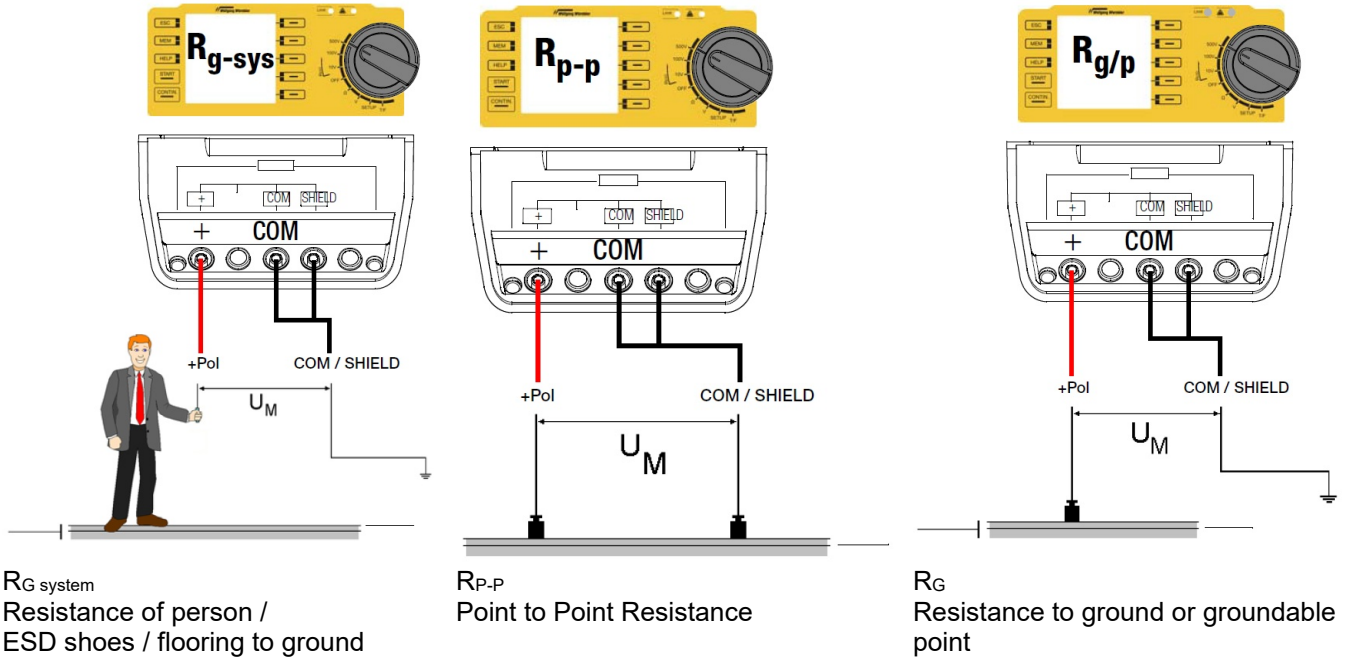
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Possible measurements with the Metriso 3000 Test-Kit



R_G system
Resistance of person /
ESD shoes / flooring to ground

R_{p-p}
Point to Point Resistance

R_G
Resistance to ground or groundable
point

Accessories (optional):



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



Part No.
7100.3000.Z502H
Battery-Pack Metriso3000
8 LSD-NiMH rechargeable



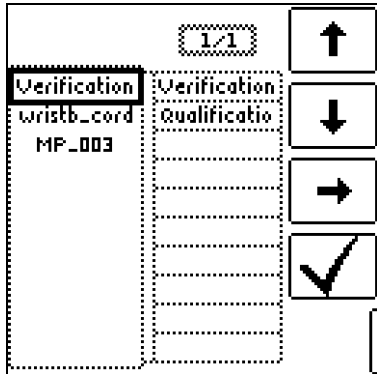
Part No.
7100.2000.TR50
50m Cable reel with unroll
handle for floor measurement



Part No.
7100.3000.Z502R
Charger for battery pack
Metriso3000 (EU/US/UK)

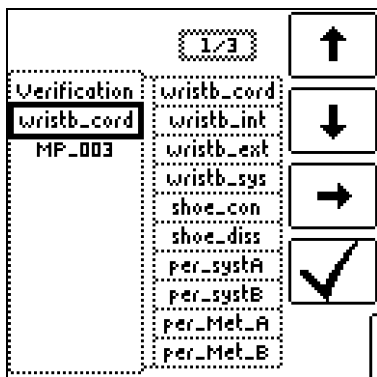


Menu driven Measurement



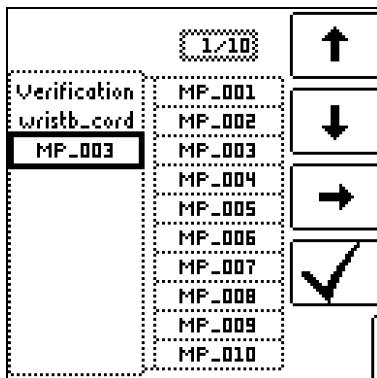
1. Measurement type selection

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



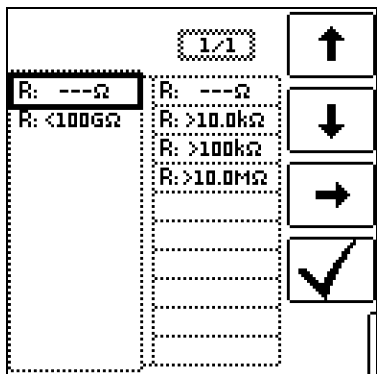
2. ESD control element selection

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