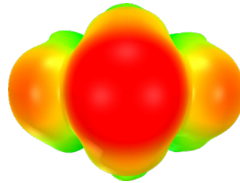


Standard Gain Horn Antennas

49.8 - 75.8 GHz, 15 dBi



Radiation pattern



QR code



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

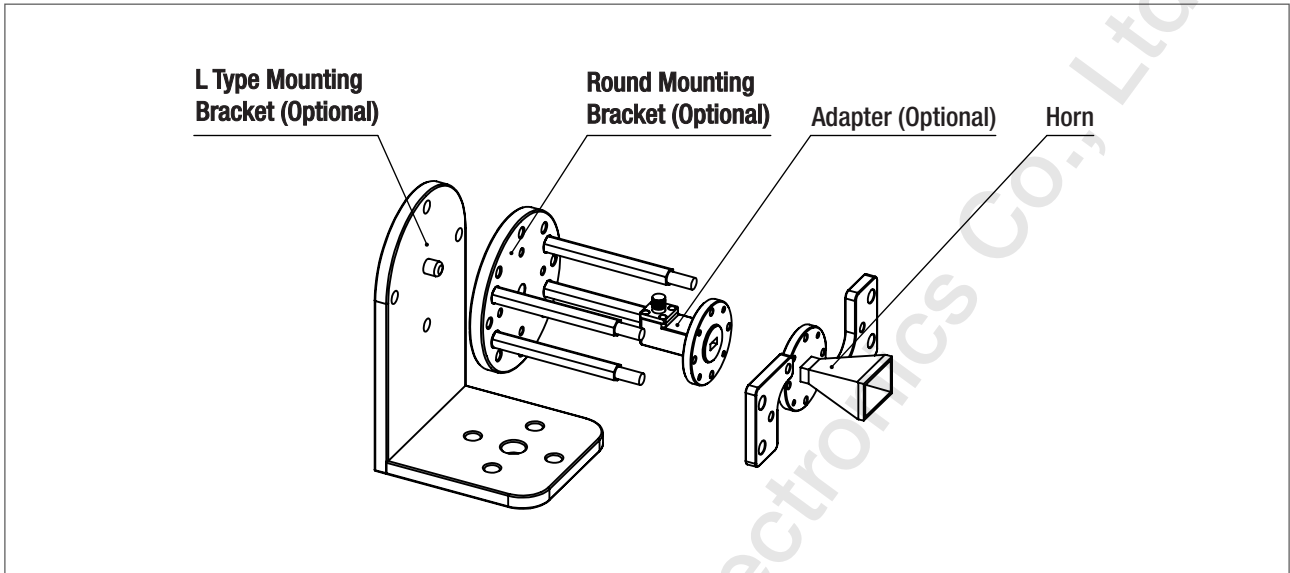
⚙️ Product specifications

Part number	HA-WR15-15	Polarization	Single linear
Antenna type	Pyamidal horn	Gain [dBi]	15 Typ.
Frequency range [GHz]	49.8 – 75.8	3dB beamwidth [deg]	E-plane: 25 Typ. H-plane: 25 Typ.
Waveguide band	WR15	Cross-polarization isolation [dB]	50 Typ.
Dimensions (H x W x L) [mm; inch]	19.05 x 19.05 x 55.65; 0.75 x 0.75 x 2.19	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

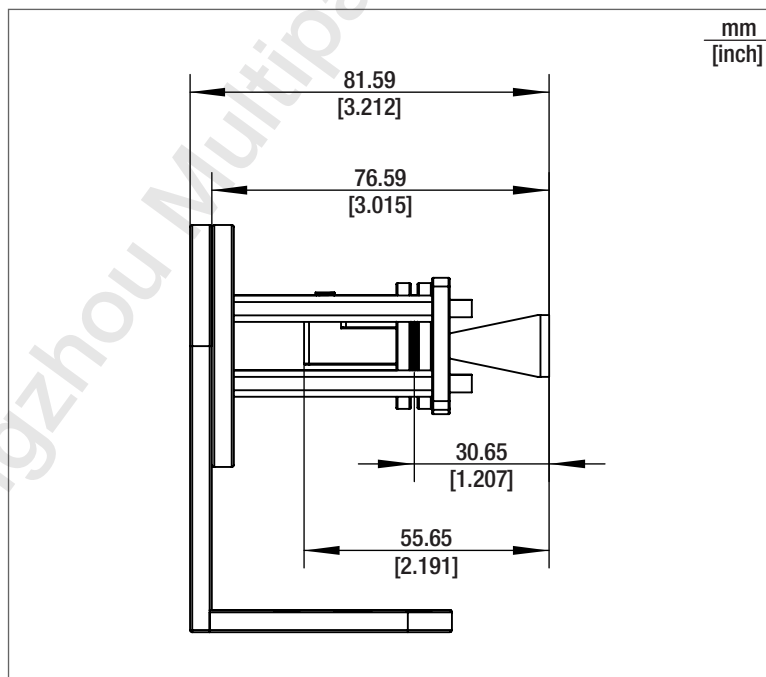
• Assembly dimensional drawing

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.

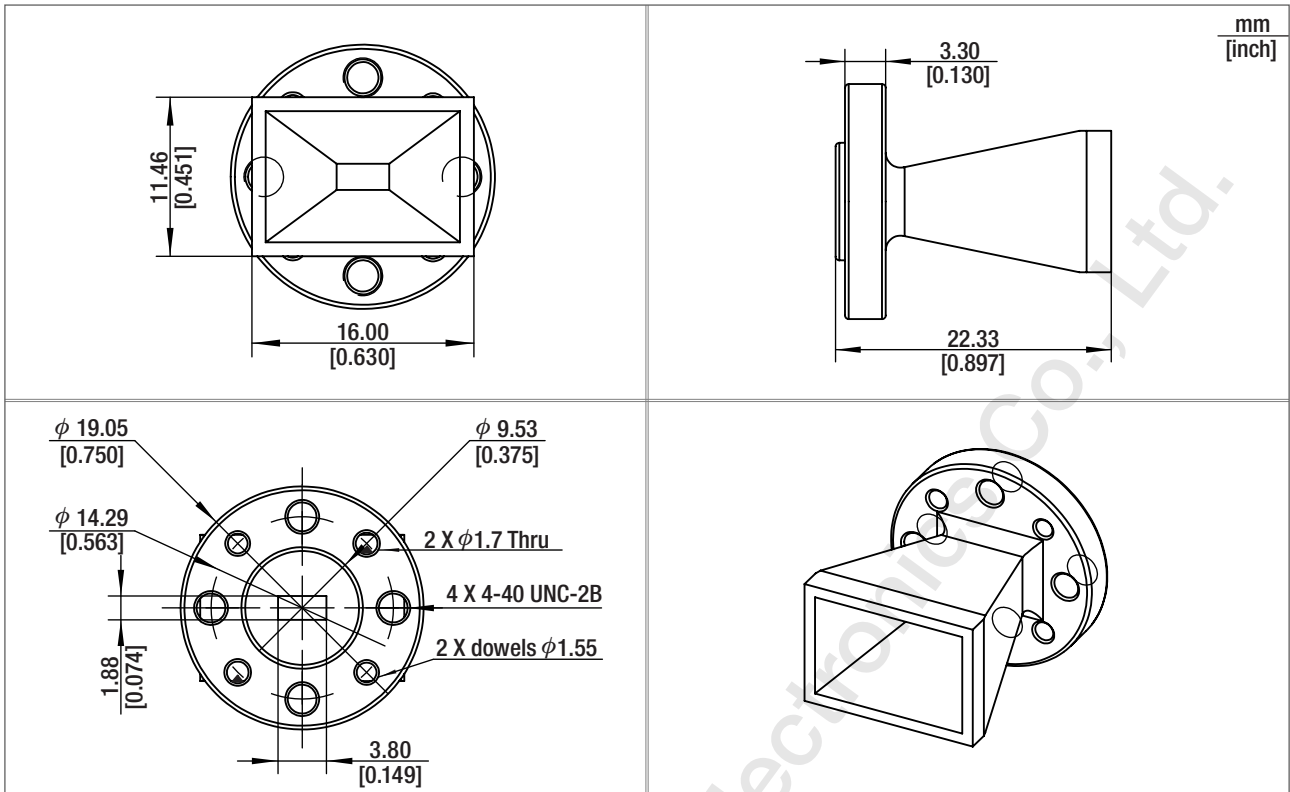


Side view of the mounting system.

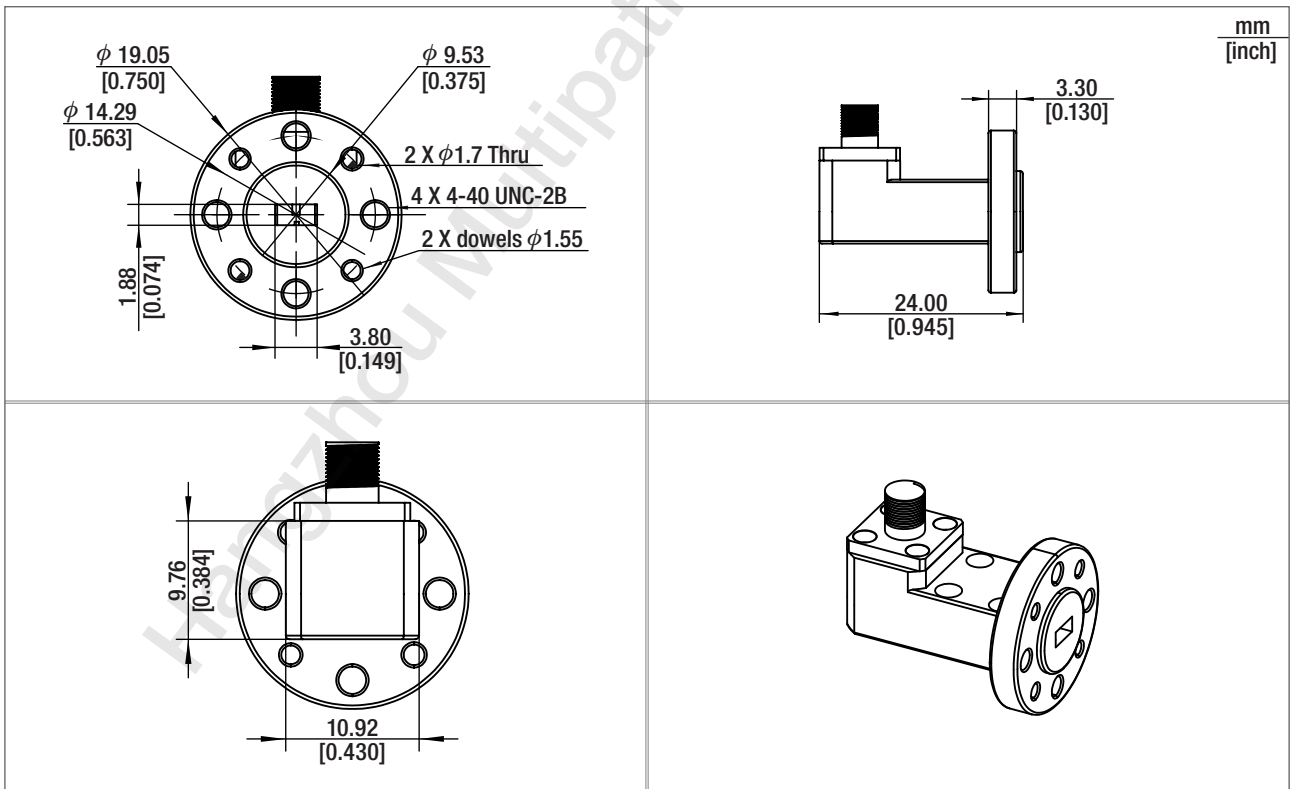
Detailed dimensions of the components will be given in subsequent diagrams.



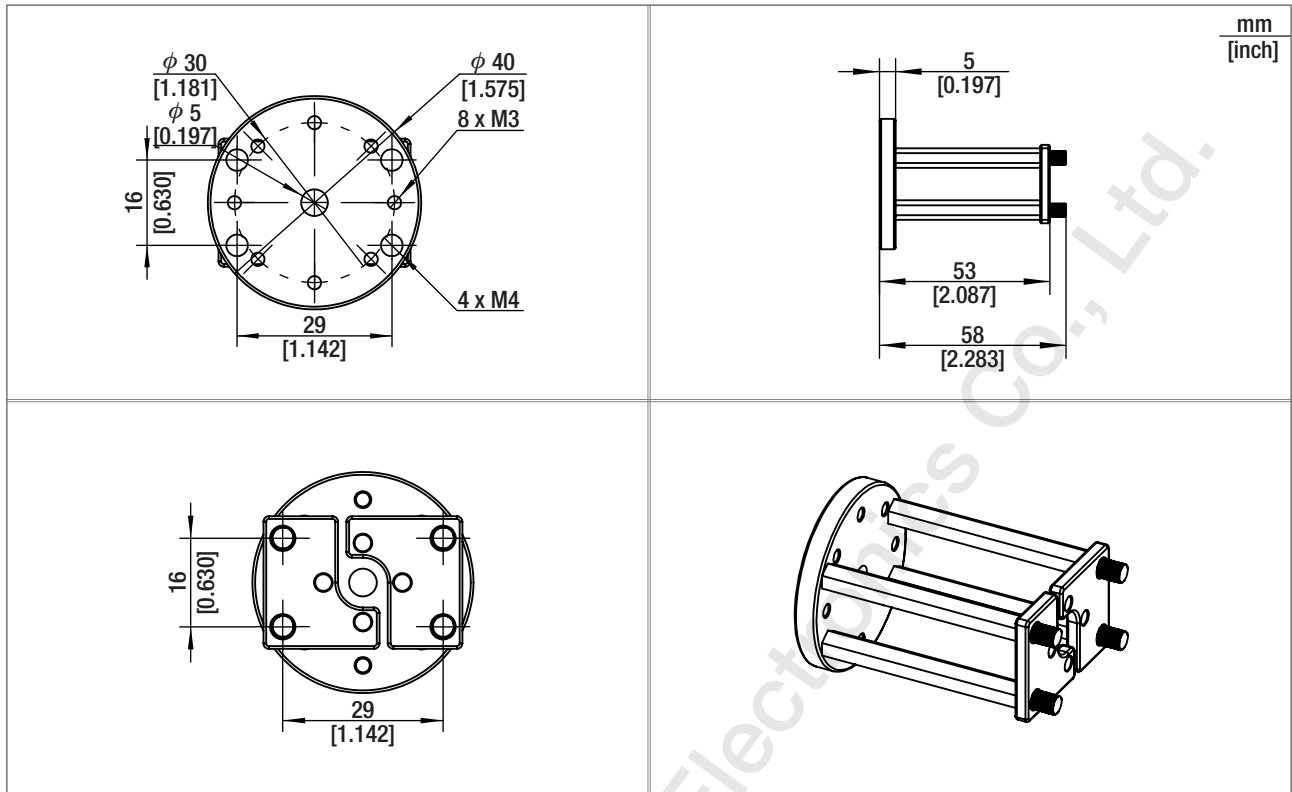
• Dimensional drawing: horn, HA-WR15-15



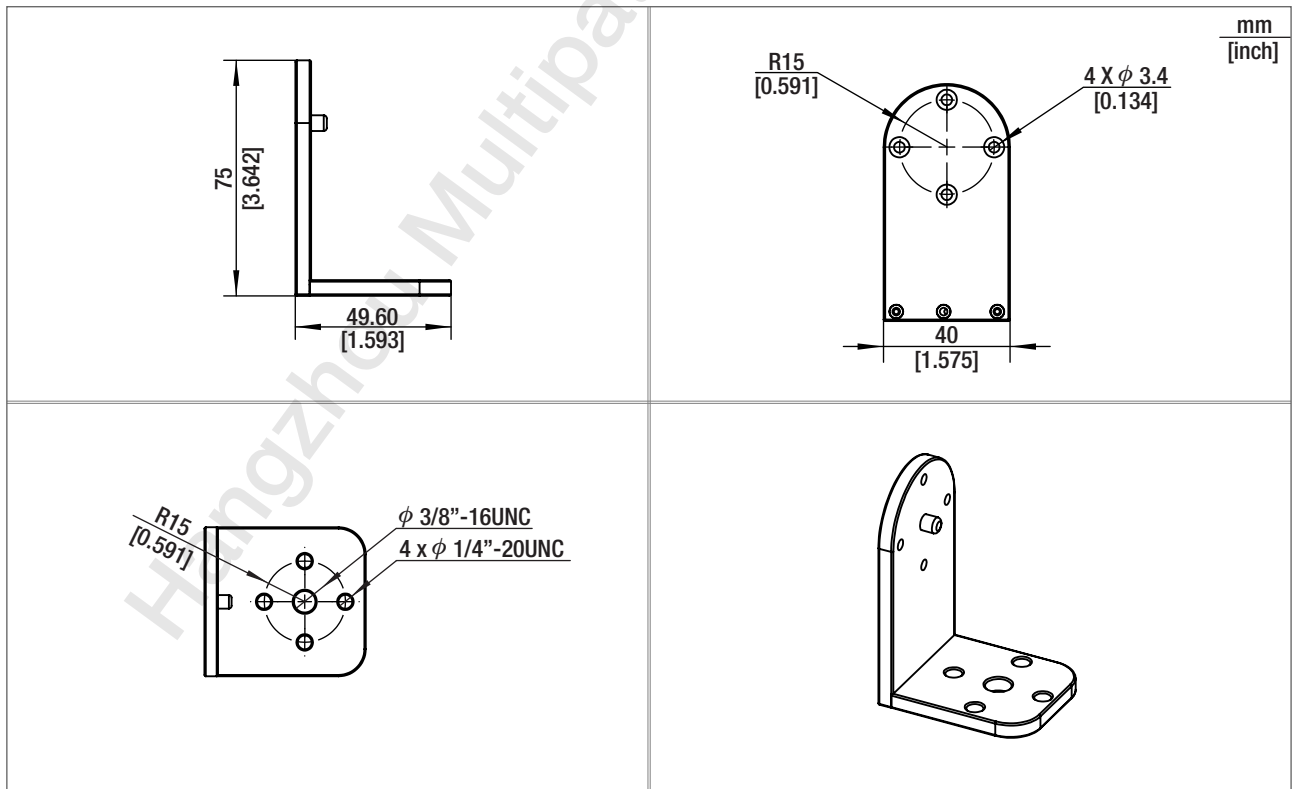
• Dimensional drawing: adapter, WR15-1.0-F (Optional)



• Dimensional drawing: round mounting bracket (Optional)

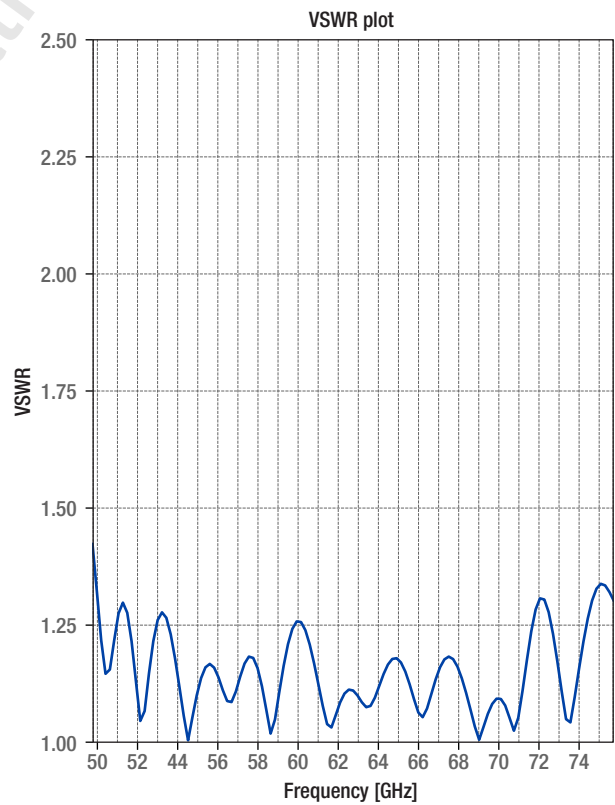
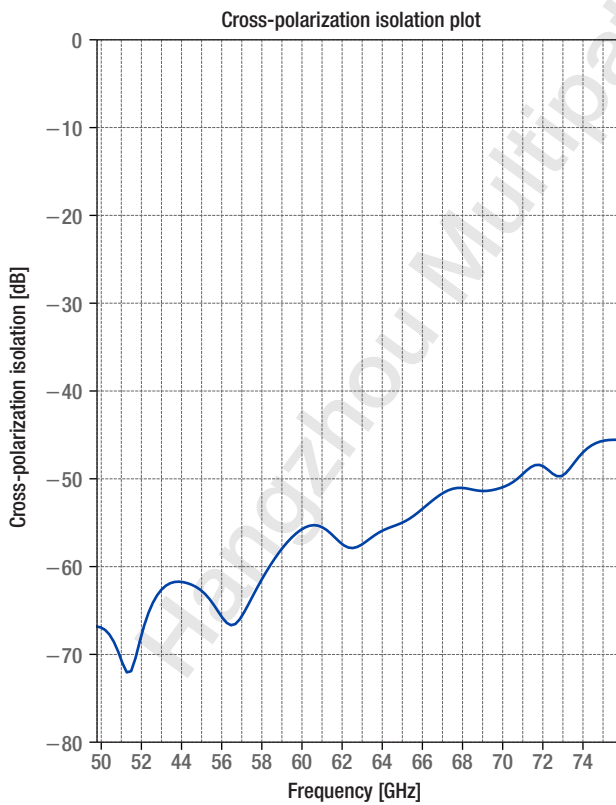
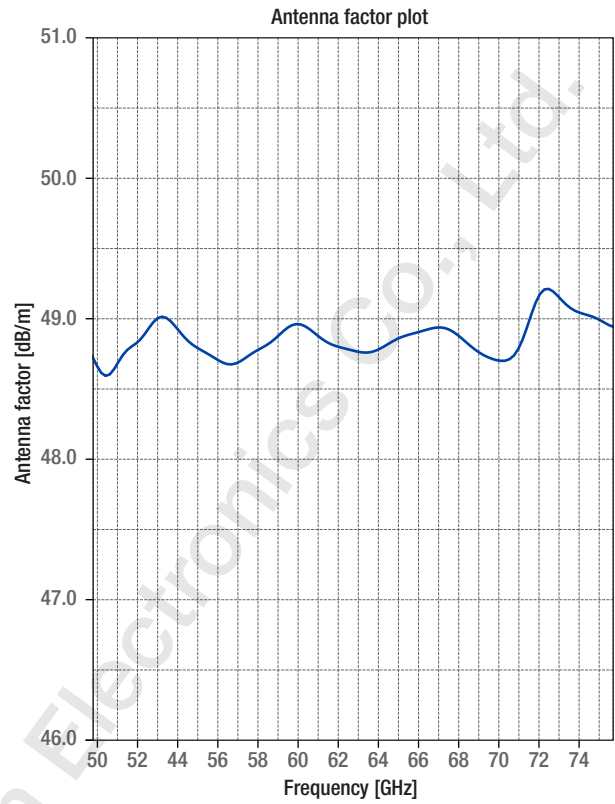
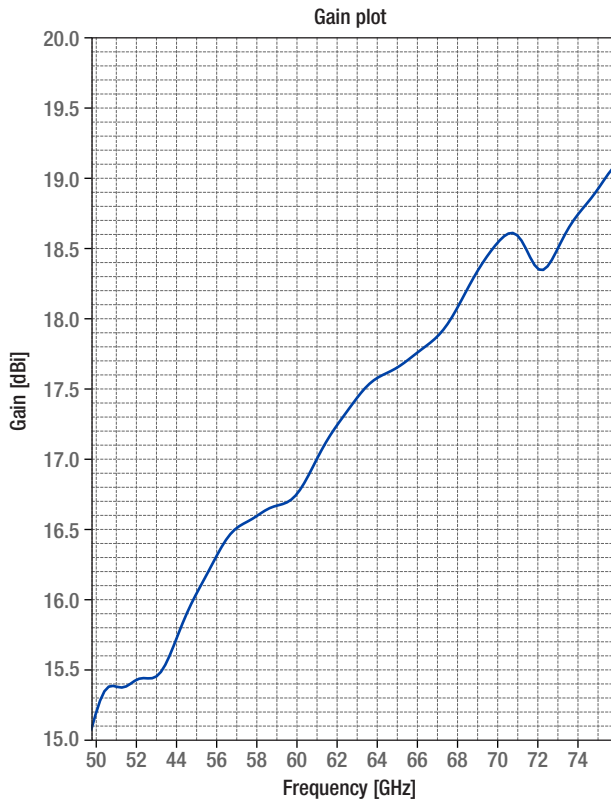


• Dimensional drawing: L type mounting bracket (Optional)



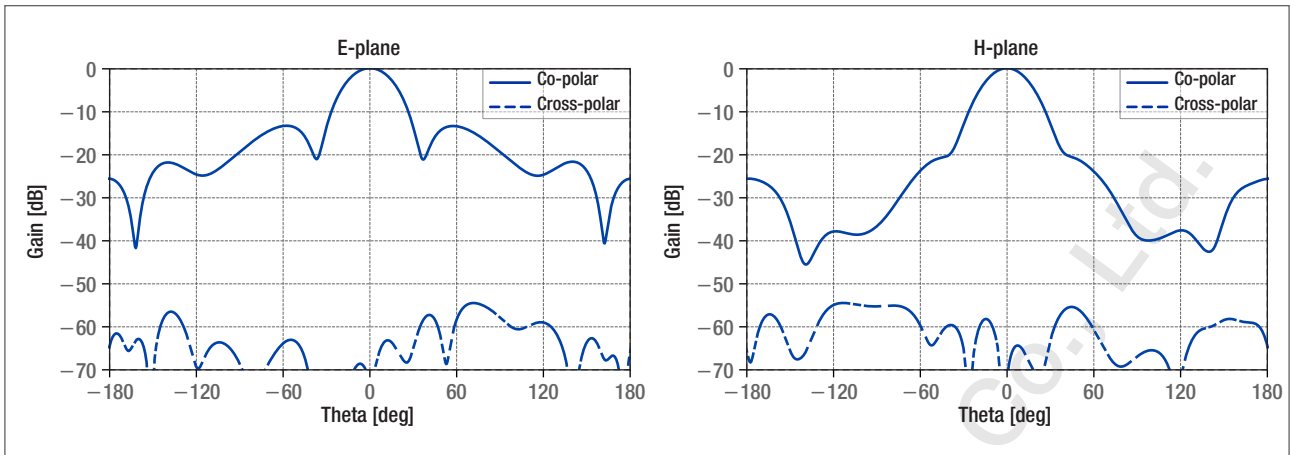
Electrical characteristics

Gain & Antenna factor & Cross-polarization isolation & VSWR

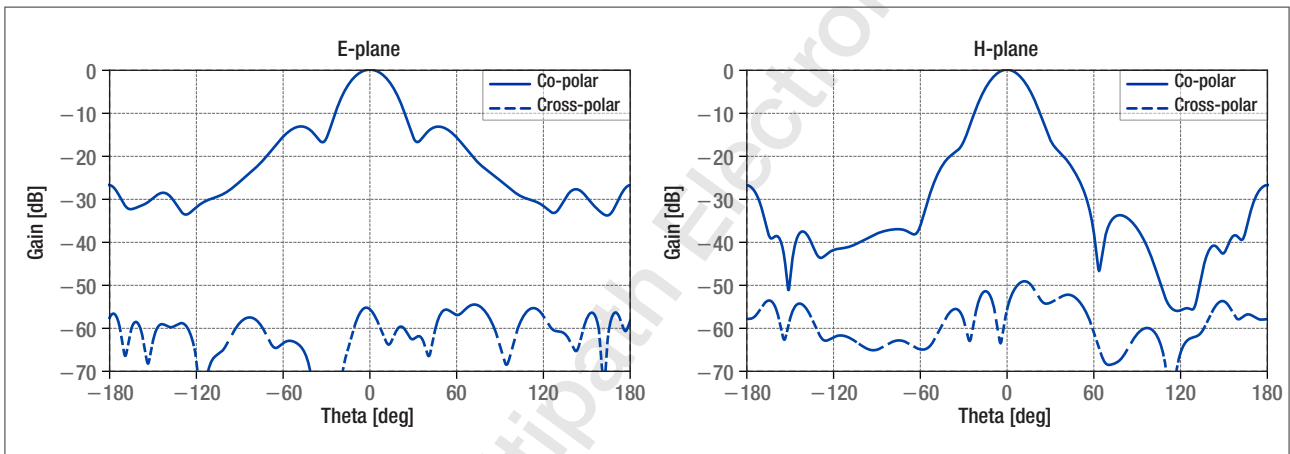


• Radiation patterns

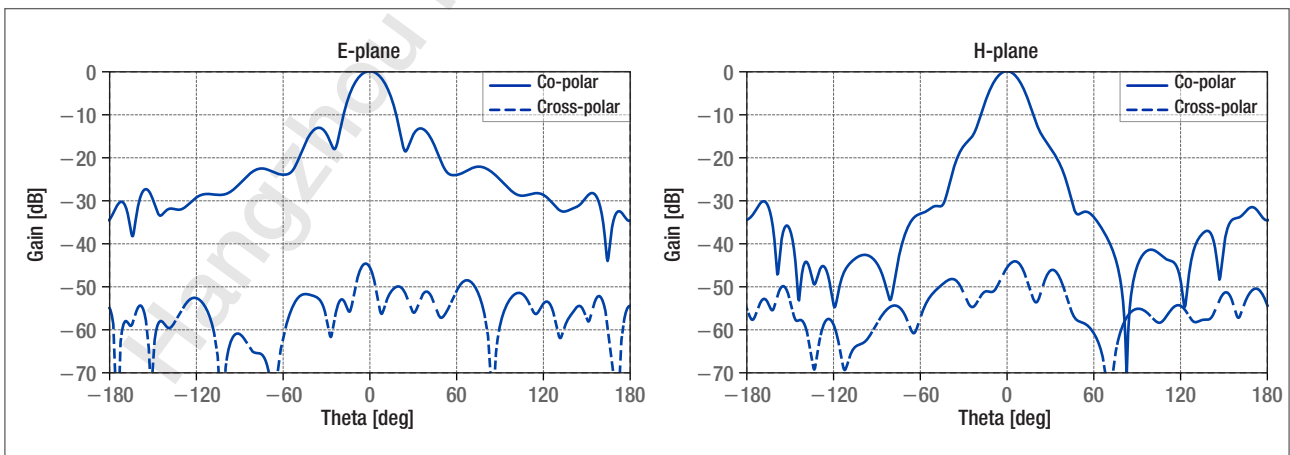
Patterns @ 50.0 GHz



Patterns @ 60.0 GHz



Patterns @ 78.0 GHz



• Data table

Frequency [GHz]	Gain [dBi]	Antenna factor [dB/m]	Cross-polarization isolation [dB]	VSWR
50	15.38	48.79	-71.81	1.27
51	15.44	48.90	-65.14	1.06
52	15.49	49.02	-62.04	1.27
53	15.76	48.92	-61.64	1.12
54	16.04	48.80	-62.54	1.10
55	16.27	48.73	-64.97	1.16
56	16.47	48.68	-66.42	1.08
57	16.56	48.75	-63.22	1.18
58	16.64	48.82	-59.74	1.07
59	16.69	48.92	-57.05	1.16
60	16.79	48.97	-55.40	1.25
61	17.01	48.88	-55.37	1.12
62	17.22	48.81	-57.06	1.05
63	17.40	48.78	-57.63	1.11
64	17.54	48.77	-56.30	1.07
65	17.62	48.83	-55.31	1.16
66	17.69	48.89	-54.41	1.15
67	17.79	48.92	-52.87	1.05
68	17.89	48.95	-51.40	1.16
69	18.07	48.89	-50.87	1.16
70	18.30	48.79	-51.20	1.03
71	18.49	48.72	-51.03	1.08
72	18.62	48.72	-50.17	1.05
73	18.51	48.95	-48.50	1.17
74	18.36	49.22	-48.83	1.30
75	18.55	49.14	-49.21	1.11

Frequency [GHz]	E-plane, 3dB beamwidth	H-plane, 3dB beamwidth
50	31.09°	29.22°
60	27.71°	24.99°
78	10.64°	19.71°



Multipath Electronics

Contact

-  +86-571-56201039
-  sales@multipath.cn
-  <https://www.multipath-electron.com>
-  Technical specifications in this datasheet are subject to change without notice. Actual products may differ from the shown images.