

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.

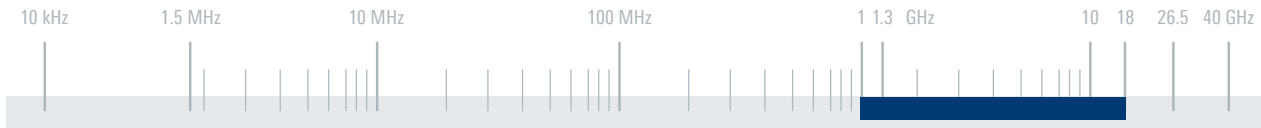
The preamplifiers prevent a significant reduction in S/N due to loss in RF cables connecting the antenna to a receiver.

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 (selectable)	
Input impedance	50 Ω	
VSWR	< 3	
Realized gain	linear	36 dB (typ.)
	circular	35 dB (typ.)
Noise figure	max. 3.6 dB	
1 dB compression point	min. +5 dBm	
Power supply	preamplifier	+15 V DC (max. 0.5 A)
	switching network	+12 V DC (max. 1 A)
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)	

Ordering information

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
Open switch and control platform, without touchscreen	R&S®OSP-220	1528.3105.02
Open switch and control platform, with touchscreen	R&S®OSP-230	1528.3105.03
Module for R&S®OSP, for controlling R&S®HL024Sx and R&S®HL050S7	R&S®OSP-BS016	4118.6007.03

Typical radiation patterns

