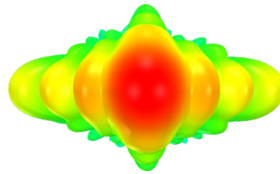


Standard Gain Horn Antennas

60.5 - 91.9 GHz, 20 dBi



Radiation pattern



QR code



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

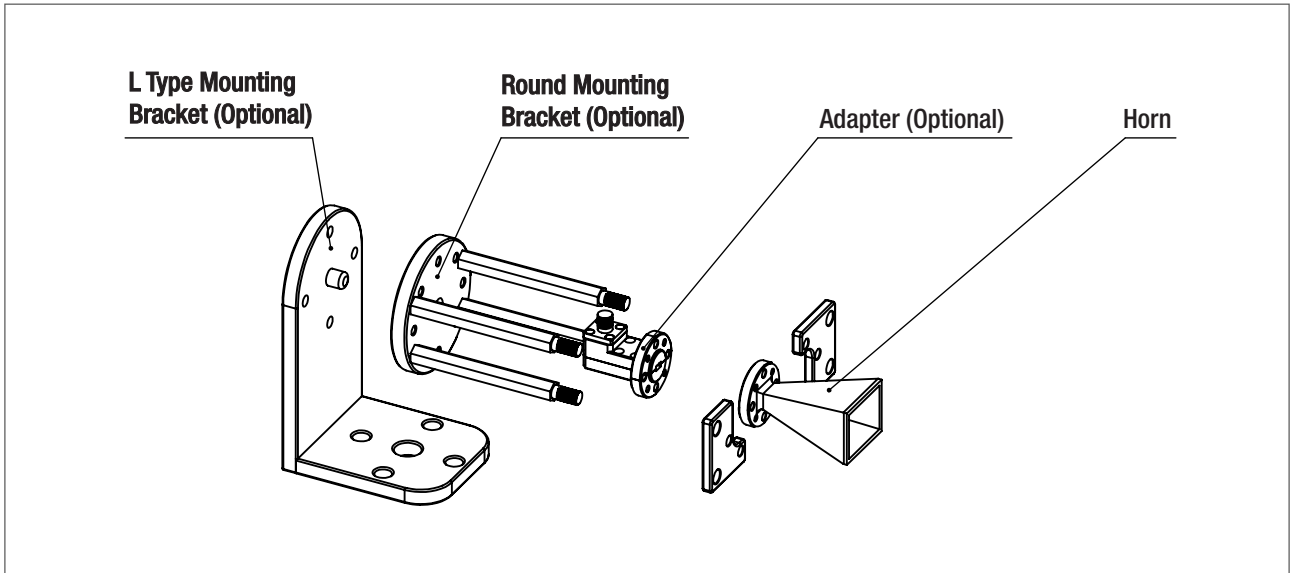
Product specifications

Part number	HA-WR12-20	Polarization	Single linear
Antenna type	Pyamidal horn	Gain [dBi]	20 Typ.
Frequency range [GHz]	60.5 – 91.9	3dB beamwidth [deg]	E-plane: 15 Typ. H-plane: 15 Typ.
Waveguide band	WR12	Cross-polarization isolation [dB]	50 Typ.
Dimensions (H x W x L) [mm; inch]	19.05 x 19.05 x 58.33; 0.75 x 0.75 x 2.30	VSWR	1.20 Typ.
Weight (approx.) [kg; lb]	0.05; 0.110	Impedance [Ohms]	50
Material	Cu (Gold plated)	RF connector	1.0-Female

Outline dimensions

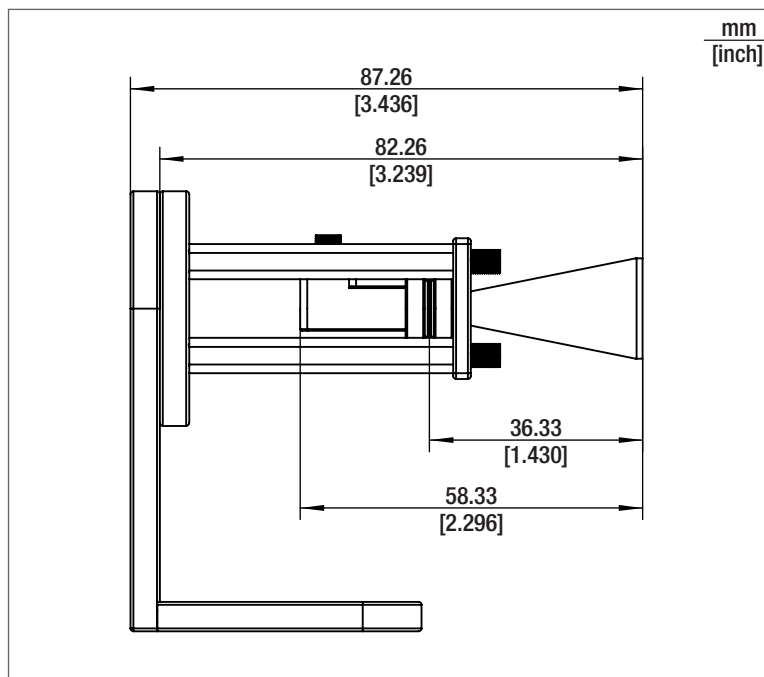
• Assembly dimensional drawing

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.

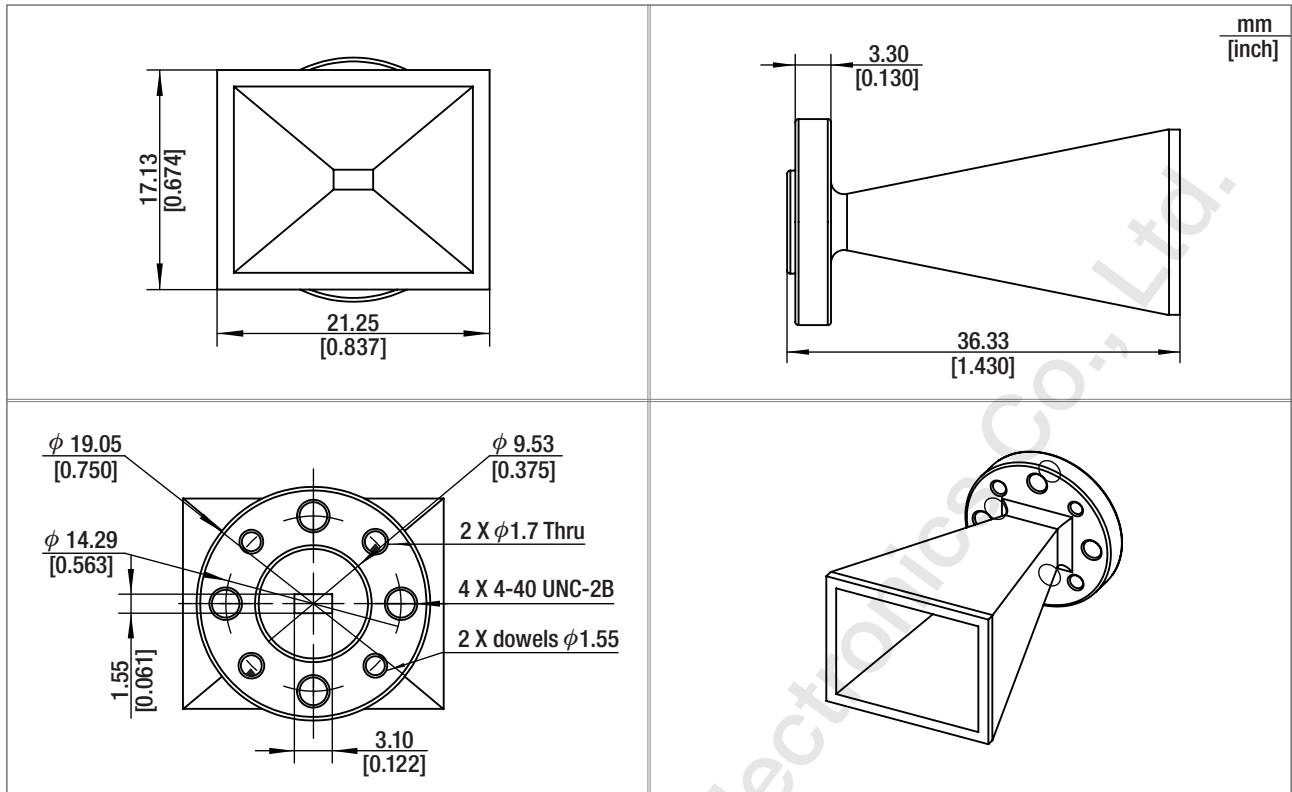


Side view of the mounting system.

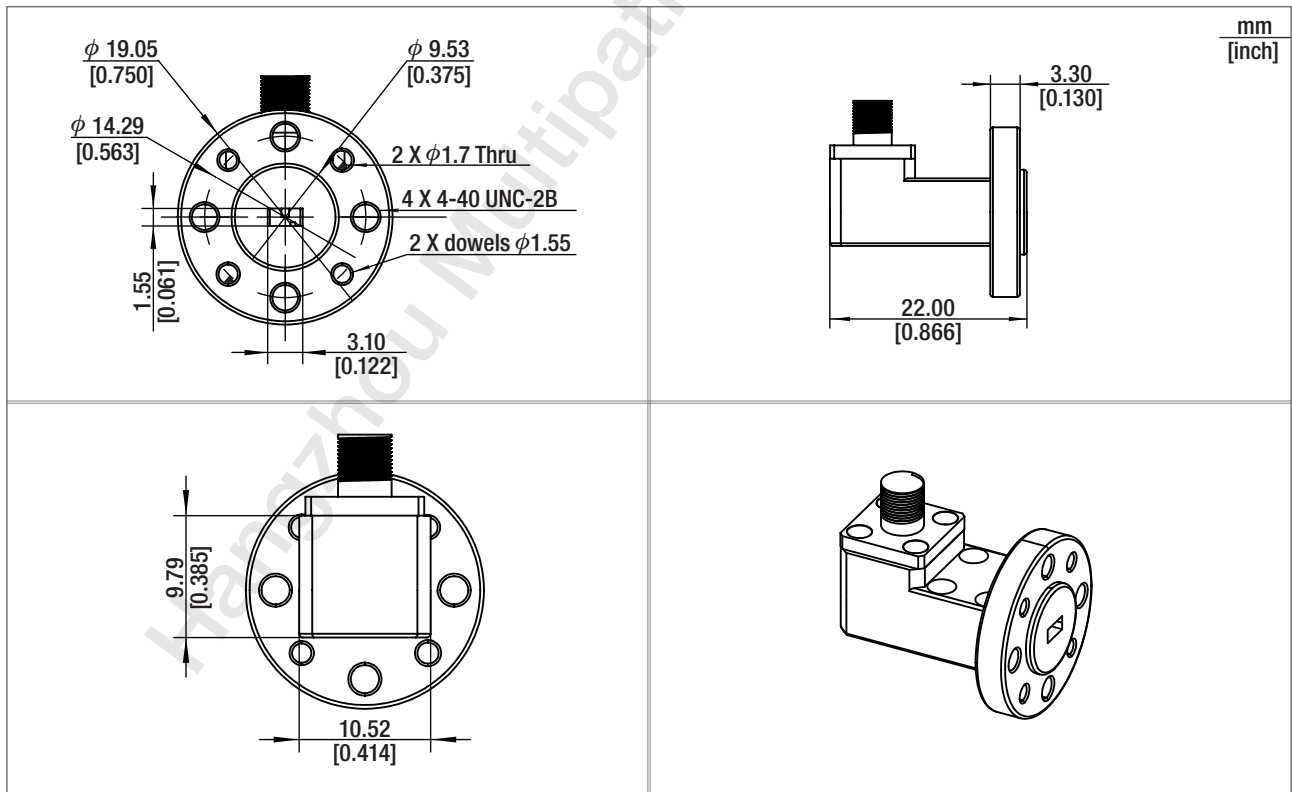
Detailed dimensions of the components will be given in subsequent diagrams.



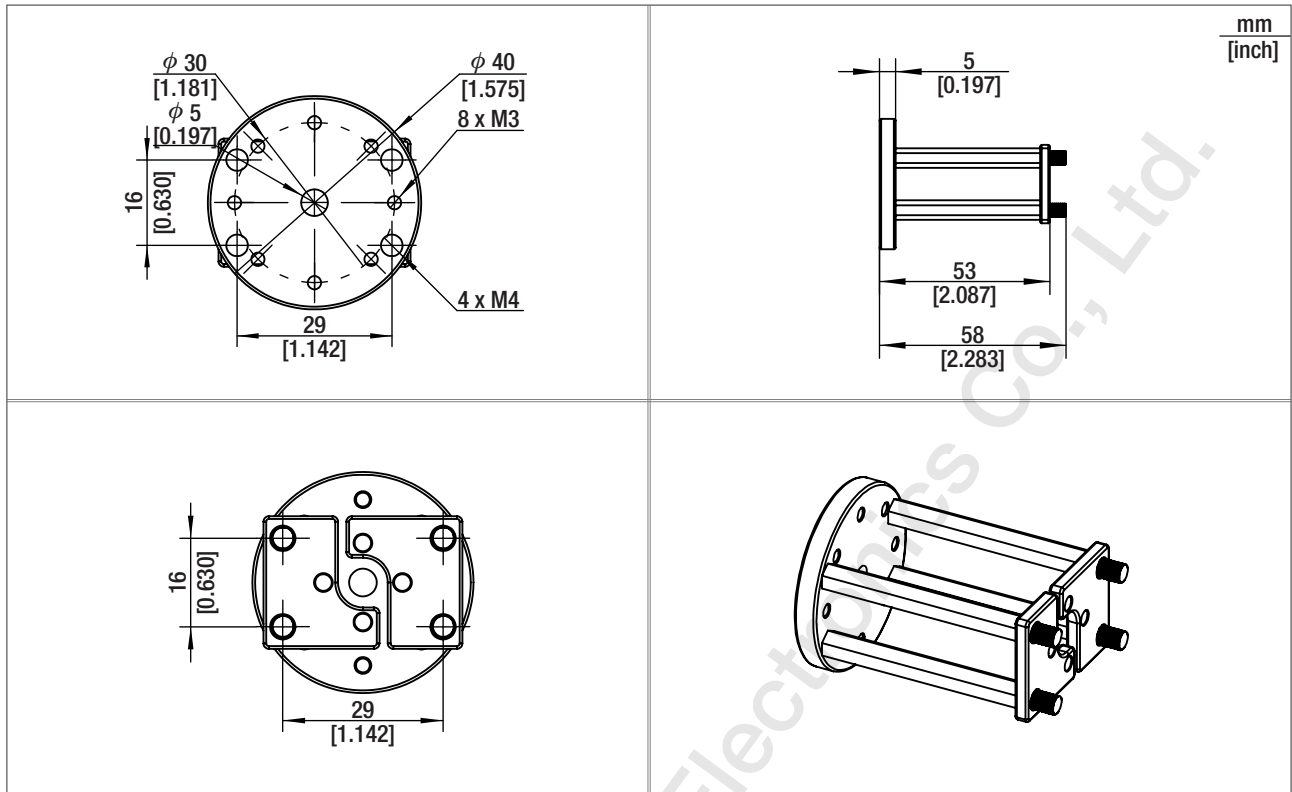
• Dimensional drawing: horn, HA-WR12-20



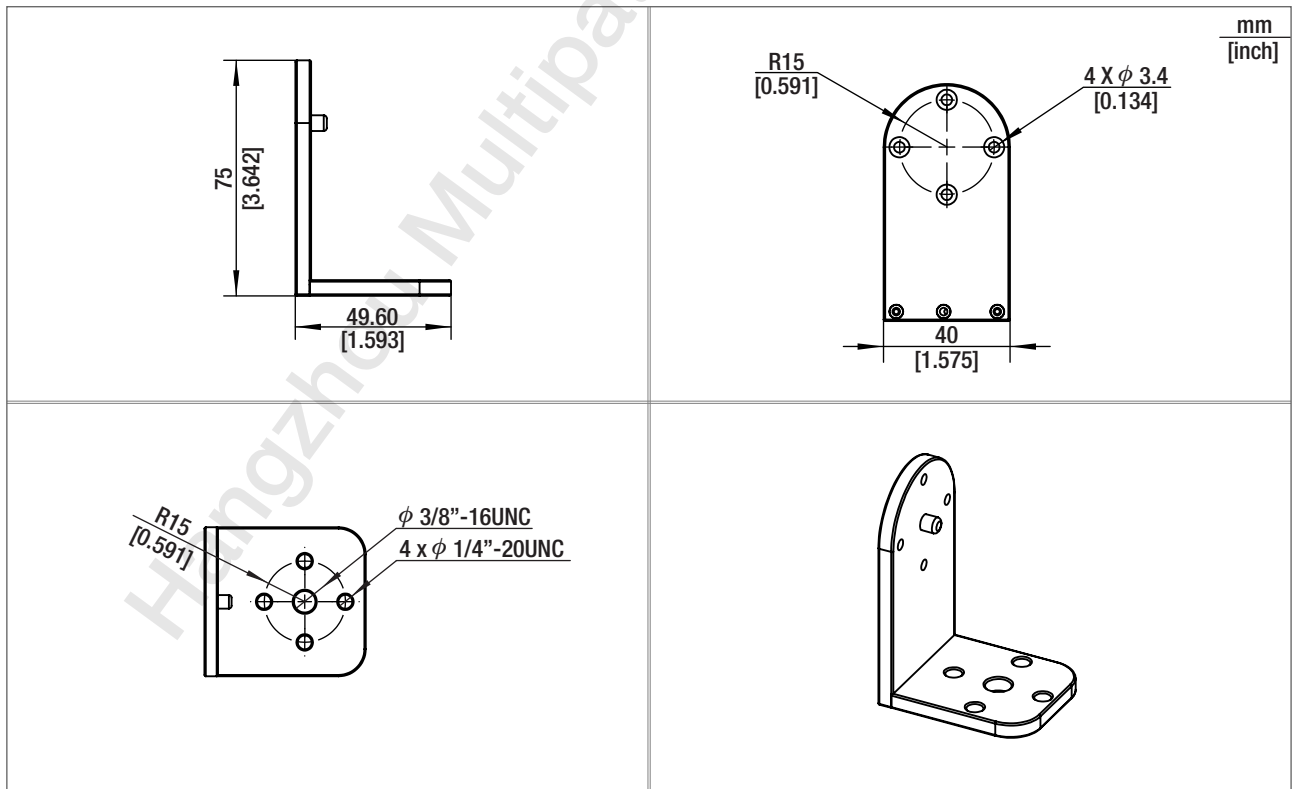
• Dimensional drawing: adapter, WR12-1.0-F (Optional)



• Dimensional drawing: round mounting bracket (Optional)

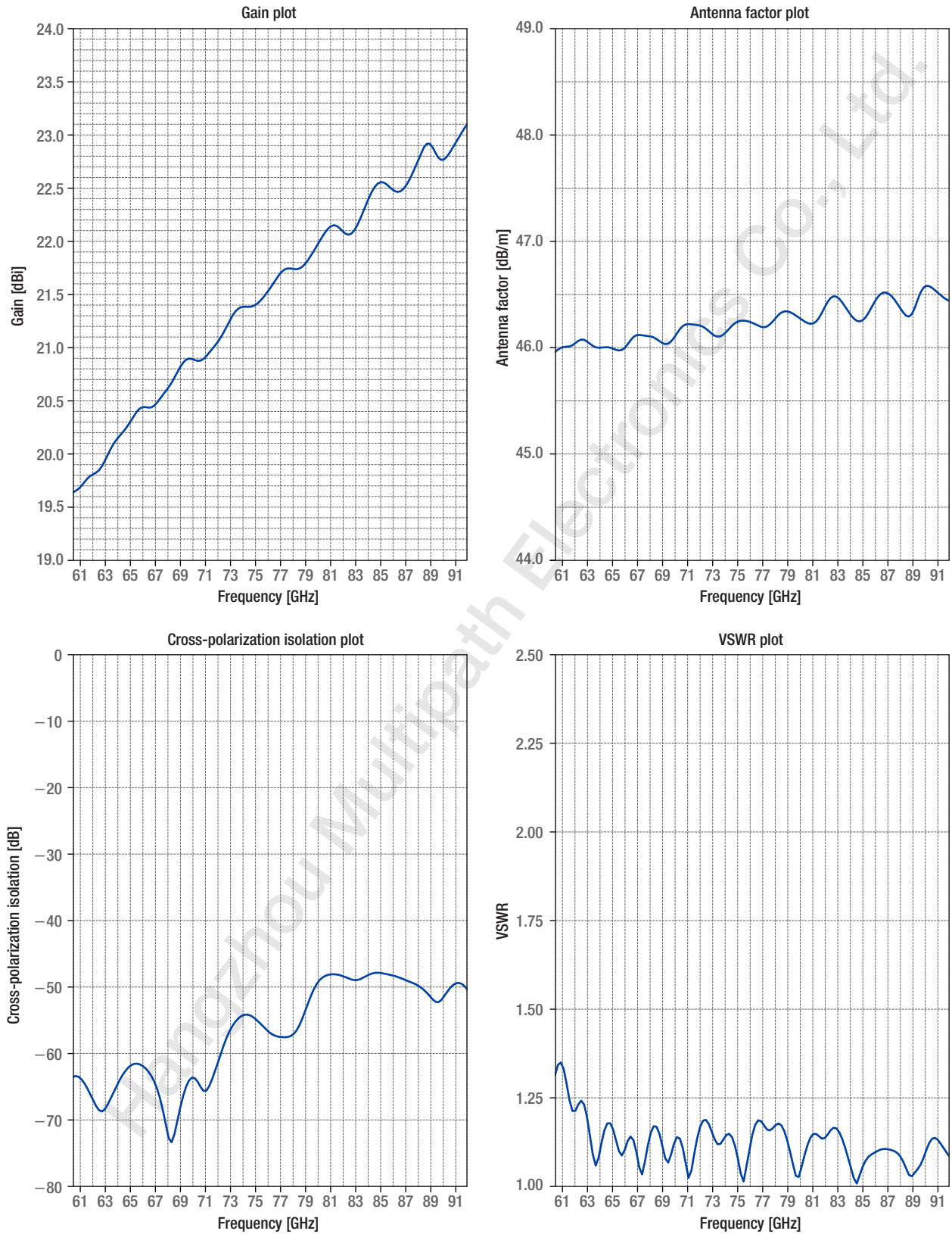


• Dimensional drawing: L type mounting bracket (Optional)



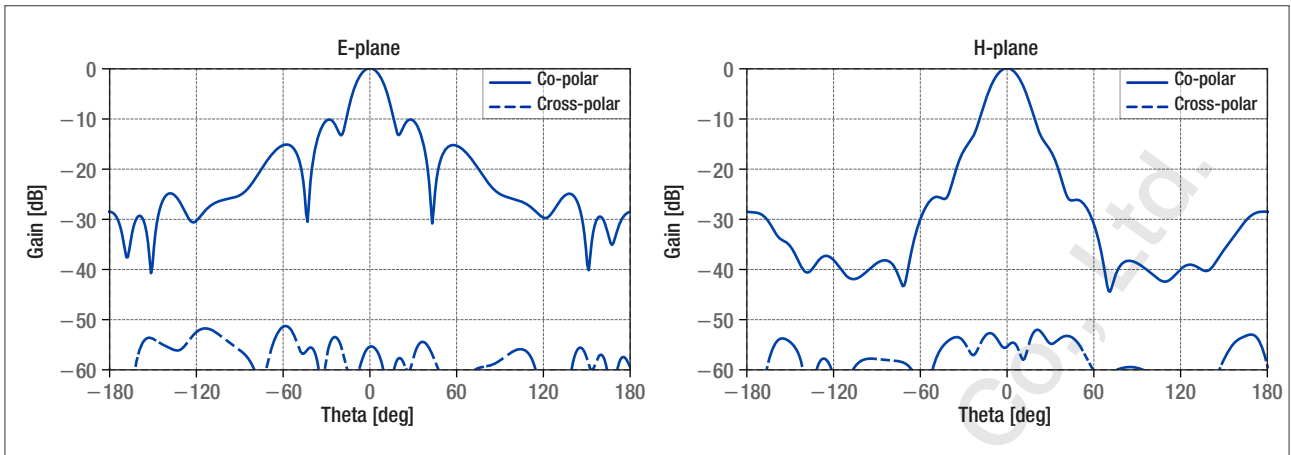
Electrical characteristics

Gain & Antenna factor & Cross-polarization isolation & VSWR

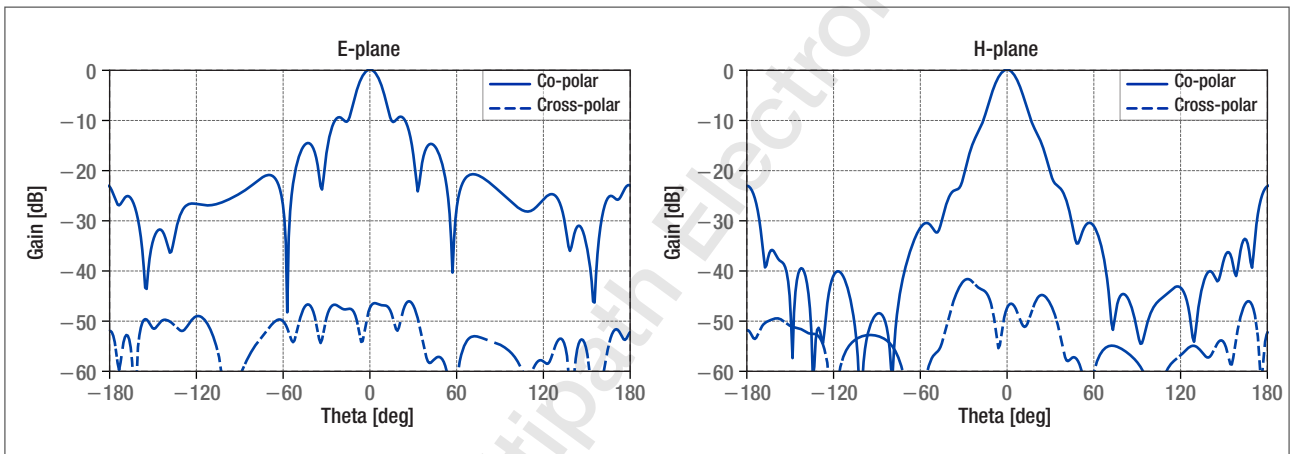


• Radiation patterns

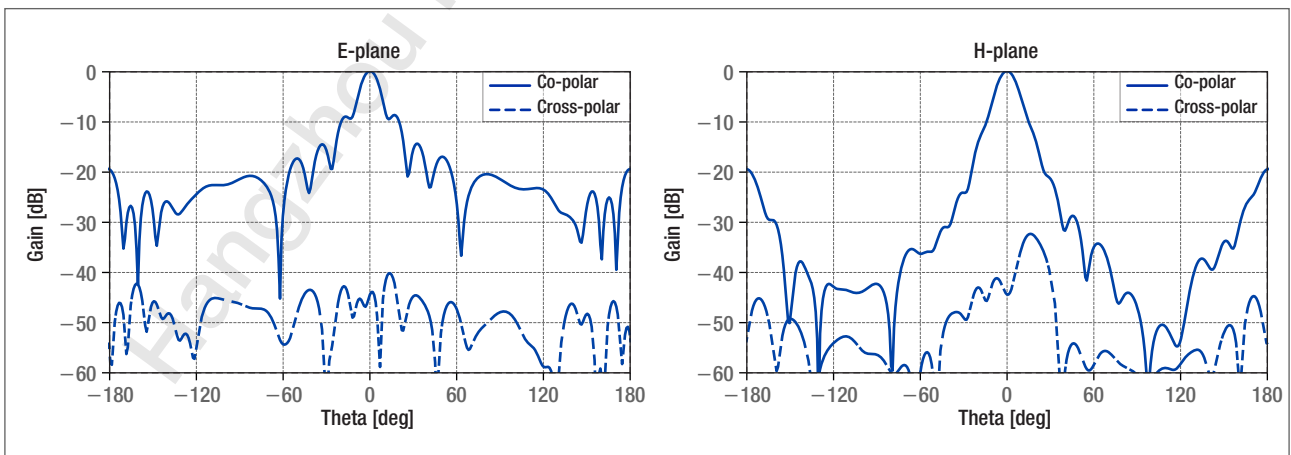
Patterns @ 60.0 GHz



Patterns @ 75.0 GHz



Patterns @ 90.0 GHz



• Data table

Frequency [GHz]	Gain [dBi]	Antenna factor [dB/m]	Cross-polarization isolation [dB]	VSWR
61	19.83	46.07	-67.80	1.23
63	20.17	46.01	-63.95	1.12
65	20.44	46.00	-61.73	1.10
67	20.60	46.12	-70.59	1.11
69	20.90	46.06	-63.94	1.09
71	20.99	46.22	-63.70	1.09
73	21.35	46.11	-55.06	1.12
75	21.43	46.26	-55.08	1.03
77	21.72	46.20	-57.39	1.17
79	21.79	46.35	-53.52	1.13
81	22.13	46.23	-47.99	1.13
83	22.08	46.49	-48.70	1.16
85	22.52	46.26	-47.70	1.00
87	22.47	46.51	-48.32	1.10
89	22.84	46.34	-49.92	1.07
91	22.78	46.59	-51.19	1.10

Frequency [GHz]	E-plane, 3dB beamwidth	H-plane, 3dB beamwidth
60	17.56°	18.99°
75	14.49°	15.55°
90	11.99°	13.20°



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