

High Frequency Analysers

27 MHz to 10 GHz



Accessories
price incl. VAT

HF Analysers

List price incl. 19% VAT
List price net (excl. 19% VAT)

Frequency range (basic device incl. antenna)

800 MHz - 2.5 GHz
800 MHz - 3.3 GHz (2.5 - 3.3 GHz with increased tolerance)
27 MHz - 2.5 GHz (HFE35C), 27 MHz - 3.3 GHz (HFE59B)
2.4 - 6 GHz (e.g. WLAN, WiMAX)
2.4 - 10 GHz (e.g. WLAN, WiMAX, radar)

Measuring ranges

10 - 19,990 $\mu\text{W}/\text{m}^2$ ⁽¹⁾
1 - 1,999 $\mu\text{W}/\text{m}^2$
0.1 - 199.9 $\mu\text{W}/\text{m}^2$ ⁽¹⁾
0.01 - 19.99 $\mu\text{W}/\text{m}^2$

Recommended value for
sleeping places ("no abnormality")
according to SBM'08:
0.1 $\mu\text{W}/\text{m}^2$

Attenuator **DG20** (adapter for 100 x stronger radiation)

Attenuator **DG20_G10** (like DG20 with improved frequency linearity and DC feedthrough)

Preamplifier **HV10_27G3** (adapter for 10 x lower radiation)

Preamplifier **HV20_2400G10** (adapter for 100 x lower radiation)

Accuracy

Basic accuracy incl. linearity tolerance (incl. antenna tolerance; UBB27 allows increased tolerance below 100 MHz)

Zero deviation (in digits, always only concerning the last digit)

Antenna, logarithmic-periodic within the scope of supply. Several patents granted or pending.

Improved resistance against ground influence, minimum deviation, from HF58B upwards with LED control

Compensated antenna (HFW: 2.4 GHz high pass filter integrated)

Direction-finding antenna **LAT10** with very narrow directional pattern up to 1.9 GHz (not suitable for quantitative measure)

UBB27_G3: active, quasi-isotropic ultra broad bandwidth antenna from 27 MHz to 3.3 GHz (no log-per.)

LC display: 3.5 digits in $\mu\text{W}/\text{m}^2$

Features for acoustic analysis

Sound signal proportional to the field strength (Piezo buzzer)

Sound signal proportional to the frequency for an acoustic analysis of pulsed radiation
(i.e.: amplitude modulation radiation) (40 mm membrane loudspeaker)

Volume regulation for loudspeaker / earphones

(1) In combination with the new NFA-series, a display in V/m is also possible

	Basic Analysis					Professional Analysis				
	HF32D	HF35C	HF38B	HFE35C	HFW35C	HF58B	HF58B-r	HF59B	HFE59B	HFW59B
price incl. VAT	199,50	299,50	499,50	749,40	392,70	849,00	994,60	1.166,20	1.844,50	1.166,20
	167,65	251,68	419,75	629,75	330,00	713,45	835,80	980,00	1.550,00	980,00
	✓	✓								
			✓			✓	✓	✓*		
				✓					✓	
					✓					✓
	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Attenuator DG20 (adapter for 100 x stronger radiation)	58.55	opt.	opt.	opt.						
Attenuator DG20_G10 (like DG20 with improved frequency linearity and DC feedthrough)	99.6				opt.	opt.	opt.	opt.	✓	opt.
Preamplifier HV10_27G3 (adapter for 10 x lower radiation)	149,70				opt.	opt.	opt.	opt.	✓	opt.
Preamplifier HV20_2400G10 (adapter for 100 x lower radiation)	149,70					opt.	opt.	opt.	opt.	opt.
Basic accuracy incl. linearity tolerance (incl. antenna tolerance; UBB27 allows increased tolerance below 100 MHz)	+/-6dB	+/-6dB	+/-6dB	+/-6dB	+/-6dB	+/-4.5dB	+/-4.5dB	+/-3dB	+/-3dB	+/-3dB
Zero deviation (in digits, always only concerning the last digit)	+/- 9	+/- 9	+/- 7	+/- 9	+/- 9	+/- 5	+/- 5	+/- 5	+/- 5	+/- 5
Antenna, logarithmic-periodic within the scope of supply. Several patents granted or pending.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Improved resistance against ground influence, minimum deviation, from HF58B upwards with LED control			✓			✓	✓	✓	✓	
Compensated antenna (HFW: 2.4 GHz high pass filter integrated)				✓	✓			✓	✓	✓
Direction-finding antenna LAT10 with very narrow directional pattern up to 1.9 GHz (not suitable for quantitative measure)	89.25	opt.	opt.	opt.	opt.	opt.	opt.	opt.	opt.	
UBB27_G3: active, quasi-isotropic ultra broad bandwidth antenna from 27 MHz to 3.3 GHz (no log-per.)	445,00				✓			opt.	✓	
LC display: 3.5 digits in $\mu\text{W}/\text{m}^2$	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Features for acoustic analysis	✓									
Sound signal proportional to the field strength (Piezo buzzer)	✓									
Sound signal proportional to the frequency for an acoustic analysis of pulsed radiation (i.e.: amplitude modulation radiation) (40 mm membrane loudspeaker)		✓	✓	✓	✓	✓	✓	✓	✓	✓
Volume regulation for loudspeaker / earphones		✓	✓	✓	✓	✓	✓	✓	✓	✓

HFEW35C set consisting of HFE35C and HFW35C

HFW59B in planning stage

High Frequency Analysers

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	Accessories price incl. VAT	Basic Analysis					Professional Analysis						
		HF32D	HF35C	HF38B	HFE35C	HF35C	HF58B	HF58B-r	HF59B	HFE59B	HF59B		
HF Analysers													
List price incl. 19% VAT		199,50	299,50	499,50	749,40	392,70	849,00	994,60	1.166,20	1.844,50	1.166,20		
List price net (excl. 19% VAT)		167,65	251,68	419,75	629,75	330,00	713,45	835,80	980,00	1.550,00	980,00		
LC display of the overall signal (Patent No. DE 103 17 805)													
Peak value (Patent No. DE 10334886)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Average value (Patent No. DE19809784)			✓	✓	✓	✓	✓	✓	✓	✓	✓		
Peak hold				✓			✓	✓	✓	✓	✓		
Digital display of the pulsed signals only (i.e. of the amplitude modulated part; additional tolerance)							✓	✓	✓	✓	✓		
Average value / peak value / peak hold (same as for the overall signal, switchable)							✓	✓	✓	✓	✓		
Video bandwidth 2 MHz (radar/UMTS-module-optimisation), switchable*								✓	✓	✓	✓		
* in this setting there will be higher background noise in the finest measurement range inherent in the system													
Frequency filter for frequency selective analysis within a specified frequency range (to be mounted externally)													
Service specific filter FF6E (switchable: GSM900, GSM1800, DECT, UMTS, WLAN, HP1100, TP1100, TETRA-BOS, DVB-T)	595,00					rec.					rec.		
Steep sided high pass filter HP800_G3 for an improved suppression of the frequencies below 800 MHz	125,00					rec.			rec.	✓			
Signal outputs													
DC output for longterm recordings							✓	✓	✓	✓	✓		
Audio output (modulated AC signal) for PC (sound card) / earphones / spectrum analyser							✓	✓	✓	✓	✓		
Additional standardised AC output (mod. Signal) for NFA series								✓	✓	✓	✓		
Power supply (battery included in scope of supply)													
9 Volt Alkali Manganese E-block battery		✓	✓	✓	✓	✓							
9-Volt NiMH high quality battery pack (easy replacement by user himself) spare part price	33,8						✓	✓	✓	✓	✓		
Power supply unit (for charging of the internal battery or for external power supply)							✓	✓	✓	✓	✓		
Antenna input for remote power supply (e.g. for active antenna and filter, as well as amplifiers, equalizers, etc.)						✓	✓	✓	✓	✓	✓		
Average life expectancy per battery / battery pack (almost half when using UBB27)		10-12h	6-7h	6-7h	6-7h	6-7h	7-8h	7-8h	7-8h	7-8h	7-8h		
Transport cases													
Plastic case K5 (approx. 27 x 18 x 8 cm) with foam filler	25,70	opt.	opt.		✓	opt.						✓	
Plastic case K2 (approx. 33 x 27 x 16 cm) with formed foam filler (fits two devices with antenna)	43,20			opt.			opt.	opt.	opt.	✓			
Aluminium case K3 (surface brushed aluminium; approx. 52 x 40 x 21 cm) with flexible compartments	79,85	opt.	opt.	opt.	opt.	opt.	opt.	opt.	opt.	opt.	opt.		

opt. = optional rec. = recommended poss. = possible

HF59B in planning stage