

SHF Antennas

Crossed Log-Periodic Antennas R&S® HL024A1/S1

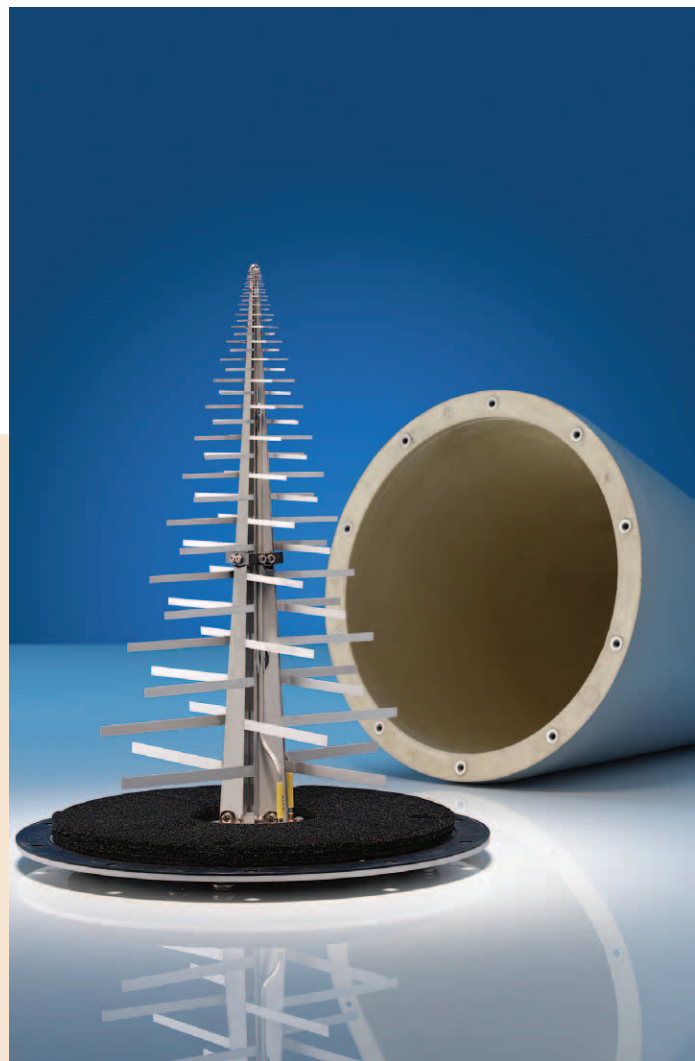


1 GHz to 18 GHz

Log-periodic directional antennas for simultaneous reception of horizontally and vertically polarized waves

Features

- ◆ Horizontal and vertical polarization
- ◆ Wide frequency range
- ◆ Radiation pattern virtually independent of frequency
- ◆ Can be used as a feed for the Microwave Directional Antenna R&S® AC008 (R&S® HL024A1)
- ◆ Can be used as a feed for the SHF Directional Antenna Systems R&S® AC090 to R&S® AC300 (R&S® HL024S1)



Brief description

The log-periodic directional R&S® HL024A1 with crossed antenna elements is suitable for simultaneous reception of horizontally and vertically polarized waves.

It can also be used as a transmitting antenna for low power.

The R&S® HL024A1 can additionally be used as a feed for the Microwave Directional Antenna R&S® AC008.

The log-periodic directional R&S® HL024S1 is of identical design and can be used as a feed for the SHF Directional Antenna Systems R&S® AC090 to R&S® AC300.

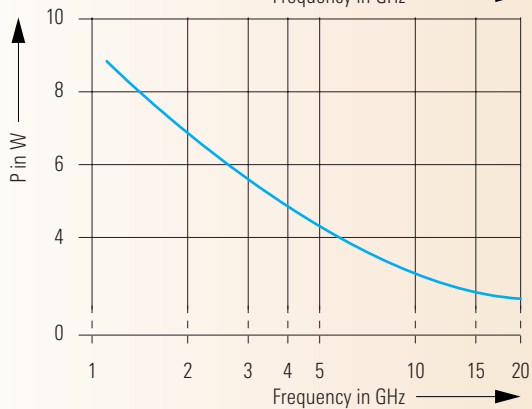
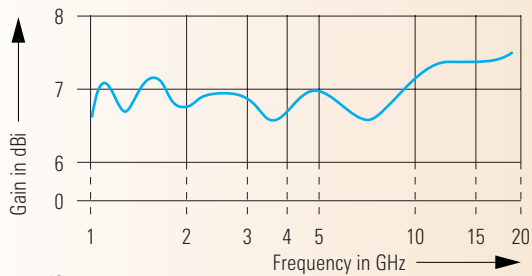


Specifications

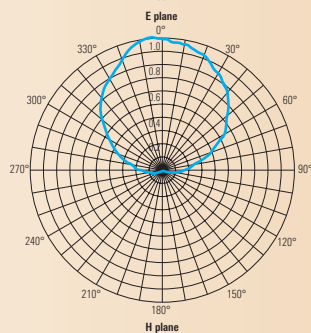
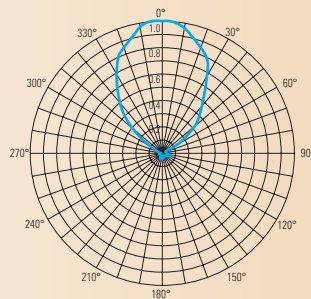
Frequency range	1 GHz to 18 GHz	Operating temperature range	-40 °C to +55 °C
Polarization	linear/horizontal and vertical	Max. wind speed	180 km/h (without ice deposit)
Input impedance	50 Ω	MTBF	>150 000 h
VSWR	≤2.5	Dimensions (diameter × height)	
Max. input power	10 W CW to 3 W CW	With radome	approx. 210 mm × 300 mm
Gain	typ. 7 dBi	Weight	approx. 0.7 kg
Connector	2 × SMA female		

Ordering information

Crossed			Recommended extras		
Log-Periodic Antenna	R&S®HL024A1	0650.7510.03	Microwave Cable, 5 m	R&S®AC008W2	0751.6931.04
Crossed			Microwave Cable, 10 m	R&S®AC008W2	0751.6931.05
Log-Periodic Antenna	R&S®HL024S1	4055.1256.02	Mast Adapter	R&S®HL025-Z	0661.9910.02
			Adapter for R&S®HZ-1	R&S®HL025Z1	4053.4006.02
			Wooden Tripod	R&S®HZ-1	0837.2310.02



Typical gain and power-handling capacity



Typical radiation patterns in the E and H planes