Safety Tester **GM-810**



Measurement and test device for testing electrical safety in accordance with IEC 60601 / IEC 62353 / IEC 61010 / EN 50678 / EN 50699 MPBetreibV / BetrSichV / DGUV Vorschrift 3

- ☑ PC operation
- ☑ automatic or multimeter measurement
- ☑ robust light metal case
- ☑ 25 A PE measure in accordance with IEC 60601
- ☑ perfect for mobile working with laptop

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Management System ISO 9001:2015
TÜVRheinland ZERTIFIZIERT
www.tuv.com ID 0910095181

Technical Data

Mains voltage:	230 V / 115 V ac, ± 10 %, 50/60 Hz
Output power:	maximum 3,5 kW
Protection class:	1
Overvoltage category:	II
Environmental temperature:	+ 5 - + 40 °C
Storage temperature:	- 10 - + 50 °C
Measurement range	
Voltage measurement:	0 - 300 V ac (input resistance: 10 MOhm)
Resolution:	0,3 V
Earth conductor resistance:	0,00 - 40 Ohm (test voltage 6 V ac, max. 25 A / max. 5 A)
Resolution:	10 mOhm
Insulation resistance:	0,2 - 100 MOhm (test voltage 500 V dc, max. 3,5 mA)
Resolution:	0,1 – 2 MOhm
Leakage current:	0 - 10 mA or 0 – 20 mA
Resistance:	1000 Ohm ± 1 % or 2000 Ohm ± 1 %
Resolution:	1 µA or 0,2 µA
Differential current:	10 µA - 20000 µA
Resolution:	1 µA or 0,2 µA
Output power:	1 – 3,5 kW
Resolution:	1 W
Current:	0 – 16 A
Resolution:	10 mA
Mechanical data:	light weight metal case IP20, 343 x 88 x 220 mm (W x H x D), approx. 5,5 kg
Interface:	1 x USB-B for PC connection 1 x USB-A

Intrinsic uncertainty

Measurement	Range	Error
Voltage:	0 - 300 V ac	± 0,3 V or ± 1 % of measurement value
Earth conductor resistance:	0,00 – 4,9 Ohm 5 – 40 Ohm	± 0,03 Ohm or ± 5 % of measurement value
Insulation resistance:	0,2 – 4,9 MOhm 5 – 100 MOhm	± 0,2 MOhm or ± 5 % of measurement value
Leakage current:	0 – 99 µA 100 – 20000 µA	± 2 µA or ± 1 % of measurement value
Differential current:	10 – 20000 µA	± 2 µA or ± 1 % of measurement value
Output power:	1 – 3,5 kW	± 2 W or ± 5 % of measurement value
Current:	0 – 16 A	± 50 mA or ± 2,5 % of measurement value

The specified intrinsic uncertainties relate to the respective measuring circuit. The operating uncertainty at the test object connections is ± 5%. The displayed value is normalized according to the documentation / standard requirement, if required.

Test object connection:	1 x outlet CEE 7/4 1 x installable rubber connector C14 12 x safety sockets (4mm) for applied part, groupable into 3 groups 1 x safety socket 4mm for test probe 1 x safety socket 4mm for PE
Accessories:	1 x measurement line with test probe, 1 m 1 x test adapter PA-X for self-diagnosis test 1 x USB cable 1 x power cord 16 A

GM-810 is a measurement and test device for testing the electrical safety of medical technical and other technical appliances. The measurements and tests correspond to the conditions of IEC 60601, IEC 62353, IEC 61010, EN 50678 and EN 50699.

To control the GM-810 a 100% compatible IBM computer with industrial standards is needed. The communication between PC and GM-810 follows through an USB interface. You can use the device to perform individual single measurements or even run automatic tests.

The control will be available among other things for the software such as

ACTIMED, WAVE, NOVA.

With GM-810 the following tests are realized:

- - line voltage measurement
- output current measurement
- output power measurement
- leakage current measurement
- equivalent leakage current measurement
- earth conductor resistance measurement
- isolation resistance measurement
- differential current measurement

The GM-810 can be used to perform separate measurement of direct- and alternating currents (ac/dc measurement, RMS) of the patient leakage current and patient auxiliary current in accordance to IEC 60601.

(Technical modifications and errors reserved. 11/2026)

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