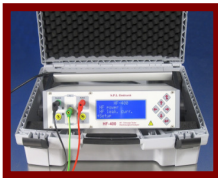




## Electrosurgical Analyzer for function tests of HF Surgical Equipment in accordance to IEC 60601-2-2

- menu guided cursor operation or PC-operation
- 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
- 6 selectable pre-resistances
- user specific language setting
- option - suit case



# Technical Data

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Line voltage:	83 - 264 V ac, 50 /60 Hz	Measurement	range	error
Power consumption:	50 VA	HF output power:	0 - 500 W	± 1 W or
Class:	1			± 2,5 % of value
Environmental temperature:	+ 5 - + 40°C	HF leakage current:	0 - 250 mA	± 2 mA
Storage temperature:	- 10 - + 50°C			± 5 % of value
Measuring ranges:		HF-current RMS:	0 - 5000 mA	± 2 mA or
HF-current RMS:	0 - 5000 mA	HF-current Peak:	0 - 5000 mA	± 4 % of value
HF-current Peak:	0 - 5000 mA			± 2 mA or
Discrimination:	0,1 mA	Load resistors:	10 Ohm,	± 4 % of value
HF- output power RMS: (in dependence of RL)	0 - 500 Watt		25 - 6375 Ohm	± 3 %
Crest Faktor: (V2)	1 - 10 (bei > 1000 mA)	Keyboard:	6 key foil keyboard	
HF-leakage current:	0 - 250 mA	Display:	4 x 20 char LCD B/W display	
Discrimination:	0,1 mA	Interfaces:	1 x USB for PC interface	
Neutral electrode test:	0 - 1000 Ohm		1 x RS-232 for PC interface	
			1 x RS-232 for additional test devices	
Bandwidth	0,3 - 10 MHz	Testing plugs:	2 x safety plugs 4 mm for HF power	
Measuring principle:	thermal electric converter		2 x safety plugs 4 mm for HF leakage current	
Load resistors:	10 Ohm		1 x safety plug 4 mm for PE	
	25 Ohm - 6375 Ohm		1 x potential balance	
	In steps of 25 Ohm	Accessories:	1 x potential balance cable	
			1 x RS-232 interface cable	
Swing in time:	< 3 sec	Selectable languages:	german, english, french, polish	
Output power:	500 W: 1 min on, 5 min off permanent: max. 200 W at 25°C environmental temperature (50 – 800 Ohm)		spanish, italian, portuguese, turkish	
Mechanical data:	light way metal case IP20			
Dimensions:	340 x 87 x 290 mm (W x H x D)			
Weight:	approx. 3,8 kg			

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## Description of functions:

HF-400 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 a 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-400 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 load resistor. For this test, the load resistor is adjustable.

(We reserve the right to make technical changes without prior notice 01/2019)

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