



**The GS Testing Module for testing electrical safety in accordance with  
IEC 62353 / IEC 61010 and VDE 0701-0702  
MPG / MPBetreibV / BetrSichV / DGUV Vorschrift 3**

- for checking the electrical safety in accordance to the MPG
- for checking the electrical safety on general electrical devices
- single measurement and automatic operation
- direct and differential current measurement

# Technical Data

Line voltage:	85 – 253 V ac, 50 / 60 Hz	Earth conductor resistance:	0,00 – 4,9 Ohm 5 - 40 Ohm	± 0,03 Ohm or ± 5 % of measurement value
Output power:	maximal 3,5 kW	Insulation resistance:	0,2 – 4,9 MOhm or 5 - 100 MOhm	± 0,2 MOhm or ± 5 % of measurement value
Protection class:	1	Leakage current:	0 - 99 µA 100 - 20000 µA	± 2 µA or ± 1 % of measurement value
Intrinsic uncertainty		Difference current:	10 - 20000 µA	± 2 µA or ± 1 % of measurement value
Voltages measurement:	0 - 300 V ac (Entrance resistance: 10 MOhm)	Output power:	1 – 3,5 kW	± 2 W or ± 5 % of measurement value
Discrimination:	0,3 V	Current:	0 – 16 A	± 50 mA or ± 2,5 % of measurement value
Earth conductor resistance:	0,00 - 40 Ohm (test voltage 6 V ac, max. 5 A)			
Discrimination:	10 m Ohm			
Insulation resistance:	0,2 - 100 MOhm (test voltage 500 V dc, max. 3,5 mA)			
Discrimination:	0,1 – 2 MOhm			
Leakage current:	0 - 10 mA or 0 – 20 mA			
Resistance:	1000 Ohm ± 1 % or 2000 Ohm ± 1 %			
Discrimination:	1 µA or 0,2 µA			
Difference current:	10 µA - 20000 µA			
Discrimination:	1 µA or 0,2 µA			
Output power:	1 – 3,5 kW			
Discrimination:	1 W			
Current:	0 – 16 A			
Discrimination:	10 mA			
Measurement	range	error		
Voltage:	0 - 300 V ac	± 0,3 V or 1 % 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 VDE test socket 12 x safety sockets (4mm) for applied part 1 x safety socket (4mm) for test probe 1 x safety socket (4mm) for test PE	
		Accessories:	1 x measurement line with test probe 1 x Test adapter PA-X for self-diagnosis test	
		Mechanical data:	portable metal case Dimensions: 128 x 142 x 240 mm (W x H x D) Weight: approx. 3,4 kg	

The GS testing module SAFE is a measuring device for checking the electrical safety of technical medical devices and other consumers in domestic and industrial environments.

The GS testing module SAFE tests in accordance with the standards IEC 62353, VDE 0701-0702 and IEC 61010.

The GS-X basic unit V4 or V5 and a PC are required for testing with this plug-in module. A measurement can be taken using the PC software. The measured values can then be automatically determined, evaluated and stored.

Within the turn-on procedure the SAFE module automatically tests the main power supply and optically signals the result with a flashing LED.

1 x red – 115 V TN- system	2 x red – 230 V TN- system
3 x red – 115 V IT-system	4 x red – 230 V IT-system

(Technical modifications and errors reserved. 12/2020)

## Connection elements:

All connection sockets are found on the front plate of the module, where they are easily accessible. Next to the test plug for the test object there are three groups of connection sockets for the patient connections. Each group can be individually tested with different tolerance values.