

R&S®HL050S7 Log-Periodic Directional Antenna with Preamplicifier

850 MHz to 26.5 GHz

Log-periodic directional antenna consisting of the R&S®HL050 and a broadband preamplicifier for linear polarization



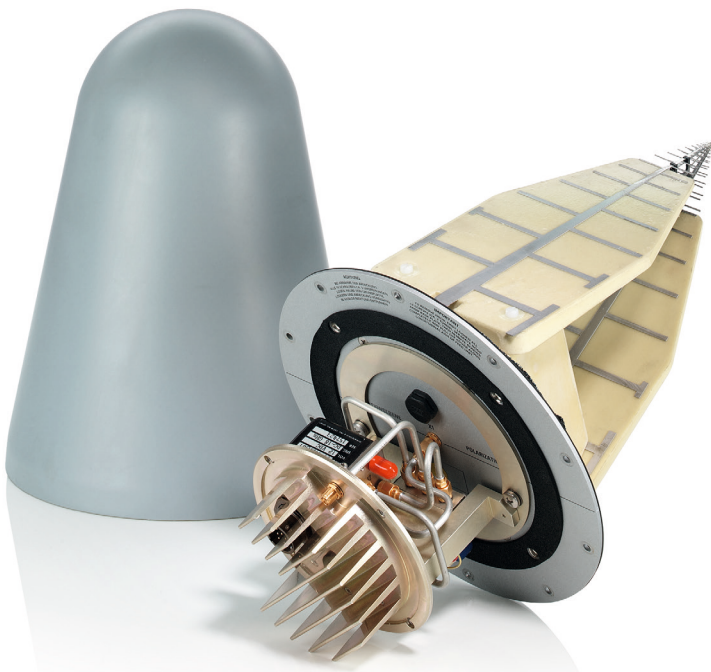
The R&S®HL050S7 log-periodic directional antenna consists of the R&S®HL050 log-periodic antenna with preamplicifier and is suitable for the reception of linearly polarized waves.

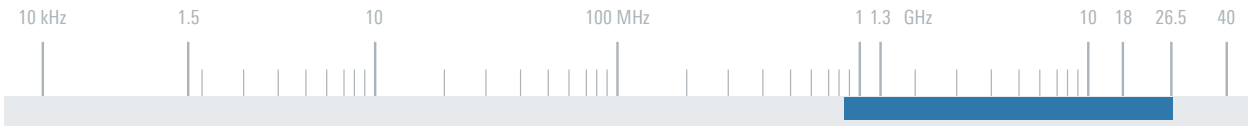
The extremely broadband and low-noise integrated preamplicifier prevents a significant reduction in S/N due to loss in RF cables connecting the antenna to a receiver.

Due to its almost rotation-symmetrical radiation pattern, the R&S®HL050S7 offers optimum secondary radiation characteristics for use as a feed in reflector antennas. It is ideal as a feed for the R&S®AC008 microwave directional antennas.

Key facts

- Extremely wide frequency range
- Rotation-symmetrical radiation patterns
- High gain due to V-shaped configuration of antenna elements
- No reduction in S/N due to the use of a low-noise amplifier at the antenna output
- Usable as a feed for R&S®AC008 microwave directional antenna
- Preamplicifier can be bypassed via control unit, e.g. at high field strengths





Specifications	
Frequency range	850 MHz to 26.5 GHz
Polarization	linear
Input impedance	50 Ω
VSWR (with preamplifier)	< 3
Passive antenna gain	typ. 7.5 dBi
Practical gain (active)	typ. 37.5 dB
Noise figure	max. 3.6 dB
1 dB compression point (at output)	min. > 5 dBm

Power supply	
Amplifier	15 V/0.2 A (max.)
Switching relay	12 V/0.75 A (max.)
Connector	PC 3.5 female
Control connector	10 pin female
MTBF	> 100000 h
Operating temperature range	-30°C to +55°C
Max. wind speed	180 km/h
Dimensions (Ø × H)	approx. 210 mm × 390 mm (8 in × 15 in)
Weight	approx. 1.7 kg (4 lb)

Ordering information	Type	Order No.
Log-Periodic Directional Antenna with Pre-amplifier	R&S®HL050S7	4064.6040.02
Recommended extras		
Control Unit	R&S®GB016	4056.7006.03
Control Cable, length: 10 m	R&S®GB016Z1	4056.7270.02
Microwave Cable, length: 5 m	R&S®AC008W2	0751.6931.04
Microwave Cable, length: 10 m	R&S®AC008W2	0751.6931.05
Adapter for R&S®HZ-1	R&S®HL025Z1	4053.4006.03
Wooden Tripod	R&S®HZ-1	0837.2310.02

