HF-Module HF

The GS Testing Module for function tests of
HF Surgical Equipment in accordance to IEC 60601-2-2

- ☑ HF - power measurement
- ☑ HF - voltage measurement
- ☑ HF - current measurement
- ☑ HF - leakage current measurement
- ☑ Neutral electrode test
- ☑ test load resistances 10 Ohm, 25 – 6375 Ohm in steps of 25 Ohm

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Technical Data

Measuring range	
HF-current TRMS:	0 - 5000 mA
Discrimination:	0,1 mA
HF- output power: (in dependence of R_L)	1 - 500 Watt
HF-leakage current:	0 - 250 mA
Discrimination:	0,1 mA
Neutral electrode test:	0 - 1000 Ohm
Bandwidth:	0,3 - 10 MHz
Measuring principle:	thermal electric converter
Load resistors:	10 Ohm 25 Ohm - 6375 Ohm In steps of 25 Ohm
Swing in time:	< 3 sec
Output power:	500 W: 1 min on, 5 min off permanent: max. 200 W at 25°C environmental temperature (50 – 800 Ohm)

Measurement	Range	Error
HF output power:	0 - 500 W	± 1 W or ± 5 % of value
HF leakage current:	0 - 250 mA	± 2 mA ± 5 % of value
HF-current:	0 - 5000 mA	± 2 mA ± 5 % of value
Load resistors:	10 Ohm, 25 - 6375 Ohm	± 3 %
Accessories:	1 x Adapter for potential balance	
Mechanical data:	portable metal case	
Dimensions:	142 x 130 x 253 mm (W x H x D)	
Weight:	approx. 3,0 kg	

Description of functions:

The GS Testing Module HF, serves to test the function of HF Surgical Equipment. In accordance to the instructions of the manufacturer of such surgical devices, the user can measure the HF output power and the HF leakage current given on a load resistor. The load resistor is adjustable to 10 Ohm and from 25 – 6375 Ohm in steps of 25 Ohm. The test parameters for testing can be laid down in a test instruction and can be automatically tested with a PC. This makes it possible to reduce the time for testing. In the use as multi-functional test device, the measured values will be directly displayed. For example:

HF output power
HF leakage current
HF current, RMS
HF voltage, RMS

HF output power:

During the measurement of power, firstly the software sets the prescribed load resistance to 10 Ohm or from 25 Ohm to 6375 Ohm in 25 Ohm steps. The HF output power can then be sent to the HF and is measured. An automatic range switcher takes care of the optimal control of the RMS-converter. The RMS converter, based on a thermal conversion principle and together with the driver module, is designed for frequencies up to 10 MHz.

HF leakage current:

The high-frequency leakage current is measured through a 200 Ohm resistor. For this test, the load resistor is adjustable.

(The specified measuring accuracy refers to the measuring element. Technical modifications and errors reserved. 09/2025)

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