

# SHF Antennas

## Crossed Log-Periodic Antenna R&S® HL 024S2



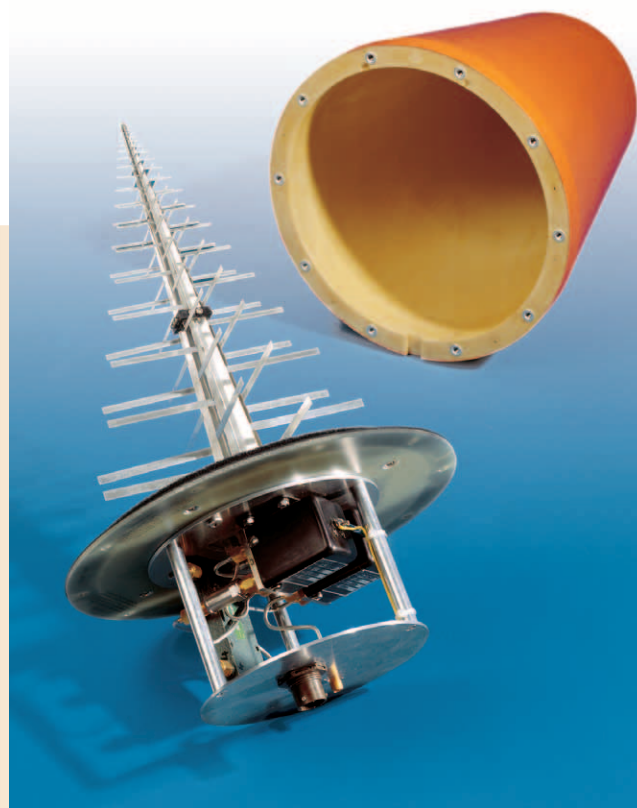
1 GHz to 18 GHz

Log-periodic directional antenna

consisting of R&S® HL024A1 and passive polarization switching network

### Features

- ◆ Horizontal, vertical, left-hand or right-hand circular polarization
- ◆ Wide frequency range
- ◆ Radiation pattern virtually independent of frequency
- ◆ Remote-controlled polarization selection with optional Control Unit R&S® GB016
- ◆ Can be used as a feed for the Directional Antennas R&S® AC008 to R&S® AC300



### Brief description

The directional R&S® HL024S2 with crossed antenna elements can be used for waves with horizontal, vertical, left-hand or right-hand circular polarization.

It consists of the Antenna R&S® HL024A1 and a polarization switching network. Polarization can be selected by remote control using the R&S® GB016, for instance.

The R&S® HL024S2 can also be used as a feed for the Directional Antennas R&S® AC008 to R&S® AC300.



## Specifications

Frequency range	1 GHz to 18 GHz	Connector	SMA female
Polarization	horizontal, vertical, left-hand or right-hand circular (selectable)	Control connector	10-contact, round, male
Input impedance	50 $\Omega$	Operating temperature range	-40 °C to +55 °C
VSWR		Max. wind speed	180 km/h (without ice deposit)
1 GHz to 12 GHz	$\leq 2.5$	MTBF	>150 000 h
12 GHz to 18 GHz	$\leq 3$	Dimensions (diameter $\times$ height)	
Gain (switching network taken into account)	4 dBi to 6 dBi	With radome	approx. 210 mm $\times$ 353 mm
Circularity	typ. 2 dB	Weight	approx. 1 kg

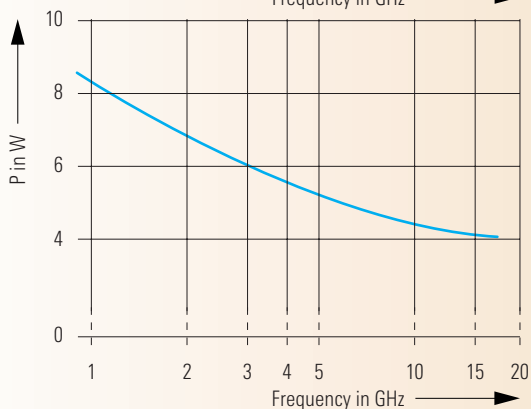
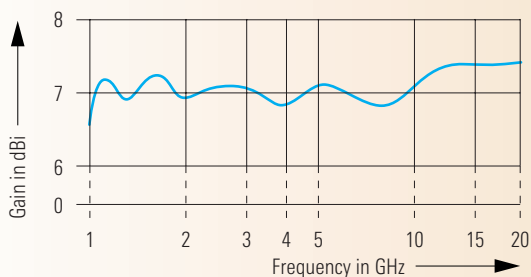
## Ordering information

### Crossed

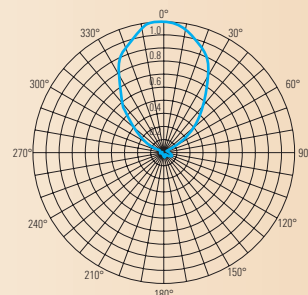
<b>Log-Periodic Antenna</b>	R&S®HL024S2	4052.1003.02
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### Recommended extras

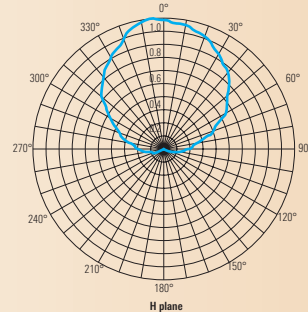
Control Unit	R&S®GB016	4056.7006.02
Control Cable, 10 m	R&S®GB016Z1	4056.7270.02
Microwave Cable, 5 m	R&S®AC008W2	0751.6931.04
Microwave Cable, 10 m	R&S®AC008W2	0751.6931.05



Typical gain and power-handling capacity



E plane



H plane

Typical radiation patterns in the E and H planes