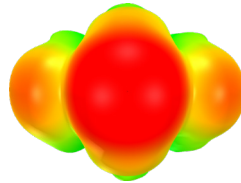


# Standard Gain Horn Antennas

60.5 - 91.9 GHz, 10 dBi

Radiation pattern



QR code



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

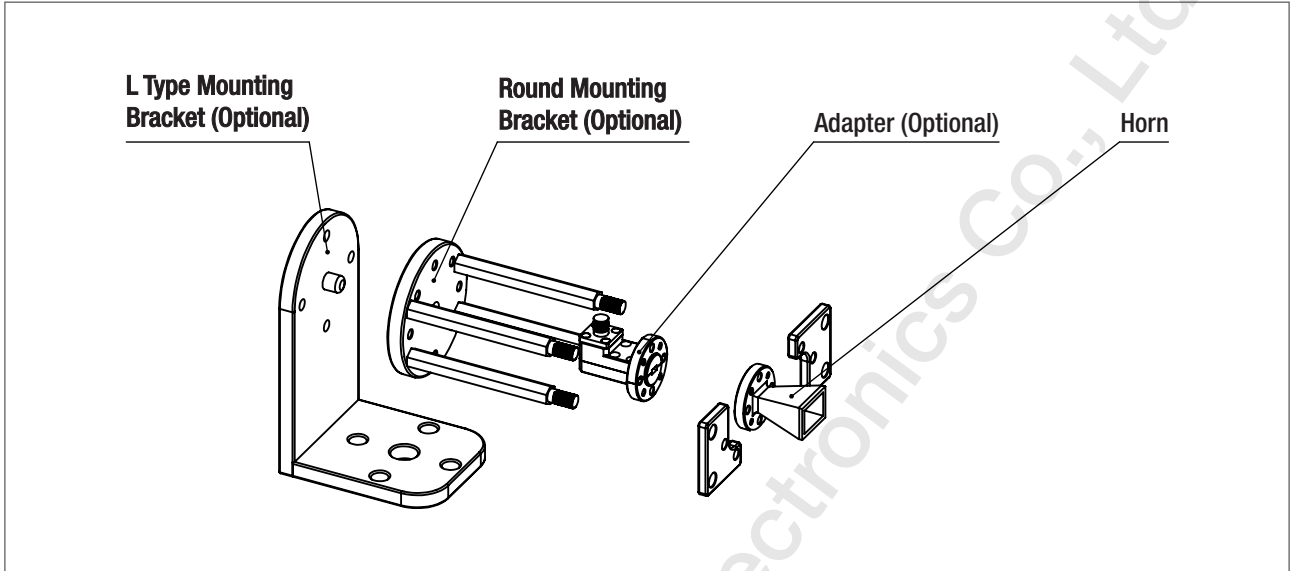
## ⚙️ Product specifications

Part number	HA-WR12-15	Polarization	Single linear
Antenna type	Pyamidal horn	Gain [dBi]	15 Typ.
Frequency range [GHz]	60.5 – 91.9	3dB beamwidth [deg]	E-plane: 25 Typ. H-plane: 25 Typ.
Waveguide band	WR12	Cross-polarization isolation [dB]	50 Typ.
Dimensions (H x W x L) [mm; inch]	19.05 x 19.05 x 43.53; 0.75 x 0.75 x 1.71	VSWR	1.25 Typ.
Weight (approx.) [kg; lb]	0.04; 0.088	Impedance [Ohms]	50
Material	Cu (Gold plated)	RF connector	1.0-Female

Outline dimensions

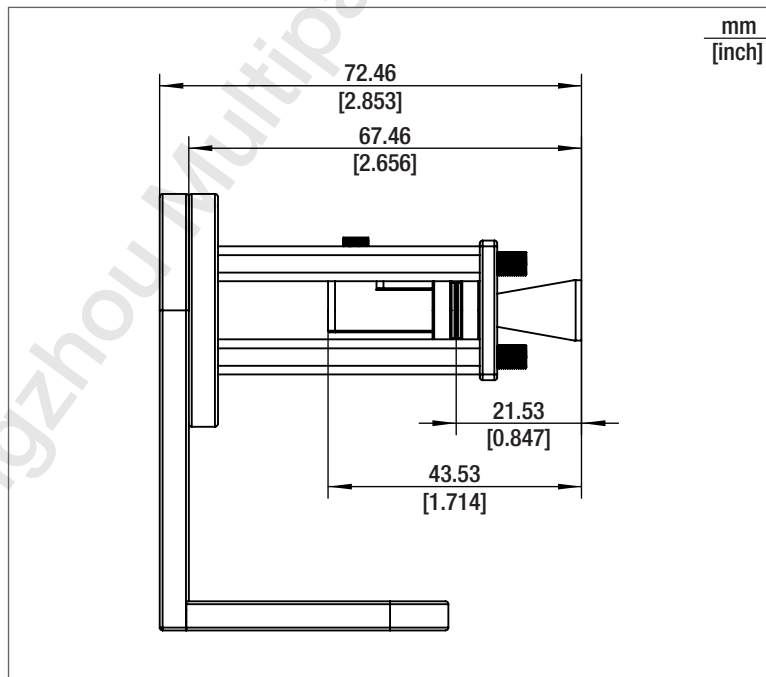
• Assembly dimensional drawing

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.

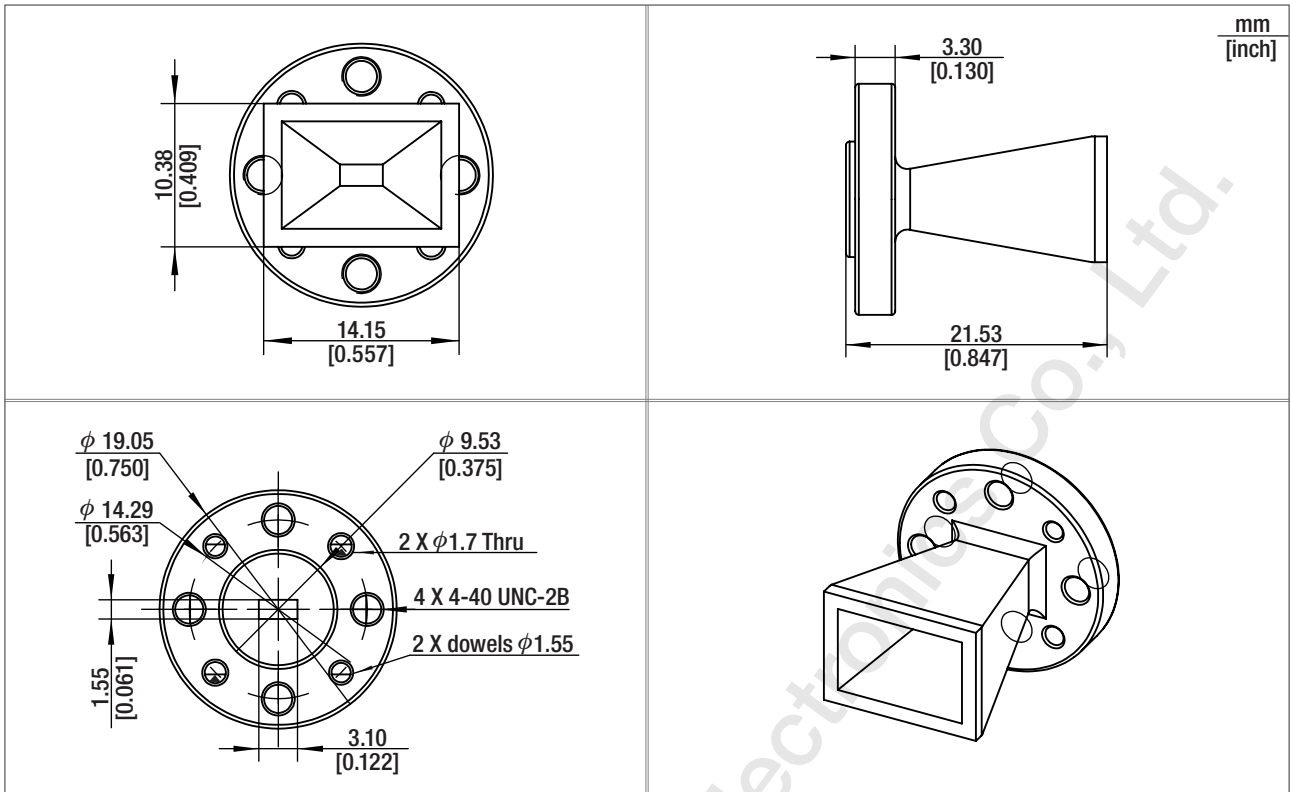


Side view of the mounting system.

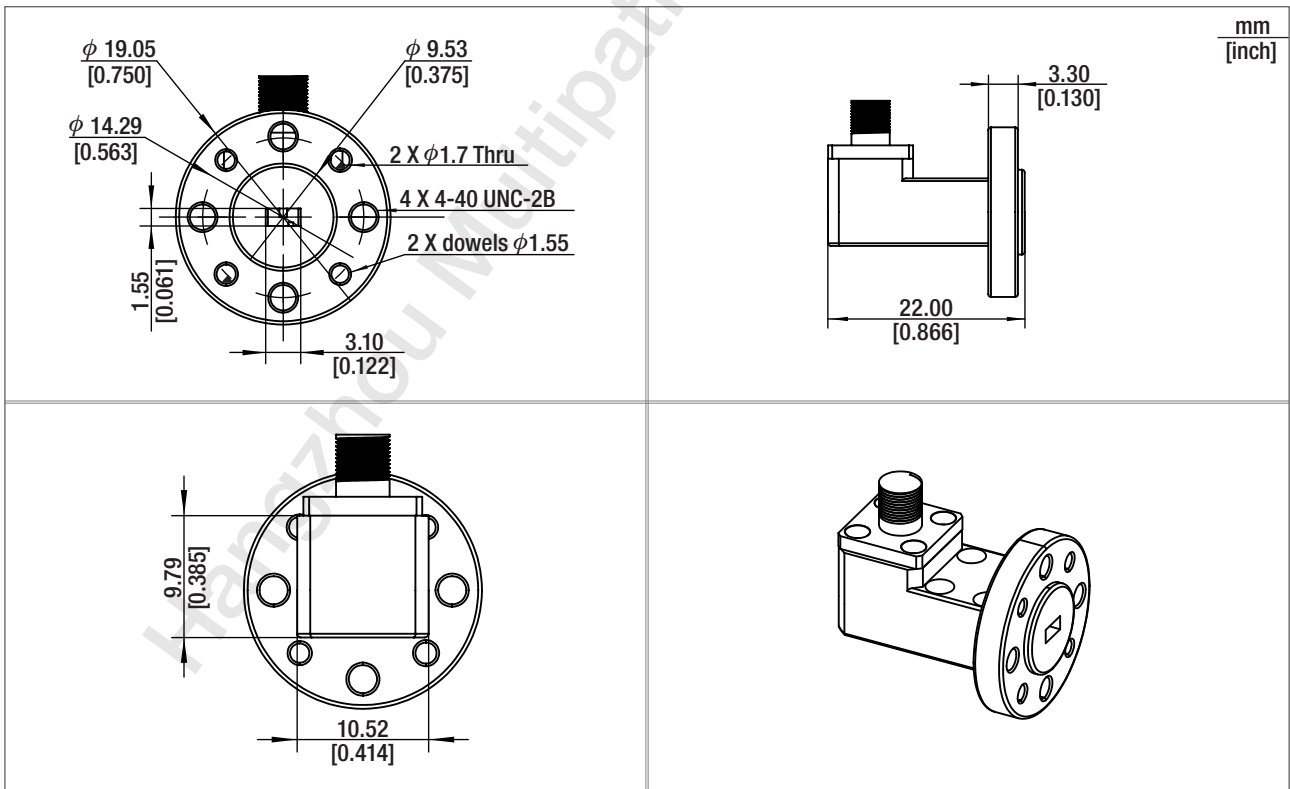
Detailed dimensions of the components will be given in subsequent diagrams.



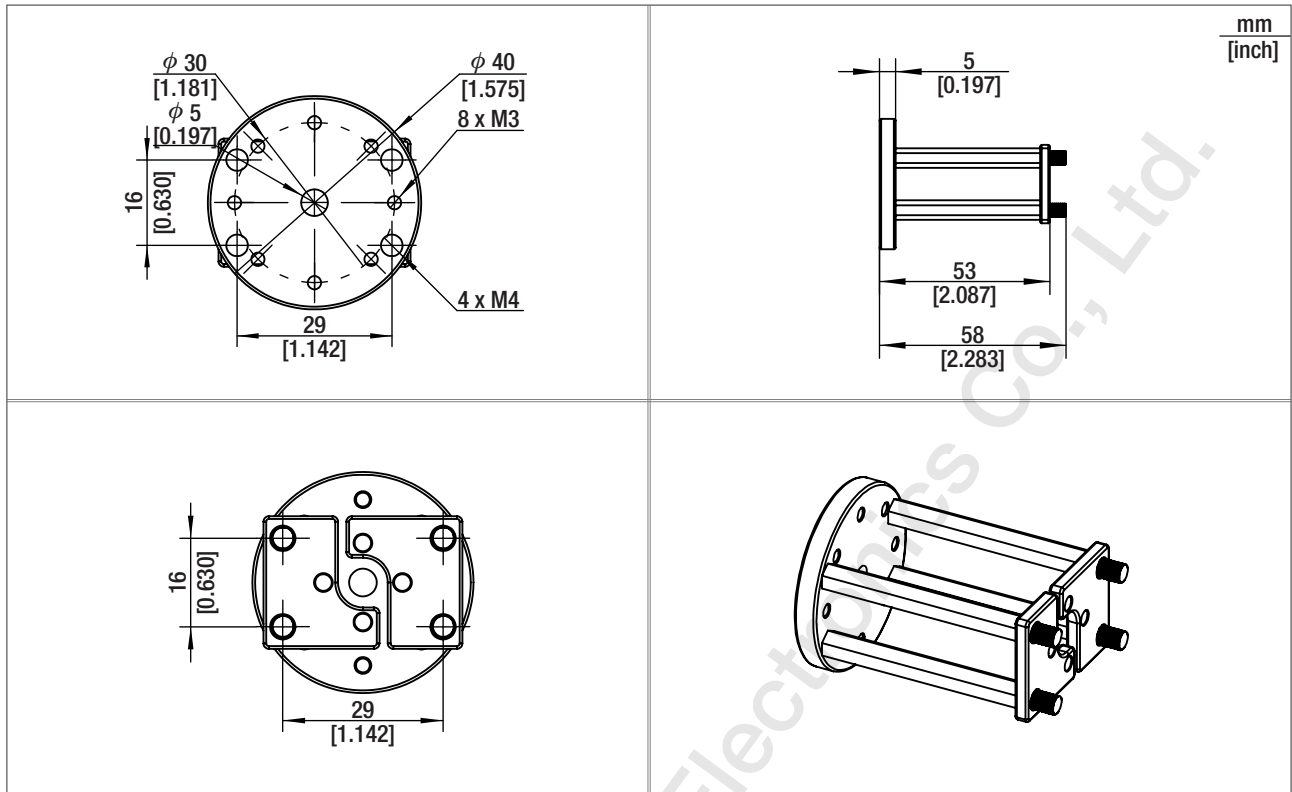
• Dimensional drawing: horn, HA-WR12-15



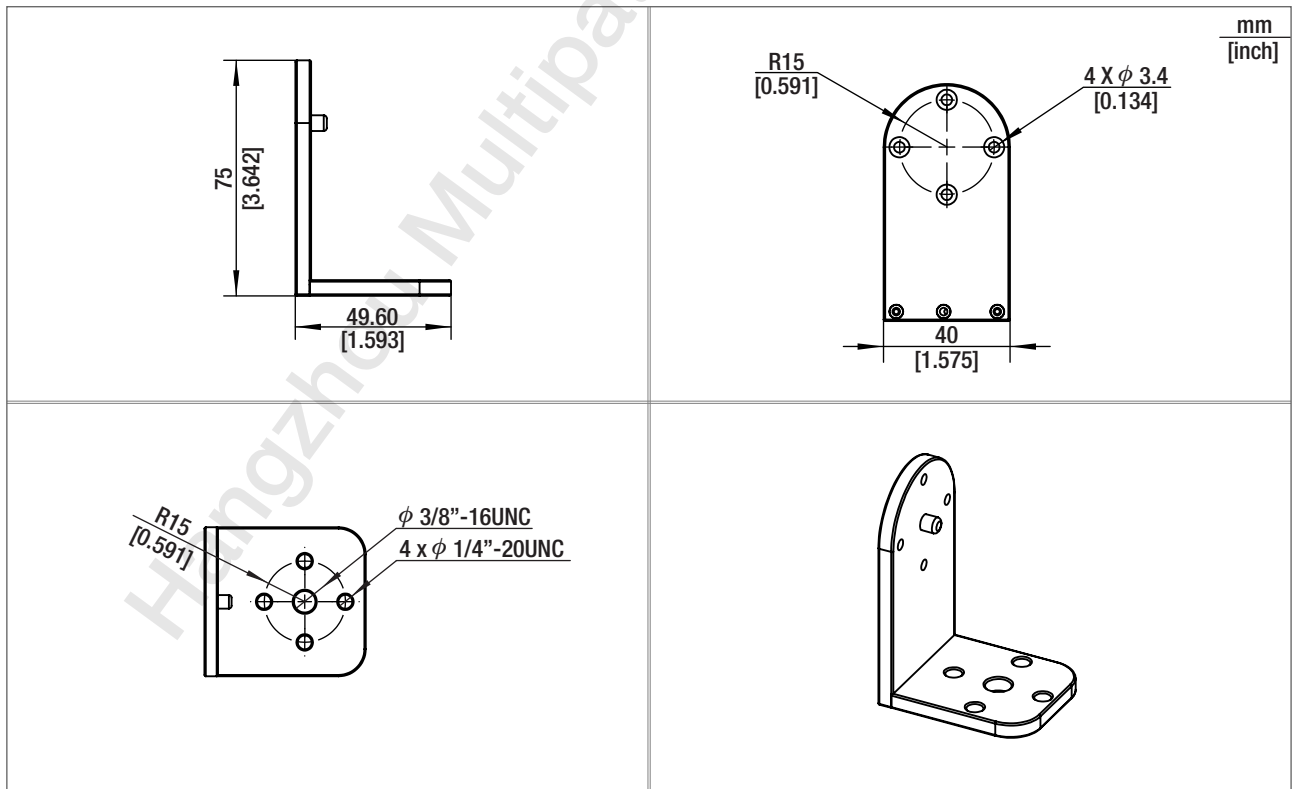
• Dimensional drawing: adapter, WR12-1.0-F (Optional)



• Dimensional drawing: round mounting bracket (Optional)

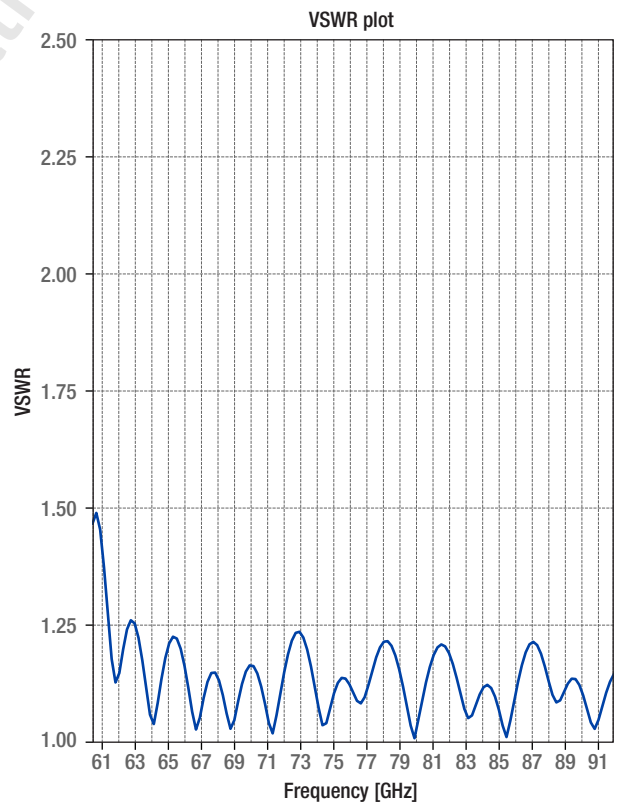
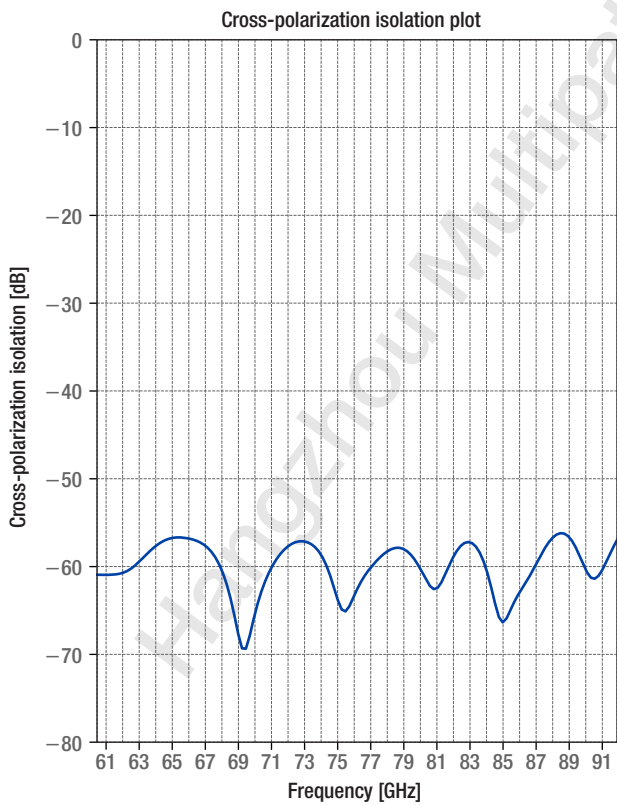
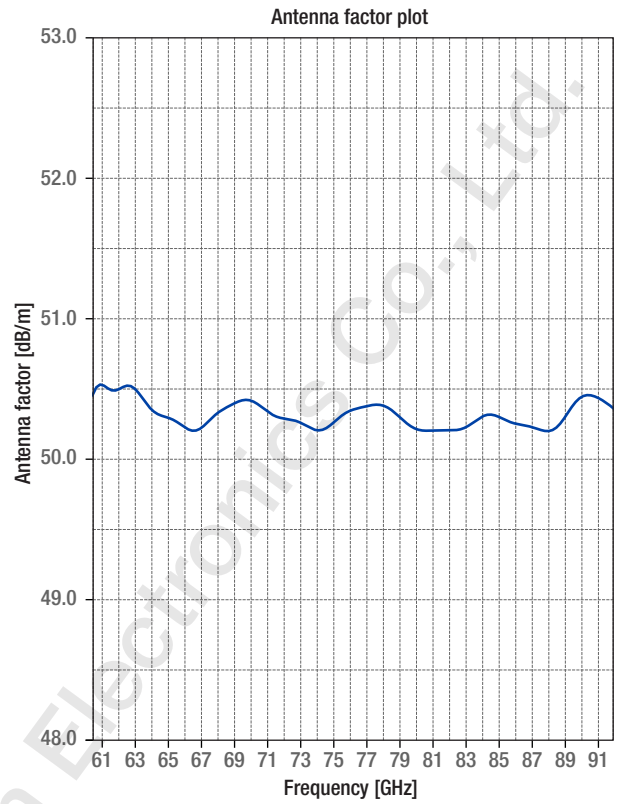
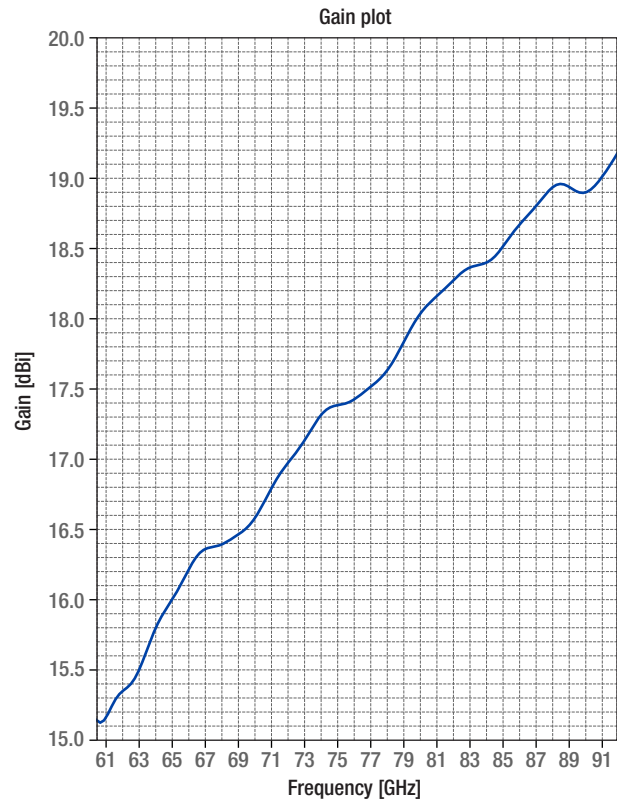


• Dimensional drawing: L type mounting bracket (Optional)



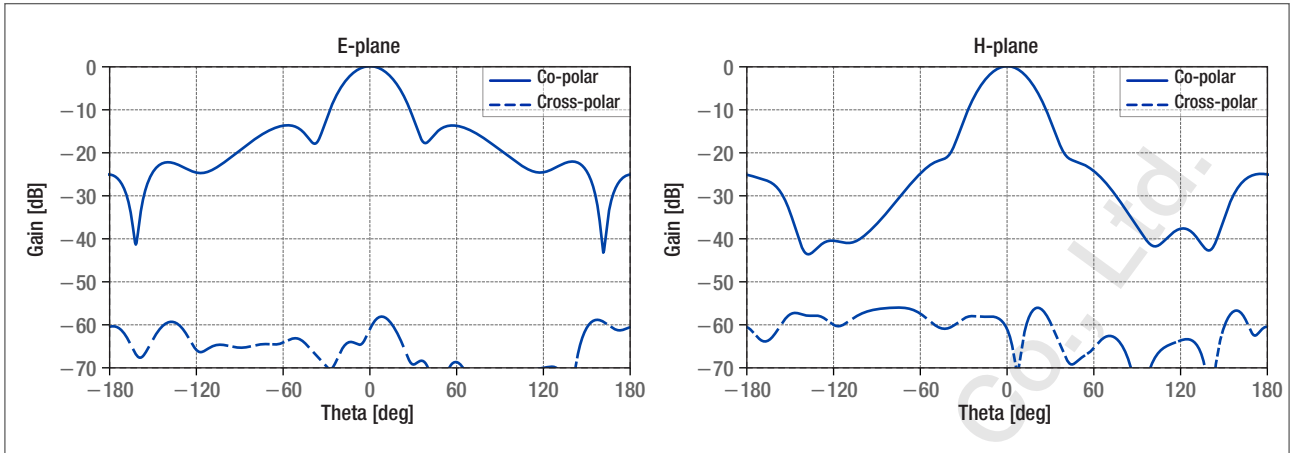
## Electrical characteristics

### Gain & Antenna factor & Cross-polarization isolation & VSWR

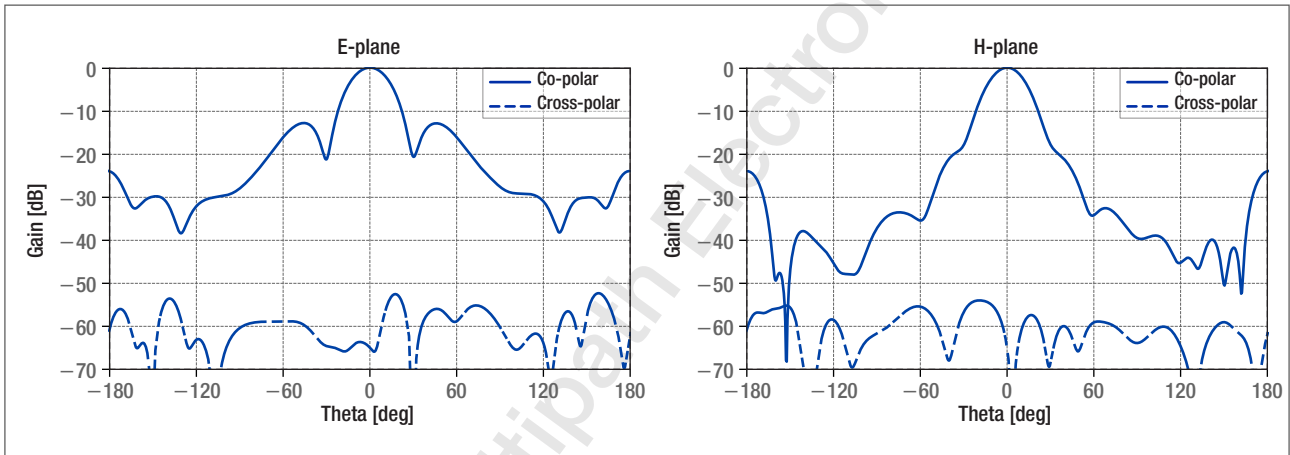


## • Radiation patterns

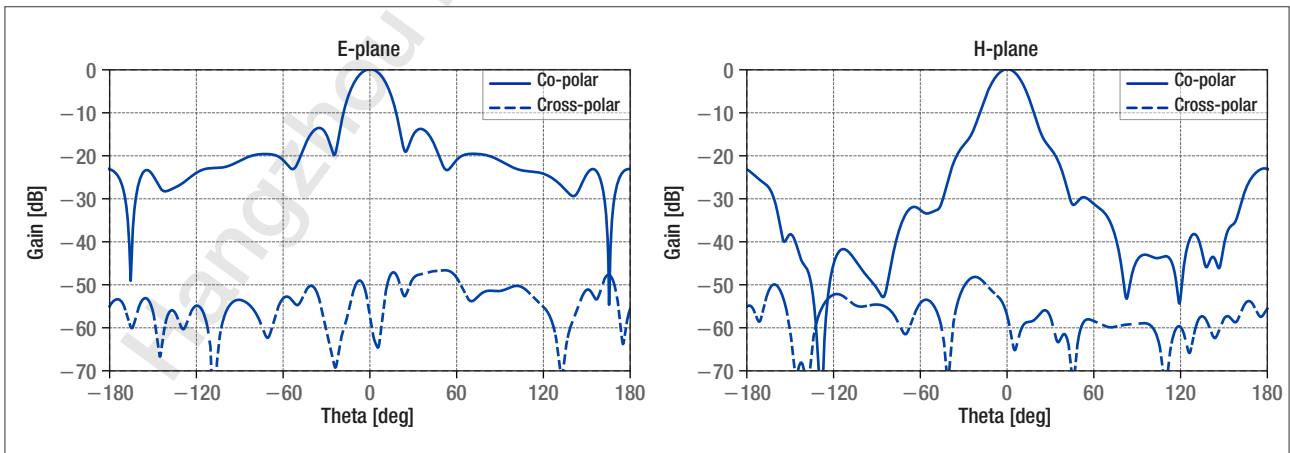
Patterns @ 60.0 GHz



Patterns @ 75.0 GHz



Patterns @ 90.0 GHz



• Data table


Frequency [GHz]	Gain [dBi]	Antenna factor [dB/m]	Cross-polarization isolation [dB]	VSWR
61	15.37	50.52	-60.38	1.20
63	15.83	50.35	-57.34	1.04
65	16.21	50.23	-56.64	1.16
67	16.39	50.32	-59.58	1.15
69	16.54	50.43	-67.77	1.15
71	16.91	50.31	-58.41	1.05
73	17.22	50.24	-57.29	1.19
75	17.40	50.29	-64.76	1.12
77	17.53	50.39	-59.74	1.12
79	17.83	50.31	-57.83	1.15
81	18.15	50.21	-62.44	1.16
83	18.35	50.22	-57.17	1.10
85	18.45	50.32	-64.07	1.11
87	18.73	50.25	-61.70	1.16
89	18.96	50.21	-56.22	1.10
91	18.91	50.46	-60.52	1.10

Frequency [GHz]	E-plane, 3dB beamwidth	H-plane, 3dB beamwidth
60	31.67°	29.74°
75	25.84°	23.79°
90	21.37°	20.39°



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