

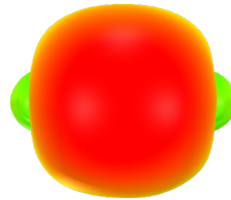


Standard Gain Horn Antennas

17.6 - 26.7 GHz, 10 dBi



Radiation pattern



QR code



Hangzhou Multipath Electronics Co., Ltd., Zhejiang, China

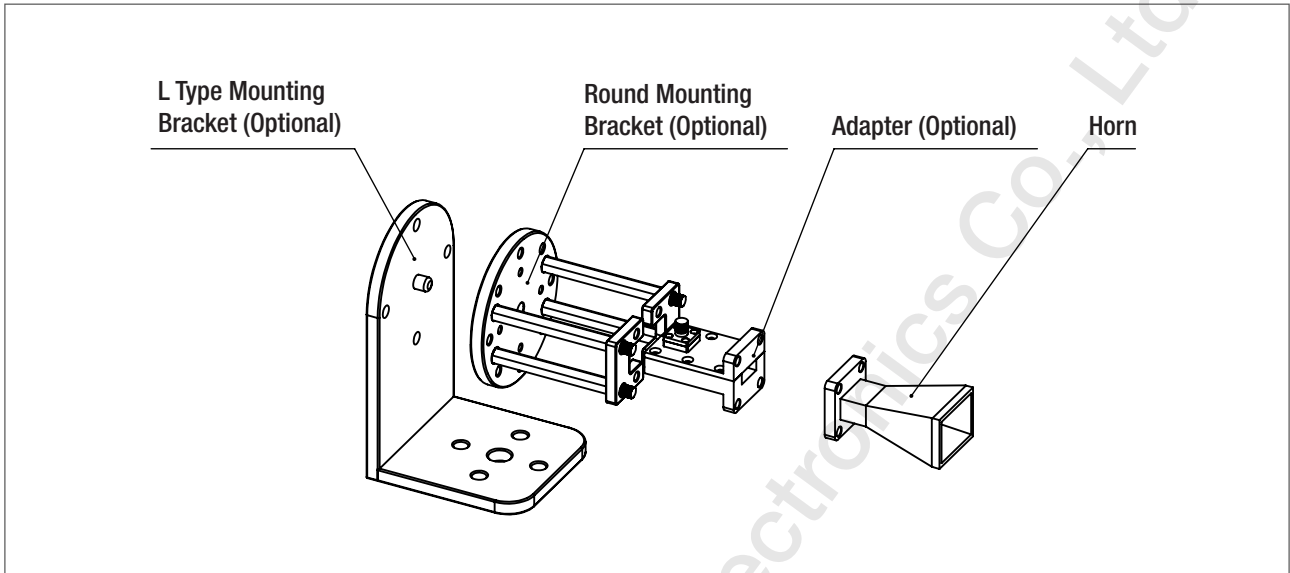
⚙️ Product specifications

Part number	HA-WR42-10	Polarization	Single linear
Antenna type	Pyamidal horn	Gain [dBi]	10 Typ.
Frequency range [GHz]	17.6 – 26.7	3dB beamwidth [deg]	E-plane: 45 Typ. H-plane: 45 Typ.
Waveguide band	WR42	Cross-polarization isolation [dB]	35 Typ.
Dimensions (H x W x L) [mm; inch]	24.5 x 22.4 x 79.3; 0.97 x 0.89 x 3.12	VSWR	1.25 Typ.
Weight (approx.) [kg; lb]	0.05; 0.110	Impedance [Ohms]	50
Material	Aluminum	RF connector	2.4-Female

Outline dimensions

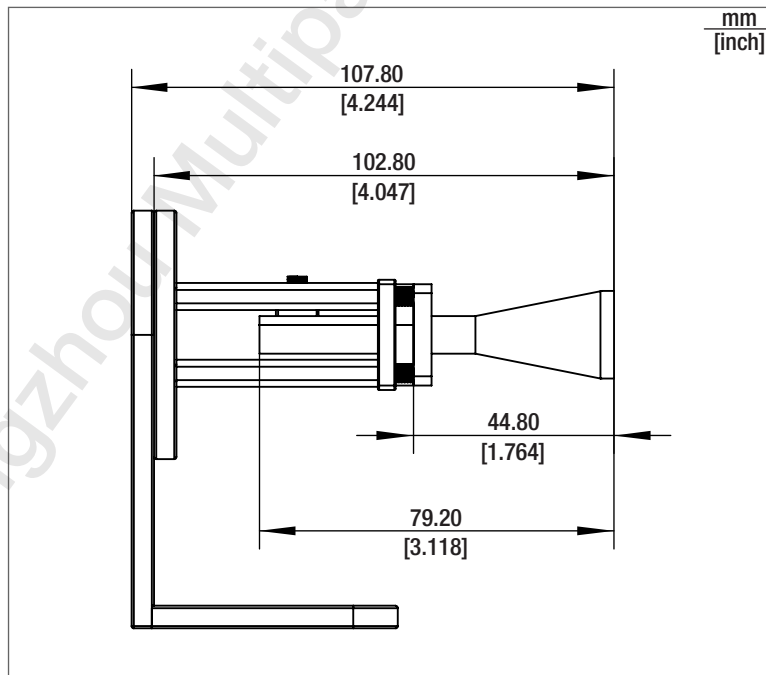
• Assembly dimensional drawing

Multipath Electronics provides complete standard gain horn antennas, forming mounting systems, integrated with (optional) waveguide to coaxial adapters, L type and round mounting brackets. The following figure shows the disassembly diagram of such a system.

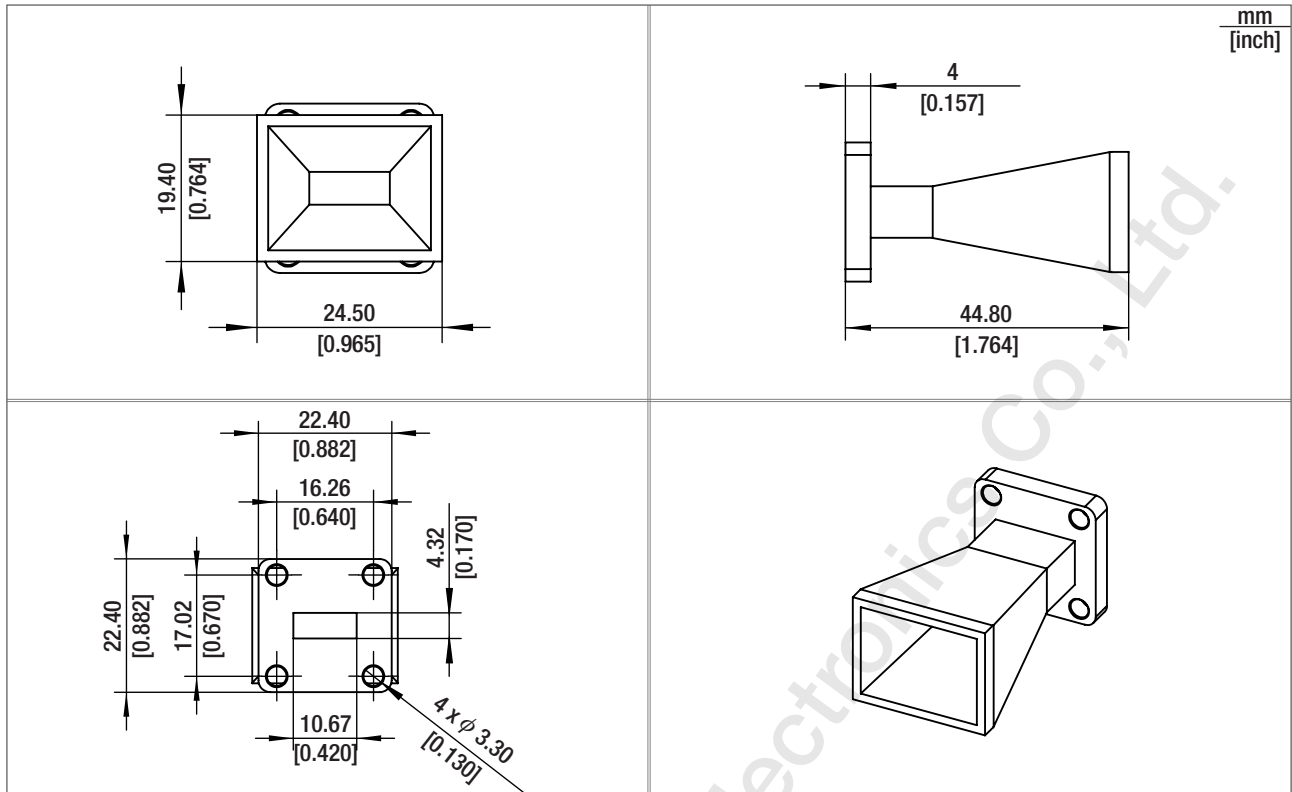


Side view of the mounting system.

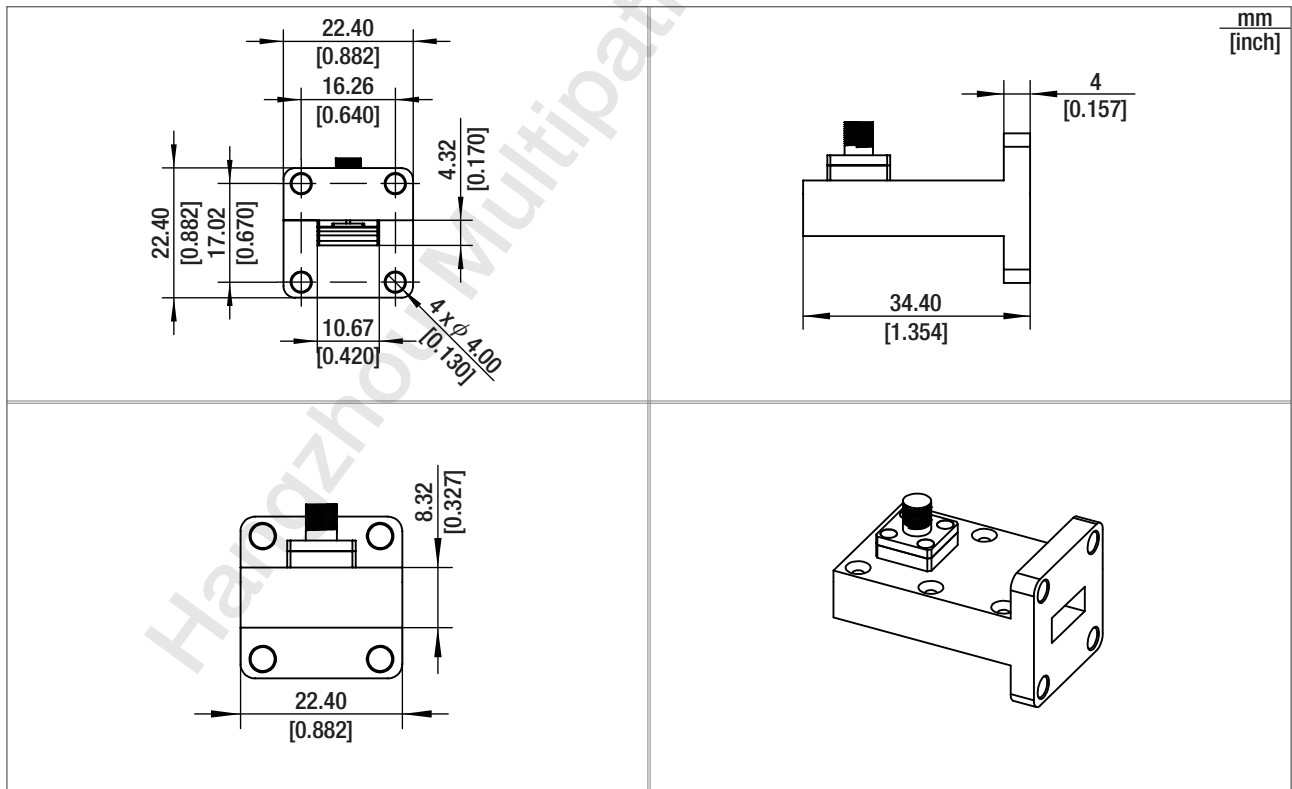
Detailed dimensions of the components will be given in subsequent diagrams.



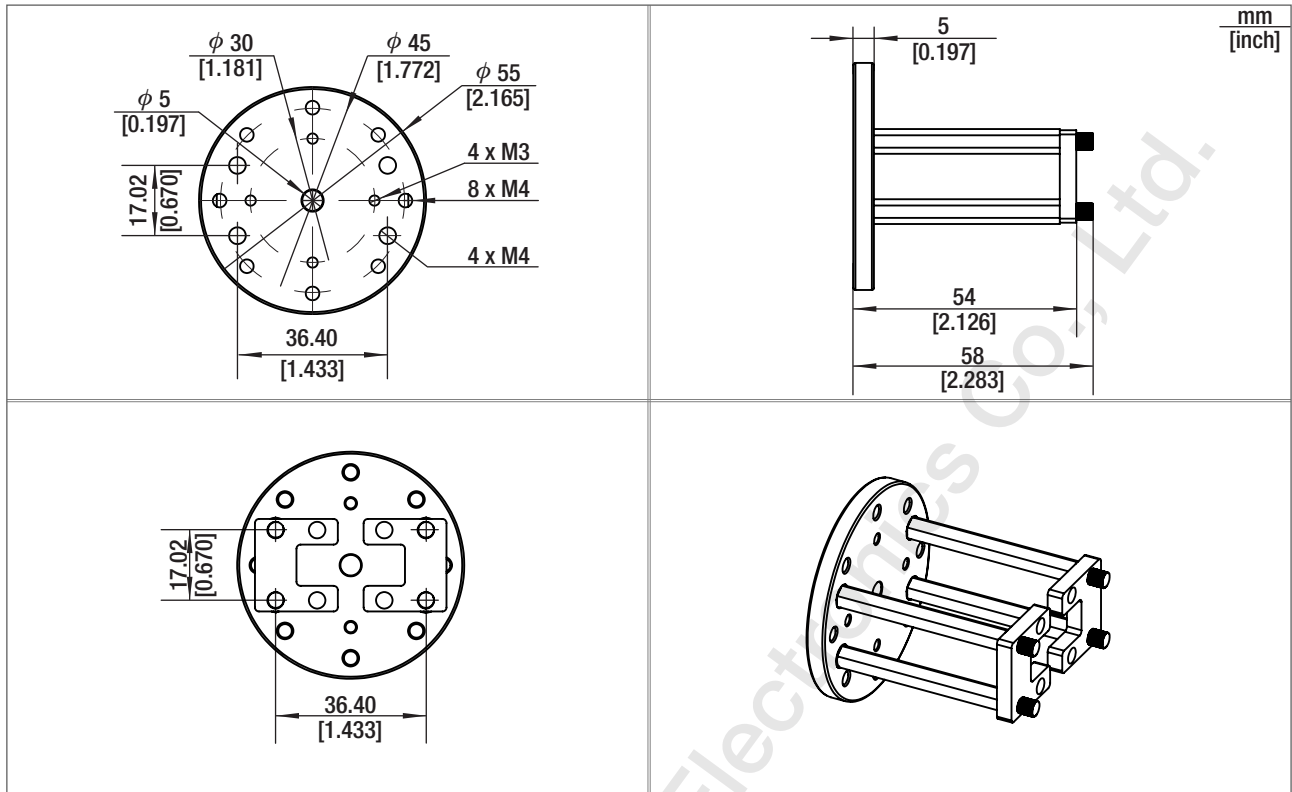
• Dimensional drawing: horn, HA-WR42-10



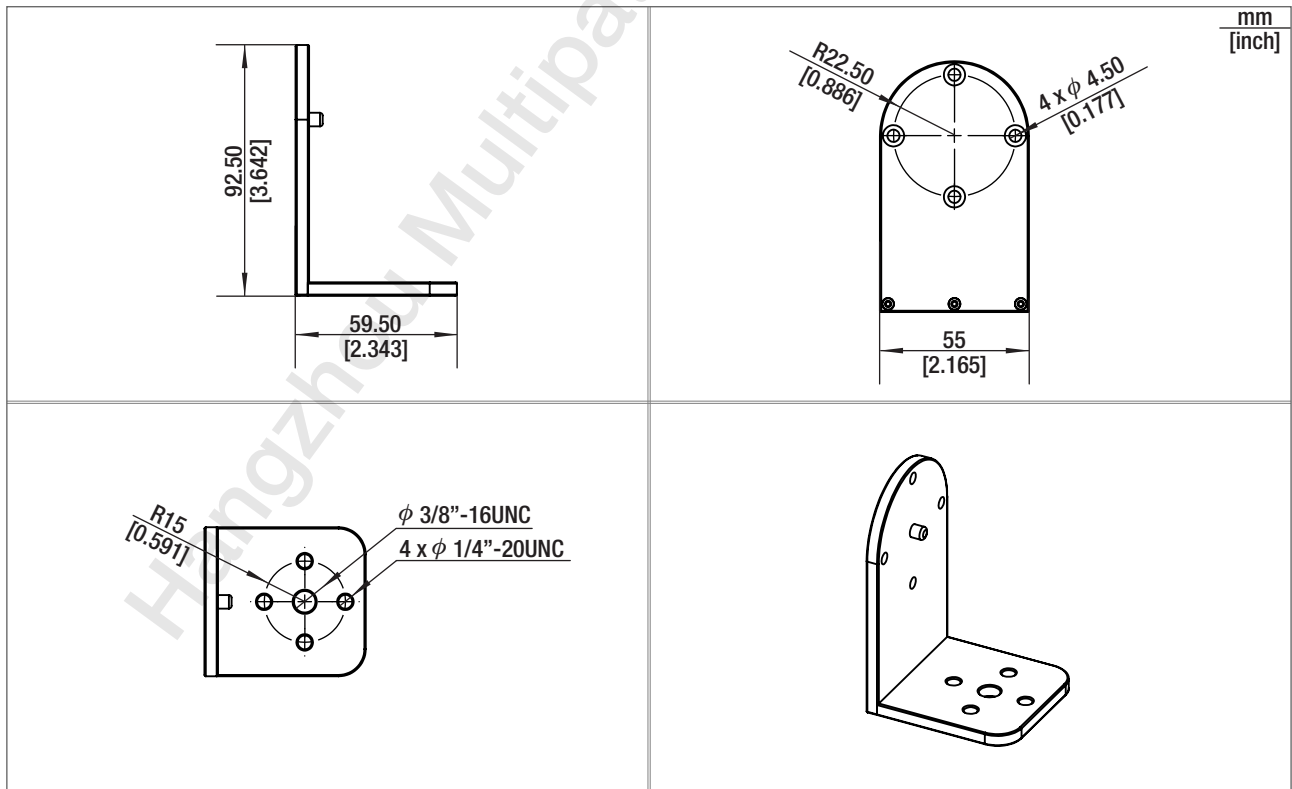
• Dimensional drawing: adapter, WR42-SMA-F (Optional)



• Dimensional drawing: round mounting bracket (Optional)

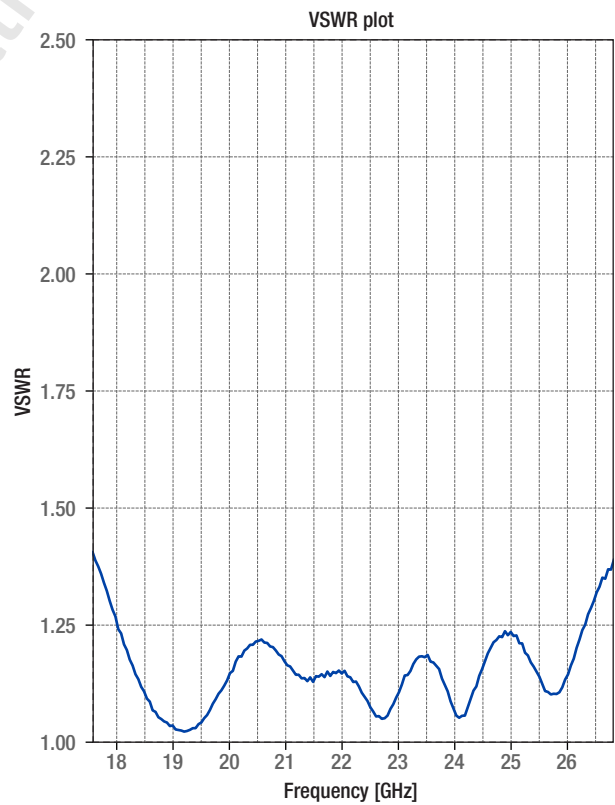
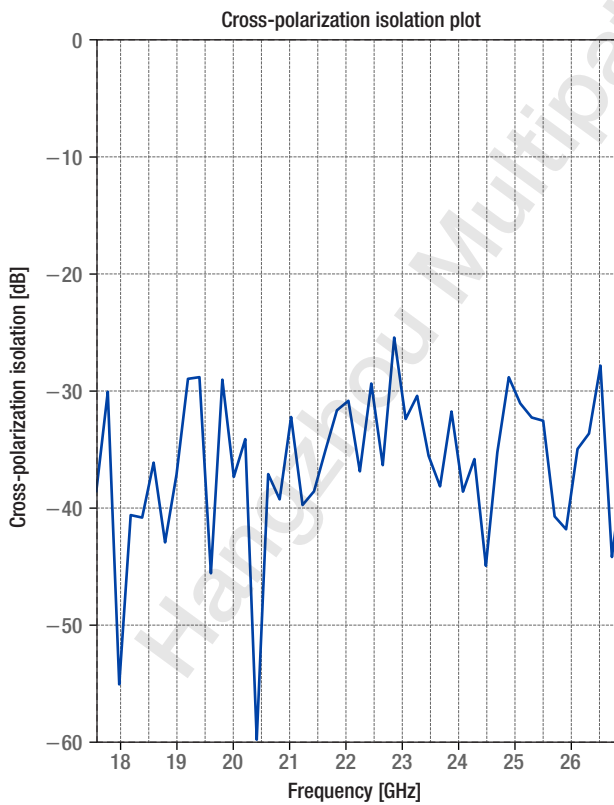
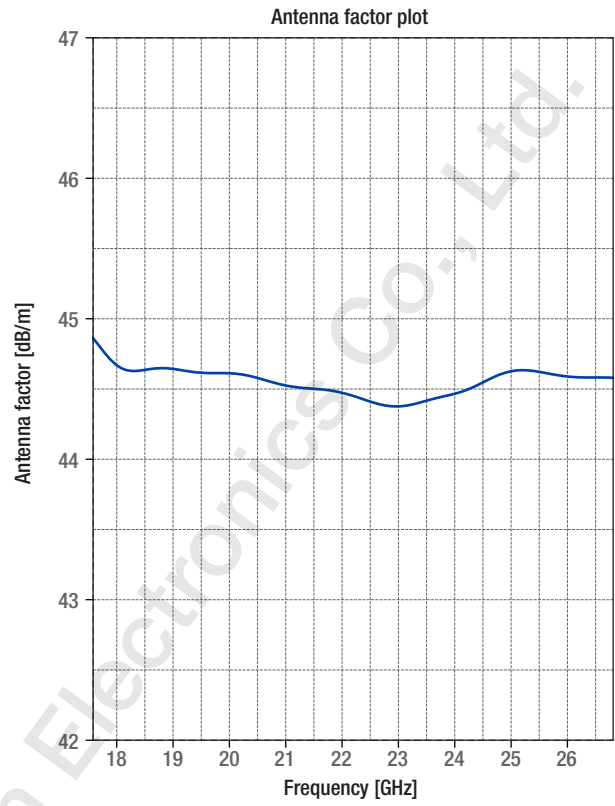
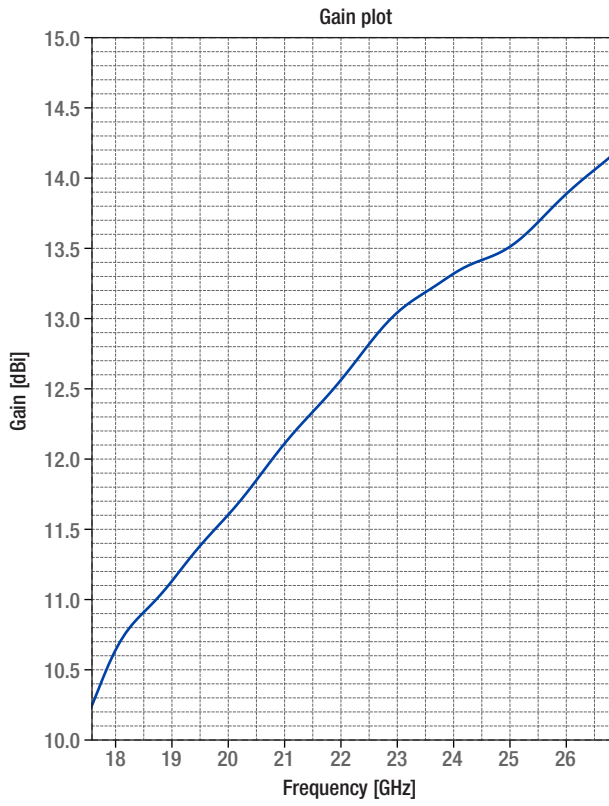


• Dimensional drawing: L type mounting bracket (Optional)



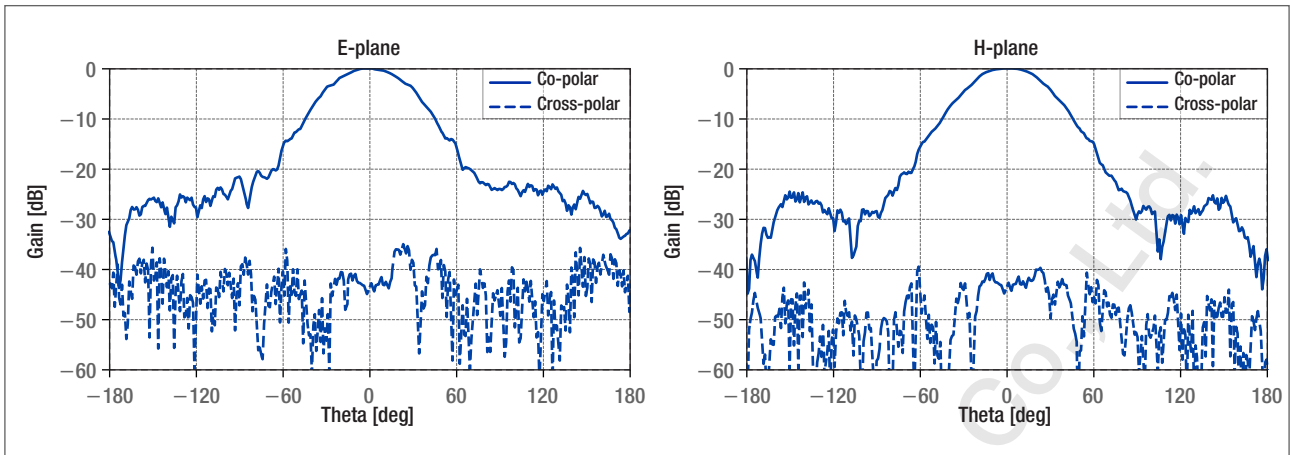
Electrical characteristics

Gain & Antenna factor & Cross-polarization isolation & VSWR

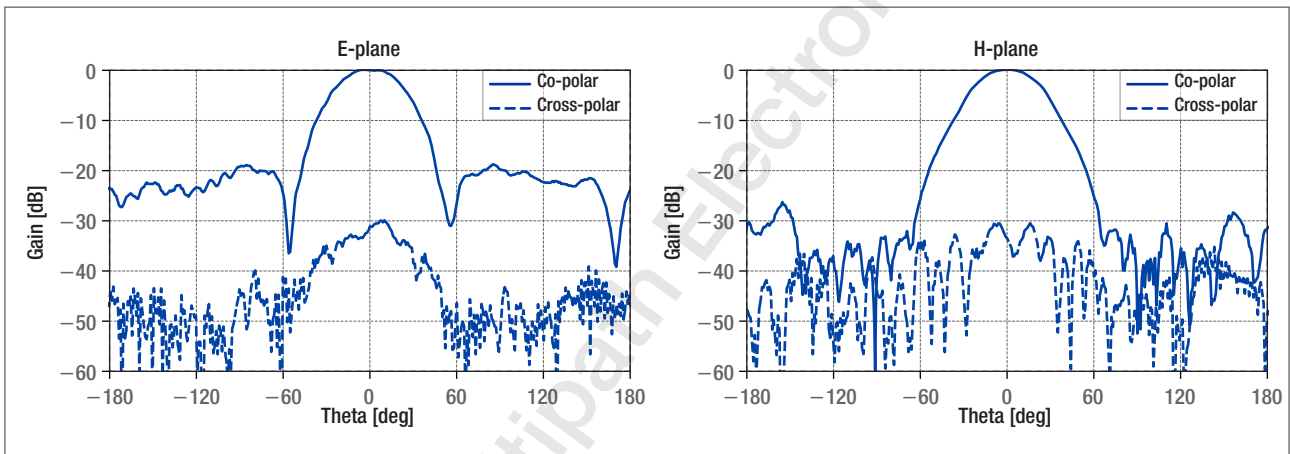


• Radiation patterns

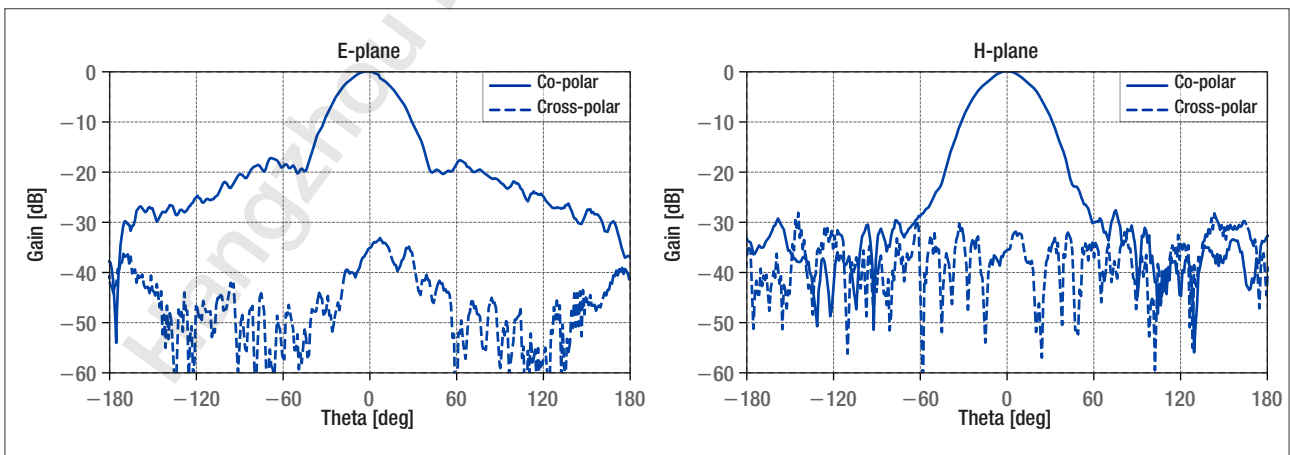
Patterns @ 18.0 GHz



Patterns @ 22.0 GHz



Patterns @ 26.0 GHz



• Data table

Frequency [GHz]	Gain [dBi]	Antenna factor [dB/m]	Cross-polarization isolation [dB]	VSWR
17.6	10.25	44.85	-38.59	1.40
18.1	10.71	44.63	-47.82	1.22
18.6	10.95	44.63	-36.18	1.08
19.1	11.19	44.62	-33.12	1.02
19.6	11.44	44.60	-45.57	1.05
20.1	11.66	44.60	-35.78	1.16
20.6	11.92	44.55	-37.15	1.20
21.1	12.17	44.50	-36.04	1.14
21.6	12.39	44.48	-35.12	1.14
22.1	12.63	44.44	-33.92	1.13
22.6	12.89	44.38	-36.39	1.05
23.1	13.09	44.37	-31.49	1.14
23.6	13.23	44.42	-38.19	1.16
24.1	13.35	44.48	-37.26	1.05
24.6	13.44	44.57	-35.30	1.21
25.1	13.56	44.62	-31.75	1.20
25.6	13.76	44.59	-40.74	1.09
26.1	13.95	44.57	-34.36	1.21
26.6	14.12	44.57	-44.19	1.36

Frequency [GHz]	E-plane, 3dB beamwidth	H-plane, 3dB beamwidth
18.0	48.83°	48.78°
22.0	43.35°	44.69°
26.0	32.73°	34.86°



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Technical specifications in this datasheet are subject to change without notice. Actual products may differ from the shown images.