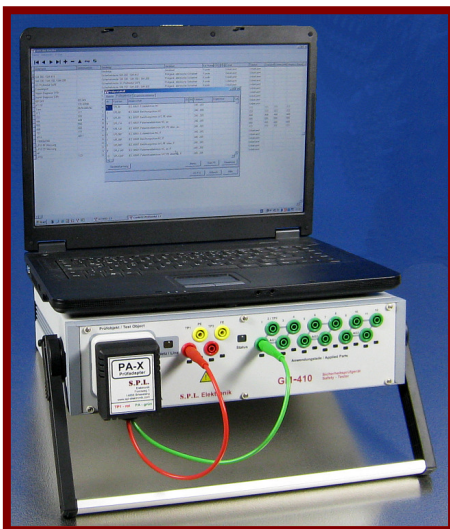




**Testing system for testing electrical safety in accordance with
IEC 60601 / IEC 62353 / IEC 61010 / VDE 0701-0702
MPG / MPBetreibV / BetrSichV / DGUV Vorschrift 3**



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

Technical Data

Line 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		
Voltages measurement:	0 - 300 V ac (input resistance: 10 MOhm)	
Discrimination:	0,3 V	
Earth conductor resistance:	0,00 - 40 Ohm (test voltage 6 V ac, max. 25 A / max. 5 A)	
Discrimination:	10 mOhm	
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	
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	± 0,03 Ohm or
Insulation resistance:	0,2 - 4,9 MOhm or 5 - 100 MOhm	± 0,2 MOhm or ± 5 % of measurement value

Leakage current:	0 - 99 µA	± 2 µA or ± 1 % of measurement value
	100 - 20000 µA	
Difference 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.

Interface:	1 x USB for PC connection 1 x RS-232 for PC-connection 1 x RS-232 for further test appliances
Test object connection:	1 x protected ground VDE test socket 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 TP3 1 x safety socket 4mm for PE 1 x safety socket 4mm for FE
Accessories:	1 x measurement line with test probe, 1 m length 1 x test adapter PA-X for self-diagnosis test 1 x USB cable 1 x power cord 16 A
Mechanical data:	light weight metal case IP20 290 x 340 x 87 mm, approx 6 kg

GM-410 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 (VDE 0751), IEC 61010 and VDE 0701-0702.

To control the GM-410 a 100% compatible IBM computer with industrial standards is needed. The communication between PC and GM-410 follows through the RS-232 serial interface and/or an USB interface. The control will be available among other things for the software such as

- ACTIMED
- vFM
- MtData.

With GM-410 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

(Technical modifications and errors reserved. 12/2020)