



**The GS Testing Module for testing electrical safety in accordance with  
IEC 62353 / IEC 61010 / EN 50678 / EN 50699  
MPBetreibV / BetrSichV / DGUV Vorschrift 3**

- for checking the electrical safety
- 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	± 0,03 Ohm or
Output power:	maximal 3,5 kW		5 – 40 Ohm	± 5 %
Protection class:	1	Insulation resistance:	0,2 – 4,9 MOhm or 5 – 100 MOhm	of measurement value ± 0,2 MOhm or ± 5 %
Measurement range		Leakage current:	0 – 99 µA 100 – 20000 µA	of measurement value ± 2 µA or ± 1 %
Voltages measurement:	0 - 300 V ac (Entrance resistance: 10 MΩ)	Differential current:	10 – 20000 µA	of measurement value ± 2 µA or ± 1 %
Discrimination:	0,3 V	Output power:	1 – 3,5 kW	of measurement value ± 2 W or ± 5 %
Earth conductor resistance:	0,00 – 40 Ohm (test voltage 6 V ac, max. 5 A)	Current:	0 – 16 A	of measurement value ± 50 mA or ± 2,5 %
Discrimination:	10 m Ohm			of measurement value
Insulation resistance:	0,2 – 100 MΩ (test voltage 500 V dc, max. 3,5 mA)			
Discrimination:	0,1 – 2 MΩ			
Leakage current:	0 – 10 mA or 0 – 20 mA			
Resistance:	1000 Ohm ± 1 % or 2000 Ohm ± 1 %			
Discrimination:	1 µA or 0,2 µA			
Differential 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		Test object connection:	1 x VDE test socket	
Voltage:	range		12 x safety sockets (4mm) for applied part	
	0 - 300 V ac	error	1 x safety socket (4mm) for test probe	
		± 0,3 V or	1 x safety socket (4mm) for test PE	
		1 % of measurement value		
		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, EN 50678, EN 50699 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 signalizes 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

## **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 tested individually with different tolerance values.

(The specified measuring accuracy refers to the measuring element. Technical modifications and errors reserved. 09/2020)