



**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

# Technical Data

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			range	error
Measuring range				
HF-current TRMS:	0 - 5000 mA			
Discrimination:	0,1 mA	HF output power:	0 - 500 W	± 1 W or ± 2,5 % of value
HF- output power RMS: (in dependence of $R_L$ )	1 - 500 Watt	HF leakage current:	0 - 250 mA	± 2 mA ± 5 % of value
HF-leakage current:	0 - 250 mA	HF-current TRMS:	0 - 5000 mA	± 2 mA ± 4 % of value
Discrimination:	0,1 mA	Load resistors:	10 Ohm, 25 - 6375 Ohm	± 3 %
Neutral electrode test:	0 - 1000 Ohm	Accessories:	1 x Adapter for potential balance	
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)			

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## Description of functions:

HF, the GS Testing Module, 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. Then the HF output power can be send 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. 09/2020)

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