

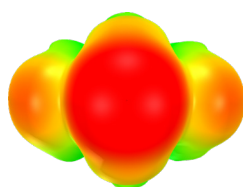


Standard Gain Horn Antennas

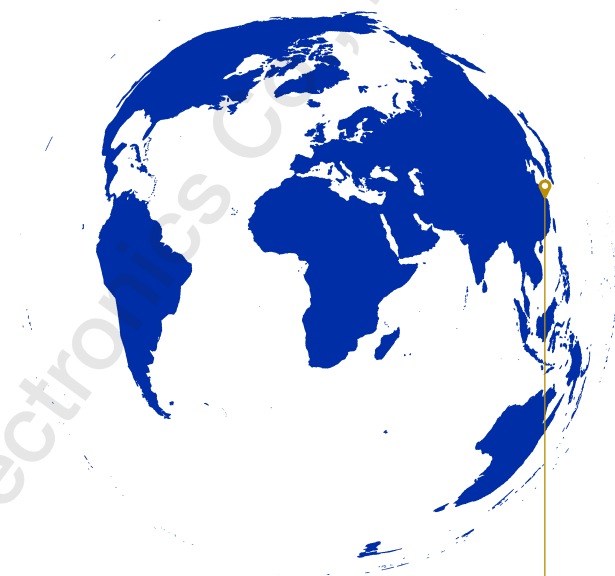
32.9 - 50.1 GHz, 15 dBi



Radiation pattern



QR code



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

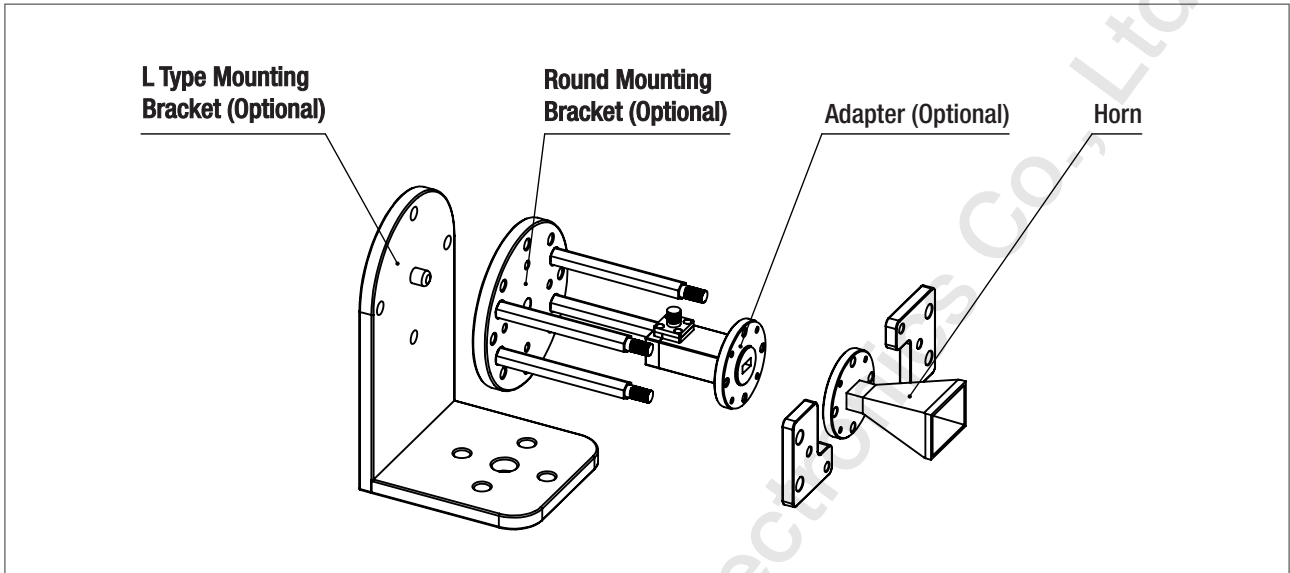
⚙️ Product specifications

Part number	HA-WR22-15	Polarization	Single linear
Antenna type	Pyamidal horn	Gain [dBi]	15 Typ.
Frequency range [GHz]	32.9 – 50.1	3dB beamwidth [deg]	E-plane: 25 Typ. H-plane: 25 Typ.
Waveguide band	WR22	Cross-polarization isolation [dB]	35 Typ.
Dimensions (H x W x L) [mm; inch]	28.6 x 28.6 x 68.3; 1.13 x 1.13 x 2.69	VSWR	1.20 Typ.
Weight (approx.) [kg; lb]	0.06; 0.132	Impedance [Ohms]	50
Material	Cu (Gold plated)	RF connector	2.4-Female

Outline dimensions

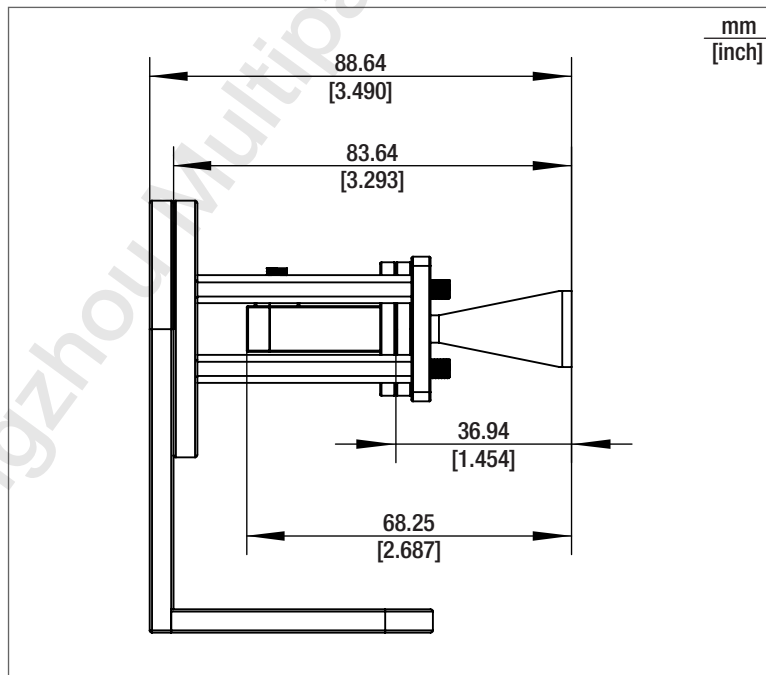
• Assembly dimensional drawing

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.

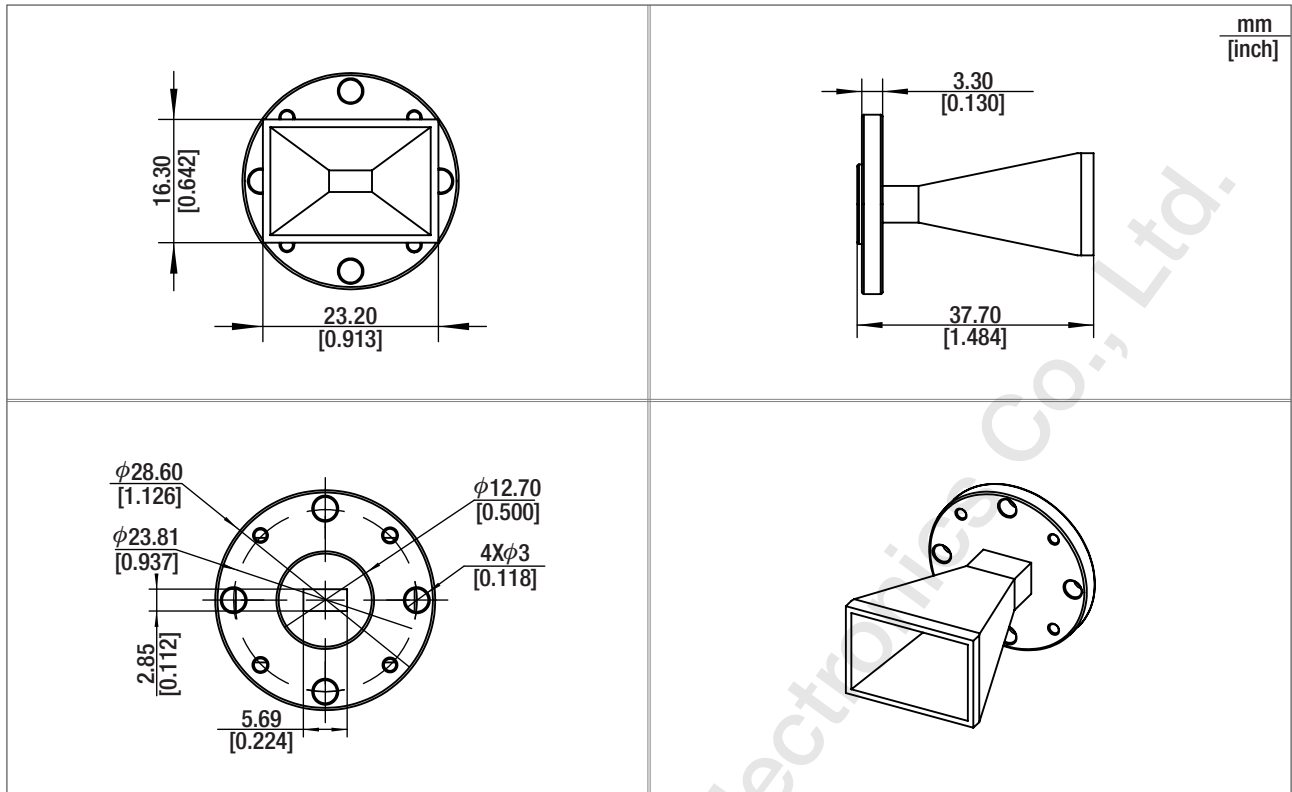


Side view of the mounting system.

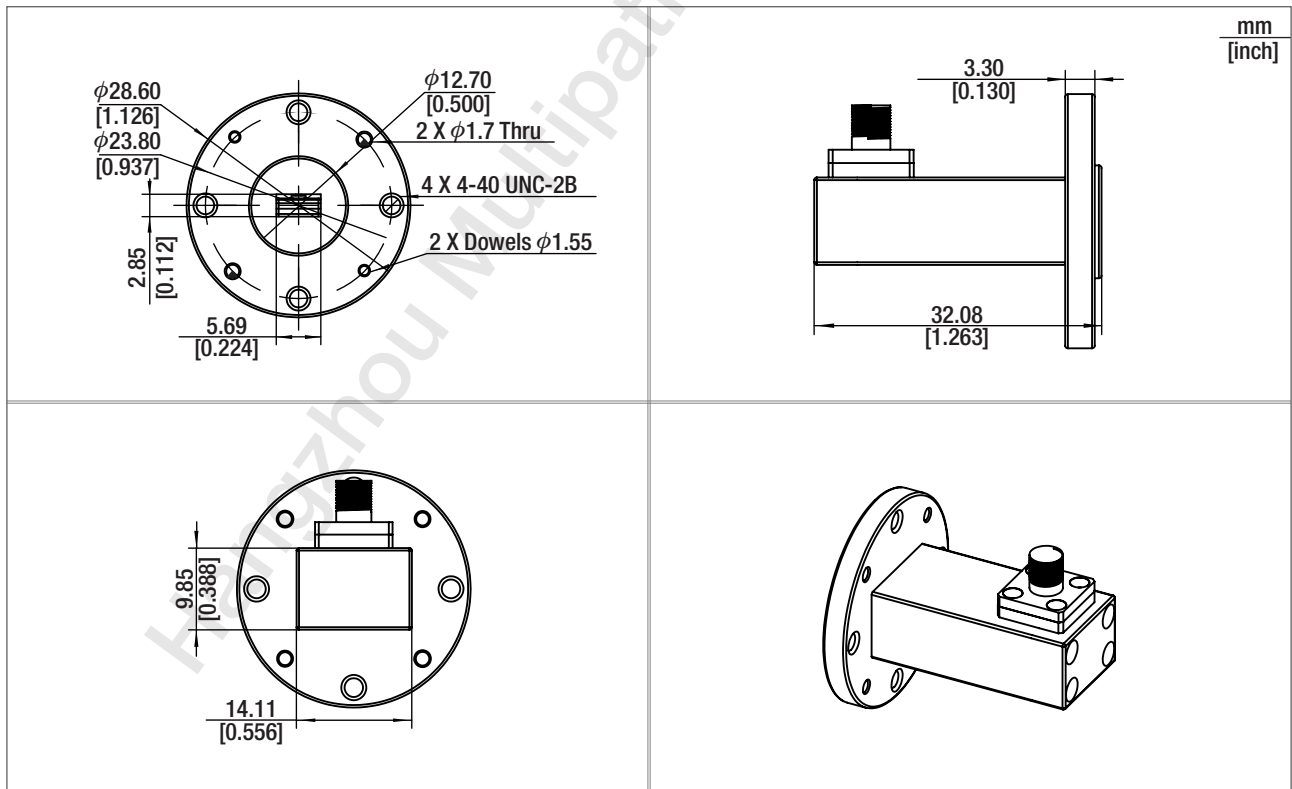
Detailed dimensions of the components will be given in subsequent diagrams.



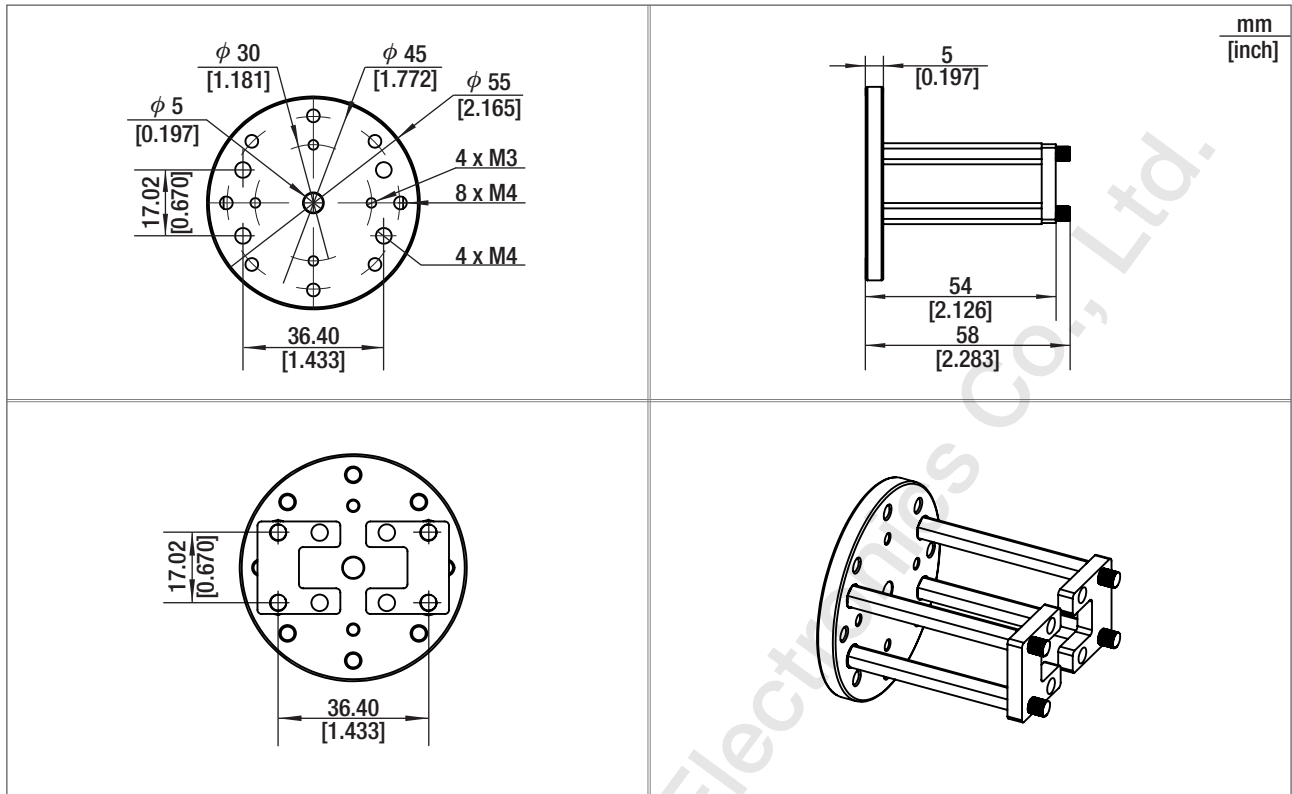
• Dimensional drawing: horn, HA-WR22-15



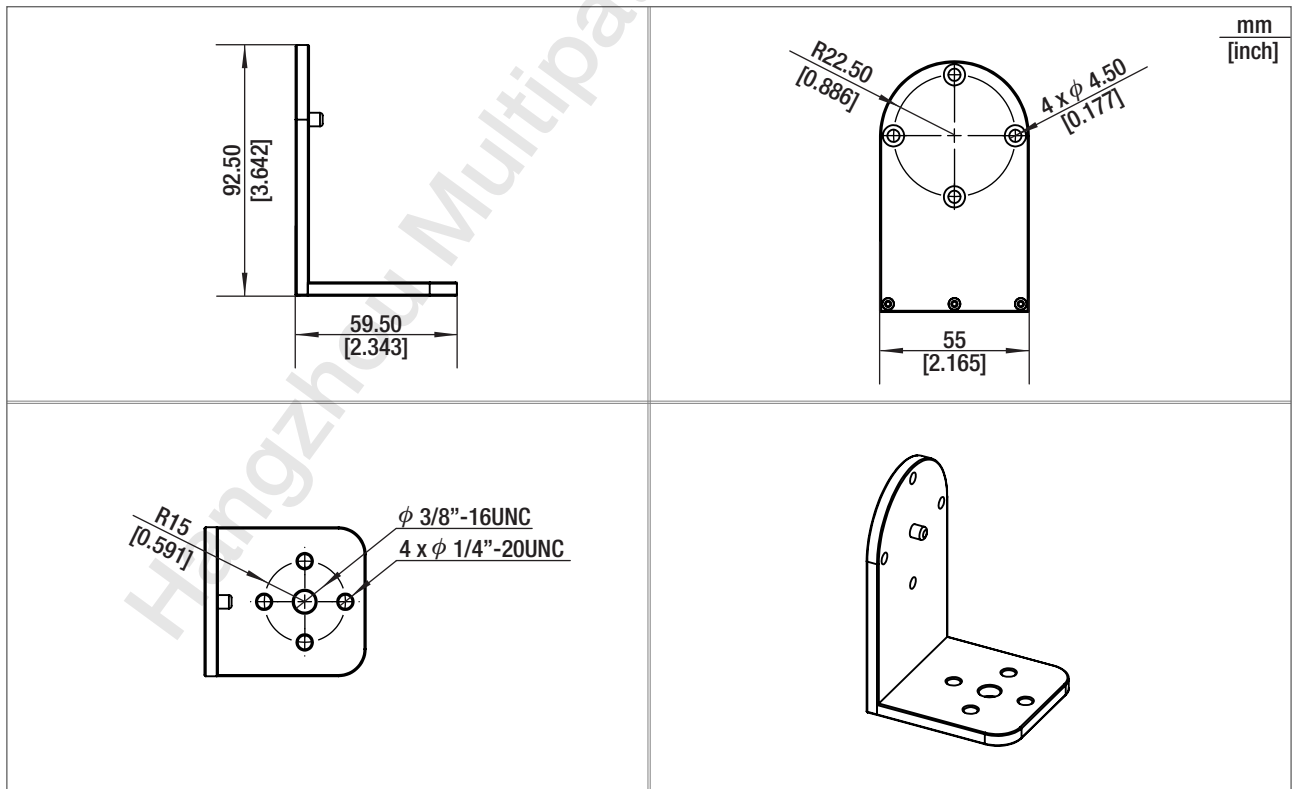
• Dimensional drawing: adapter, WR22-SMA-F (Optional)



• Dimensional drawing: round mounting bracket (Optional)

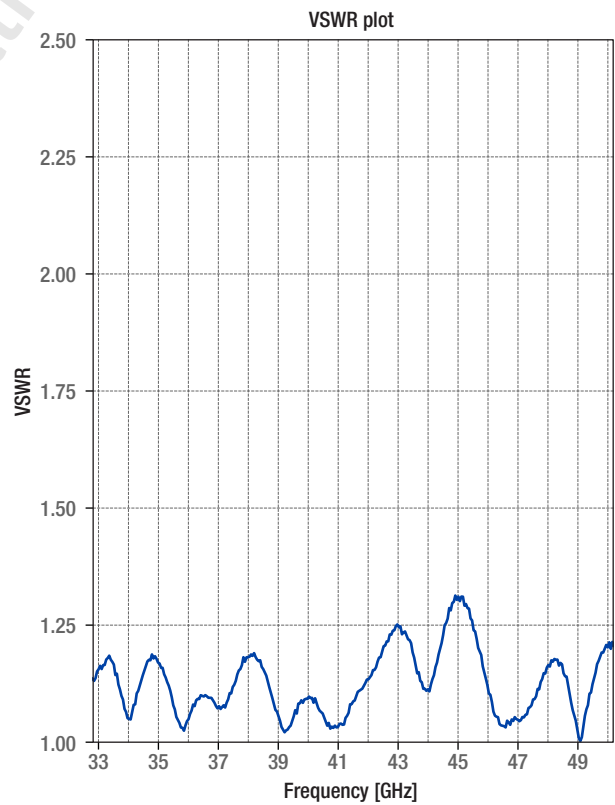
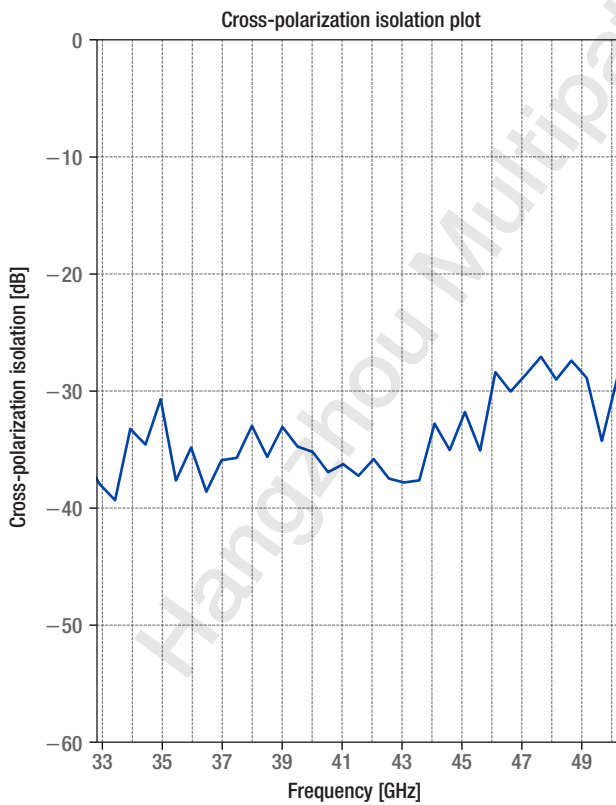
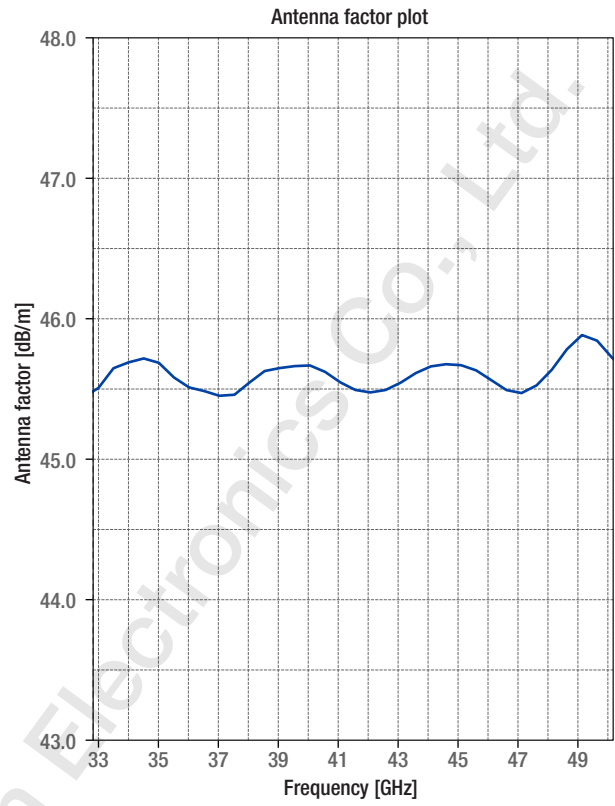
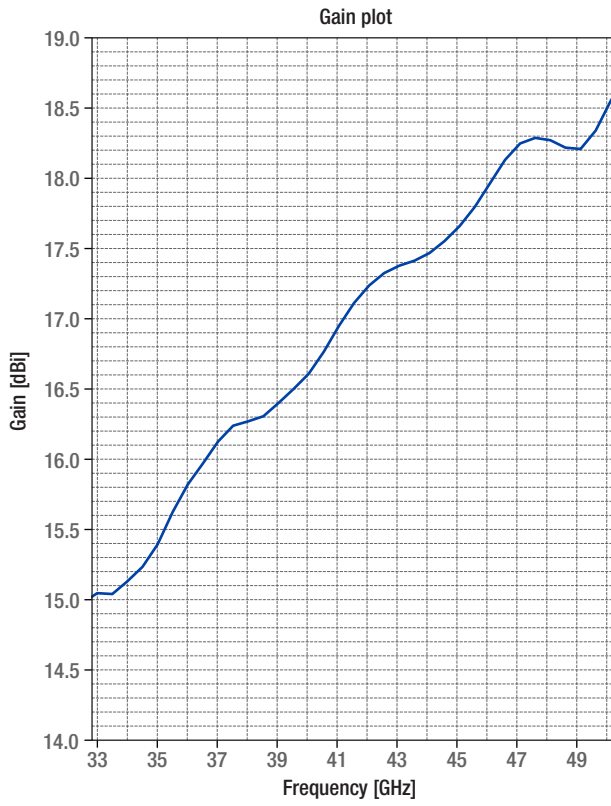


• Dimensional drawing: L type mounting bracket (Optional)



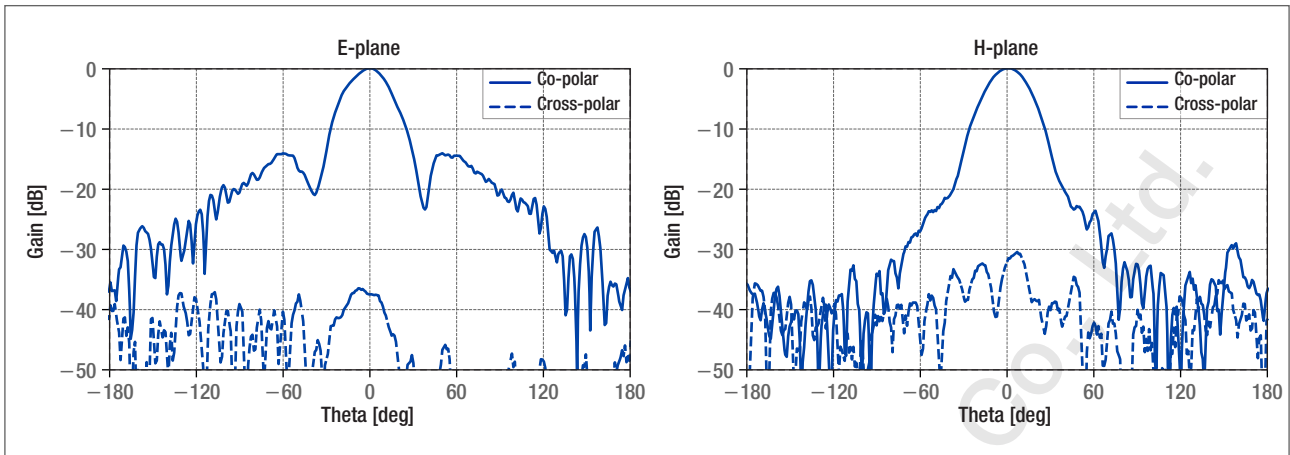
Electrical characteristics

Gain & Antenna factor & Cross-polarization isolation & VSWR

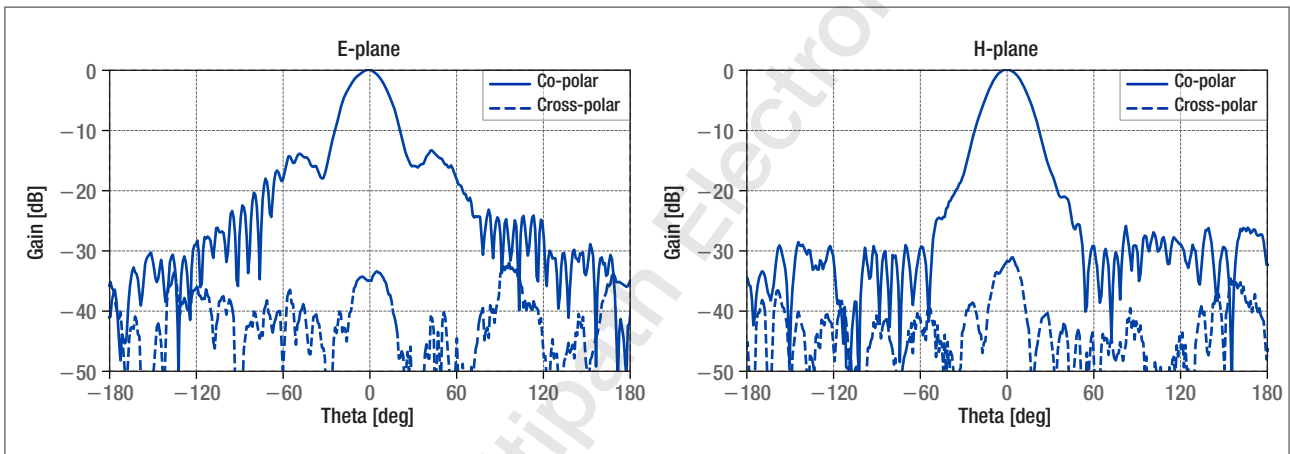


• Radiation patterns

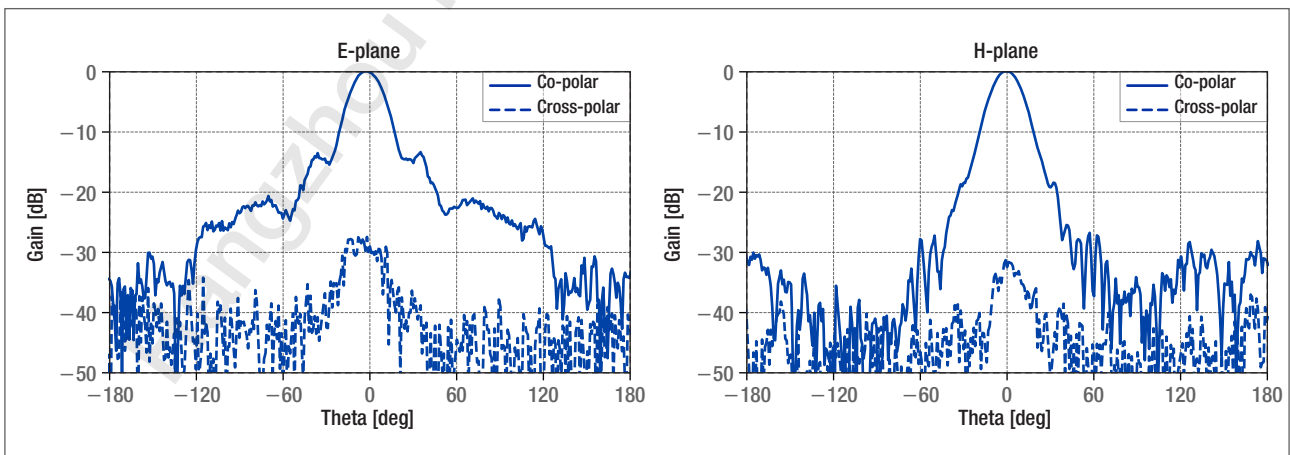
Patterns @ 33.0 GHz



Patterns @ 40.0 GHz



Patterns @ 50.0 GHz



• Data table


Frequency [GHz]	Gain [dBi]	Antenna factor [dB/m]	Cross-polarization isolation [dB]	VSWR
33	15.02	45.54	-37.35	1.13
34	15.11	45.71	-32.79	1.06
35	15.36	45.71	-30.36	1.17
36	15.77	45.54	-34.33	1.04
37	16.07	45.48	-35.37	1.07
38	16.21	45.58	-32.54	1.17
39	16.34	45.67	-32.63	1.05
40	16.54	45.69	-34.70	1.09
41	16.87	45.58	-35.70	1.04
42	17.15	45.51	-35.27	1.13
43	17.29	45.57	-37.20	1.24
44	17.37	45.69	-32.36	1.12
45	17.56	45.69	-31.41	1.30
46	17.85	45.59	-28.13	1.08
47	18.13	45.50	-28.33	1.05
48	18.15	45.66	-28.73	1.16
49	18.09	45.90	-28.59	1.03
50	18.42	45.75	-28.69	1.20

Frequency [GHz]	E-plane, 3dB beamwidth	H-plane, 3dB beamwidth
33.0	28.84°	28.48°
40.0	25.70°	24.12°
50.0	21.18°	20.27°



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