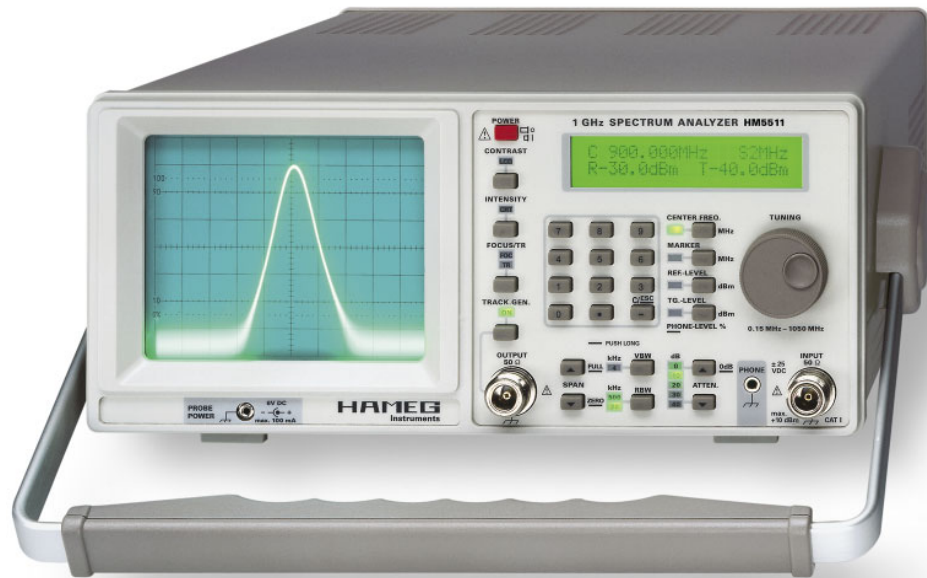
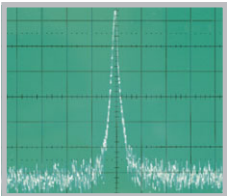


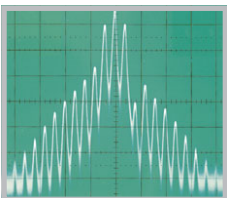
Spectrum Analyzers  
HM 5510 and HM 5511



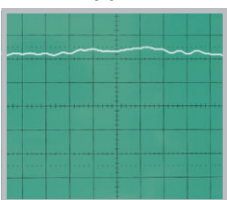
Unmodulated HF signal



HF signal  
amplitude modulated



Frequency response of an  
amplifier measured using  
the tracking generator



Frequency range: 150 kHz to 1050 MHz

Resolution bandwidths: 20 kHz and 500 kHz

Amplitude range: -100 to +10 dBm; 80 dB on screen

Highly stable temperature-compensated reference oscillator

Phase synchronous direct digital synthesis (DDS)

Keyboard allows precise and reproducible frequency settings

HM 5511 features an additional tracking generator

HM5510 Test signal output



## Spectrum Analyzer HM5510 / HM5511 SPECIFICATIONS

Reference temperature: 23 °C ±2 °C

### Frequency specifications

Frequency range:	0.15 MHz to 1.050 GHz
Stability:	±5 ppm per year
Aging:	±1 ppm per year
Frequency display resolution:	1 kHz (6½ digit)
Center frequency	
adjustment range:	0 to 1.050 GHz
Accuracy:	±2 kHz
Frequency generation:	TCXO, DDS (digital frequency synthesis)
Span range:	Zero-Span and 1 to 1000 MHz (steps 1-2-5)
Marker:	
Frequency resolution:	1 kHz, 6½ digit,
Accuracy:	±1 kHz (±center frequency error)
Resolution bandwidth (RBW):	500 kHz and 20 kHz
Video filter bandwidth (VBW):	4 kHz
Sweep time:	20 ms

### Amplitude specifications (relative to the marker) 150 kHz - 1 GHz

Range:	-100 dBm to +10 dBm
Display:	CRT, 8 x 10 Division
Display calibration:	10 dB/div., logarithmic
Display range:	80 dB (10dB/div)
Amplitude frequency response:	
10 dB attn., zero span, RBW	
500 kHz, signal -20 dBm):	<±3 dB
LCD display:	2 x 20 characters, center frequency, span, marker frequency, reference and marker level
Input attenuator:	0 to 40 dB in 10 dB steps
Accuracy (input attenuator):	<±1 dB at 10 dB
Reference range:	-100 dBm to +10 dBm
Accuracy (reference level):	
500 MHz (CF), 10 dB attn.	
zero span, RBW 500 kHz:	±2 dB
Min. average noise floor:	-100 dBm (RBW 20 kHz)
3rd order intermodulation:	
2 signals at -30 dBm,	
>3 MHz apart	> 75 dBc
2nd harmonic suppression:	
-30 dBm., 0 dB attenuation,	
at >3 MHz):	> 75 dBc
Amplitude error, bandwidth:	
dependent at RBW	
500 kHz, Zero Span:	<±1 dB
VSWR (attenuator ≥10 dB):	typ. 1,5 : 1
Marker:	
Amplitude resolution:	0.5 dB, 3½-digit
Amplitude accuracy:	<±1 LSB (0.5 dB)

### Inputs / Outputs

Signal input:	N connector
Impedance:	50 Ω
Max. continuous rf input level	
10 - 40 dB attenuator:	+20 dBm (0,1 W)
0 dB attenuator:	+10 dBm
Max. DC input voltage:	±25 V
Power supply for Hameg	
field probes:	6 V <sub>DC</sub>
Audio (phone) output:	3.5 mm Ø, phone connector
HM 5511 only:	
Tracking generator output:	N connector
Impedance:	50 Ω
HM 5510 only:	
Test signal output:	N connector
Impedance:	50 Ω
Frequency:	10 MHz
Level:	0 dBm (±3 dB)

### Functions

Keyboard input:	Center frequency, reference and tracking generator levels
Rotational control input:	center frequency, reference and tracking generator levels, marker; crt-intensity, focus and trace alignment, LCD contrast adjustment
Tracking generator (HM 5511 only):	
Frequency range:	0.15 MHz to 1.050 GHz
Output level:	-50 dBm to 0 dBm
Frequency response:	
0 dBm to -10 dBm:	<±3 dB
-10.5 dBm to -50 dBm:	<±4 dB
RF interference:	> 20 dBc

### Miscellaneous

Working temperature:	+10°...+40 °C
Storage temperature:	-40°...+70 °C
Line voltage range:	105 - 254 V~, 50/60 Hz
Power consumption HM5510:	ca. 31 W
Power consumption HM5511:	ca. 37 W
Protective class:	I acc. to EN 61010-1 (IEC 61010-1)
Dimensions: (W x H x D):	285 x 125 x 380 mm, Handle for carrying and tilting
Colour:	techno-brown
Weight:	HM 5510: approx. 5.2 kg HM 5511: approx. 5.6 kg

### Included in delivery:

Spectrum Analyzer HM5510 or HM5511, Line cord, Manual, Adapter N (BNC)

Accessories supplied: HZ520 Ansteckantenne (BNC); HZ560 Transient-Limiter; HZ575 Converter (75Ω → 50Ω)