

R&S®HL024S9 Crossed Log- Periodic Antenna

1 GHz to 18 GHz

Log-periodic directional antenna consisting of the R&S®HL024A1, two broadband preamplifiers and a switching network for linear or circular polarization



The R&S®HL024S9 consists of the R&S®HL024A1 crossed log-periodic antenna and two broadband preamplifiers. It is suitable for the reception of linearly and circularly polarized waves.

Due to the integrated switching network, horizontal, vertical, left-hand or right-hand circular polarization can be selected.

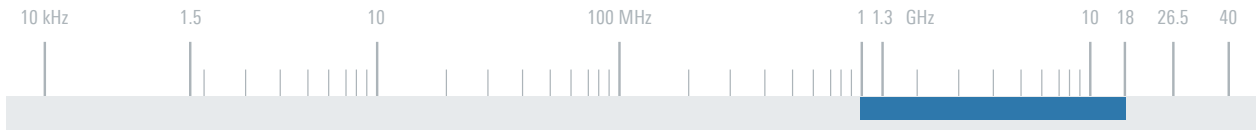
The preamplifiers prevent a significant reduction in S/N due to loss in RF cables connecting the antenna to a receiver.

The antenna can also be used as a feed for the R&S®AC008 microwave directional antenna.

Key facts

- Wide frequency range
- Broadband preamplifiers
- Switching network for horizontal, vertical and circular polarization
- 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





Specifications

Frequency range	1 GHz to 18 GHz
Polarization	horizontal, vertical, left-hand or right-hand circular
Input impedance	50 Ω
VSWR	< 3
Practical gain	
linear	typ. 36 dB
circular	typ. 35 dB
Noise figure	max. 3.6 dB

1 dB compression point	min. +5 dBm
Power supply	+15 V DC (max. 0.5 A) (preamplifier), +12 V DC (max. 1 A) (switching network)
Connector	SMA female
Control connector	10-contact, round, male
MTBF	> 55 000 h
Operating temperature range	-30°C to +55°C
Dimensions ($\varnothing \times H$; with radome)	approx. 210 mm \times 390 mm (8 in \times 15 in)
Weight	approx. 1.7 kg (4 lb)

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Ordering information

	Type	Order No.
Crossed Log-Periodic Antenna	R&S®HL024S9	4047.6252.02
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

Typical radiation patterns

