

# R&S®HL024S7 CROSSED LOG- PERIODIC ANTENNA

1 GHz to 18 GHz

Log-periodic directional antenna consisting of the R&S®HL024A1 and a broadband preamplifier for horizontal or vertical polarization (selectable)



The R&S®HL024S7 consists of the R&S®HL024A1 crossed log-periodic antenna and a broadband preamplifier. It is suitable for the reception of linearly polarized waves.

Horizontal or vertical polarization can be selected.

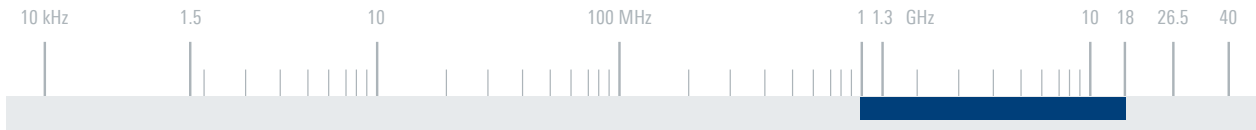
The preamplifier can be optionally switched on. It prevents a significant reduction in S/N due to loss in RF cables connecting the antenna to a receiver.

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

## Key facts

- ▶ Wide frequency range
- ▶ Selectable broadband preamplifier
- ▶ Selectable horizontal or vertical 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 or vertical (selectable)	
Input impedance	50 Ω	
VSWR	< 3	
Antenna gain (passive)	typ. 6 dBi	
Noise figure	max. 3.6 dB	
Realized gain (active)	typ. 36 dB	
1 dB compression point	min. +5 dBm	
Power supply	preamplifier	+15 V DC (max. 0.3 A)
	switching network	+12 V DC (max. 0.75 A)
Connector	SMA female	
Control connector	10-contact, round, male	
MTBF	> 100000 h	
Operating temperature range	-30°C to +55°C	
Dimensions	Ø × H; with radome	approx. 210 mm × 390 mm (8 in × 15 in)
Weight	approx. 1.7 kg (4 lb)	

## Ordering information

Ordering information	Type	Order No.
Crossed log-periodic antenna	R&S®HL024S7	4042.8505.02

## 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
Module for R&S®OSP, for controlling R&S®HL024Sx and R&S®HL050S7	R&S®OSP-BS016	4118.6007.03
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

## Typical radiation patterns

