

R&S®HL024S8 CROSSED LOG- PERIODIC ANTENNA

1 GHz to 18 GHz

Log-periodic directional antenna consisting of the R&S®HL024A1 and two broadband preamplifiers for horizontal and vertical polarization



The R&S®HL024S8 consists of the R&S®HL024A1 crossed log-periodic antenna and two broadband preamplifiers. It is suitable for the reception of linearly polarized waves.

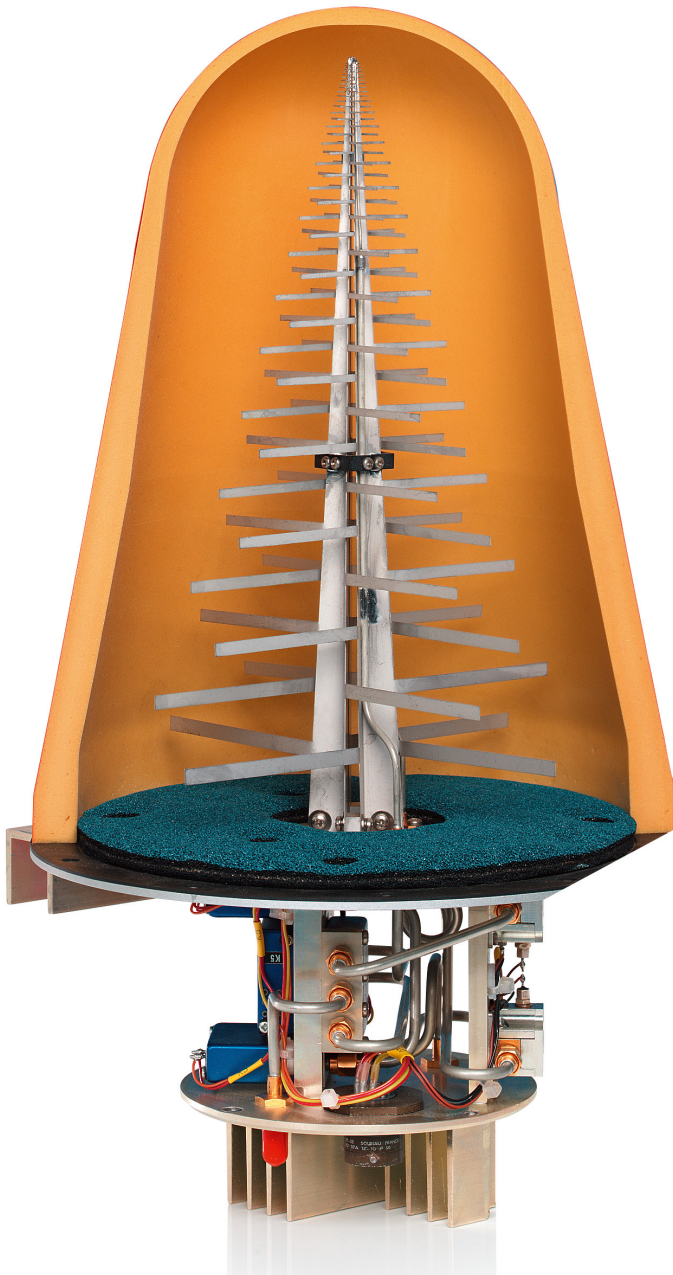
Two RF connectors are provided for simultaneous use of both polarization planes.

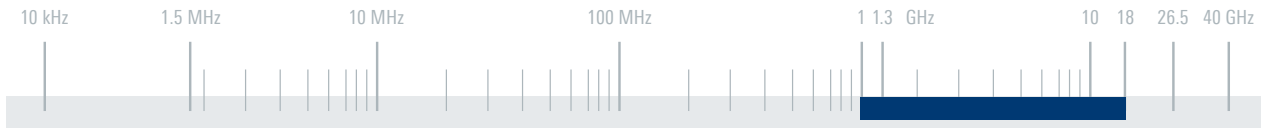
The preamplifiers can be optionally switched on. They prevent a significant reduction in S/N due to loss in RF cables connecting the antenna to a receiver.

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

Key facts

- ▶ Wide frequency range
- ▶ Selectable broadband preamplifiers
- ▶ Simultaneous reception of both polarization planes
- ▶ No reduction in S/N due to the use of low-noise amplifiers at the antenna outputs
- ▶ Usable as a feed for R&S®AC008 microwave directional antenna





Specifications

Frequency range	1 GHz to 18 GHz	
Polarization	horizontal and vertical (simultaneously)	
Input impedance	50 Ω	
VSWR	< 3	
Antenna gain (passive)	6 dBi (typ.)	
Noise figure	max. 3.6 dB	
Realized gain (active)	36 dB (typ.)	
1 dB compression point	min. +5 dBm	
Power supply	preamplifier	+15 V DC (max. 0.7 A)
	switching network	+12 V DC (max. 1 A)
Connector	2 \times 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®HL024S8	4042.7509.02

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

