



Measurement and test device for testing electrical safety in accordance with EN 50678 / EN 50699 / BetrSichV / DGUV Vorschrift 3



- ☑ PC operation
- ☑ automatic or multimeter-operating
- ☑ robust light metal casing
- ☑ max. 25 A / 5 A earth conductor measurement
- ☑ great use combined with a Laptop,
great use during transport / in transit to stay mobile

Technical Data

Line voltage:	230 V / 115 V ac, $\pm 10\%$, 50 / 60 Hz	Leakage current:	0 - 99 μ A	$\pm 2\ \mu$ A or
Output power:	maximum 3,5 kW		100 - 20000 μ A	$\pm 1\%$ of measurement value
Protection class:	1	Differential current:	10 - 20000 μ A	$\pm 2\ \mu$ A or
Overvoltage category:	II			$\pm 1\%$ of measurement value
Environmental temperature:	+ 5 - + 40 °C	Output power:	1 - 3,5 kW	$\pm 2\ \text{W}$ or
Storage temperature:	- 10 - + 50 °C			$\pm 5\%$ of measurement value
Measurement range:		Current:	0 - 16 A	$\pm 50\ \text{mA}$ or
Voltages measurement:	0 - 300 V ac (input resistance: 10 MOhm)			$\pm 2,5\%$ of measurement value
Discrimination:	0,3 V	The specified intrinsic uncertainties relate to the respective measuring circuit. The operating uncertainty at the test object connections is $\pm 5\%$. The displayed value is normalized according to the documentation / standard requirement, if required.		
Earth conductor resistance:	0,00 - 40 Ohm (test voltage 6 V ac, max. 25 A / 5 A)			
Discrimination:	10 mOhm	Interface:	1 x USB for PC connection	
Insulation resistance:	0,2 - 100 MOhm (test voltage 500 V dc, max. 3,5 mA)		1 x RS-232 for PC connection	
Discrimination:	0,1 - 2 MOhm		1 x RS-232 for more testing devices	
Leakage current:	0 - 10 mA / 0 - 20 mA	Test object connections:	1 x outlet CEE 7/4	
Resistance:	2000 Ohm $\pm 1\%$		1 x safety socket 4mm for test probe	
Discrimination:	1 μ A or 0,2 μ A		1 x safety socket 4 mm for PE	
Differential current:	10 μ A - 20000 μ A		1 x installable rubber connector C14 for measurement of resistance of protective earth conductor	
Discrimination:	1 μ A or 0,2 μ A	Attachments:	1 x measurement line with test probe, 1 m length	
Output power:	1 - 3,5 kW		1 x test adapter PA-X for self-diagnosis test	
Discrimination:	1 W		1 x USB cable	
Current:	0 - 16 A		1 x power cord 16 A	
Discrimination:	10 mA	Mechanical data:	Light metal casing IP20	
Intrinsic uncertainty			343 x 88 x 280 mm (W x H x D), ca. 5 kg	
Measurement	Range	Error		
Voltage:	0 - 300 V ac	$\pm 0,3\ \text{V}$ or $\pm 1\%$ of measurement value		
Earth conductor resistance:	0,00 - 4,9 Ohm	$\pm 0,03\ \text{Ohm}$ or		
	5 - 40 Ohm	$\pm 5\%$ of measurement value		
Insulation resistance:	0,2 - 4,9 MOhm or 5 - 100 MOhm	$\pm 0,2\ \text{MOhm}$ or $\pm 5\%$ of measurement value		

GM-710 is a measurement and test device for testing the electrical safety of electrical devices. The measurements and tests correspond to the conditions of EN 50678 and EN 50699.

To control the GM-710, a 100% compatible IBM computer with industrial standards is needed. The communication between PC and GM-710 takes place by USB / serial interface (RS-232). The activation occurs by having ACTIMED installed, the PC-Software which is needed.

With GM-710 the following tests are realized:

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

With the GM-710 it is possible to perform single measurements, as well as automated measurements.

For the test object, all plug-in points can easily be found on the front board of the device.

(Technical modifications and errors reserved. 09/2026)