

R&S®HL040E Log-Periodic Broadband Antenna

400 MHz to 6 GHz

For broadband transmission and reception under open-field and laboratory conditions



The linearly polarized R&S®HL040E log-periodic broadband antenna provides broadband transmission and reception in the frequency range from 400 MHz to 6 GHz.

Precise construction and optionally available individual calibration make the antenna suitable for field strength and EMI measurements.

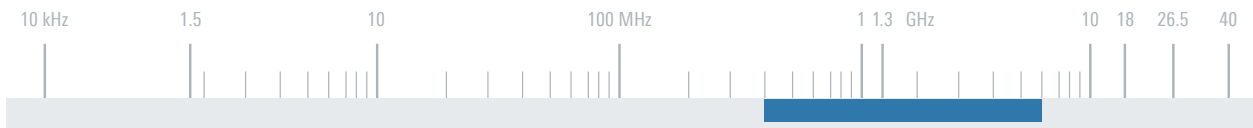
An accredited calibration of the free-space antenna factors is optionally available.

Power rating and matching (VSWR) allow its use in EMS measurements where field strengths of 10 V/m or higher are required.

Key facts

- ▀ Wide frequency range
- ▀ Suitable for susceptibility and emission measurements
- ▀ Stable radiation patterns over frequency range ensure optimum illumination of EUT
- ▀ Low cross-polarization
- ▀ Compact size, low weight
- ▀ Ease of handling
- ▀ Sturdy design





Specifications	
Frequency range	400 MHz to 6 GHz
Polarization	linear
Nominal impedance	50 Ω
VSWR	< 2.0
Gain	typ. 5.5 dBi
Cross-polarization	typ. < -25 dB
Front-to-back-ratio	
400 MHz to 4.5 GHz	> 20 dB
4.5 GHz to 6 GHz	> 15 dB

Maximum input power (at +40°C)	
400 MHz	100 W CW
1 GHz	90 W CW
3 GHz	50 W CW
6 GHz	35 W CW
RF connector	N female
MTBF	> 150 000 h
Operating temperature range	-40°C to +70°C
Protection class	IP55
Max. wind speed	275 km/h (without ice deposit)
Dimensions (W × H × L)	approx. 0.43 m × 0.13 m × 0.55 m (17 in × 5 in × 22 in)
Weight	approx. 2.5 kg (6 lb)

Ordering information	Type	Order No.
Log-Periodic Broadband Antenna, without calibration	R&S®HL040E	4099.8004.02
Log-Periodic Broadband Antenna, with factory standard calibration	R&S®HL040E	4099.8004.12
Accredited Antenna Calibration (free-space antenna factors)	R&S®HL040E-DKD	4099.8210.02
Recommended extras		
Wooden Tripod	R&S®HZ-1	0837.2310.02
Adapter for R&S®HZ-1	R&S®HL025Z1	4053.4006.03

