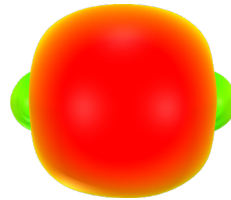


Standard Gain Horn Antennas

39.2 - 59.6 GHz, 10 dBi

Radiation pattern



QR code



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

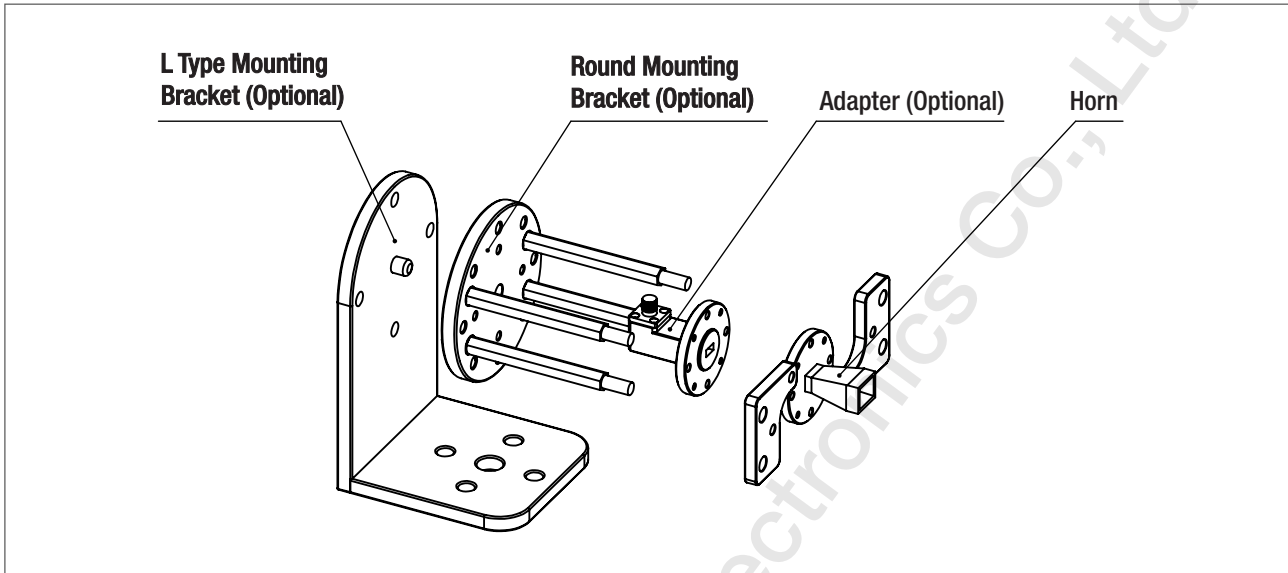
⚙️ Product specifications

Part number	HA-WR19-10	Polarization	Single linear
Antenna type	Pyamidal horn	Gain [dBi]	10 Typ.
Frequency range [GHz]	39.2 – 59.6	3dB beamwidth [deg]	E-plane: 45 Typ. H-plane: 45 Typ.
Waveguide band	WR19	Cross-polarization isolation [dB]	50 Typ.
Dimensions (H x W x L) [mm; inch]	28.6 x 28.6 x 44.75; 1.13 x 1.13 x 1.76	VSWR	1.25 Typ.
Weight (approx.) [kg; lb]	0.05; 0.110	Impedance [Ohms]	50
Material	Cu (Gold plated)	RF connector	1.85-Female

Outline dimensions

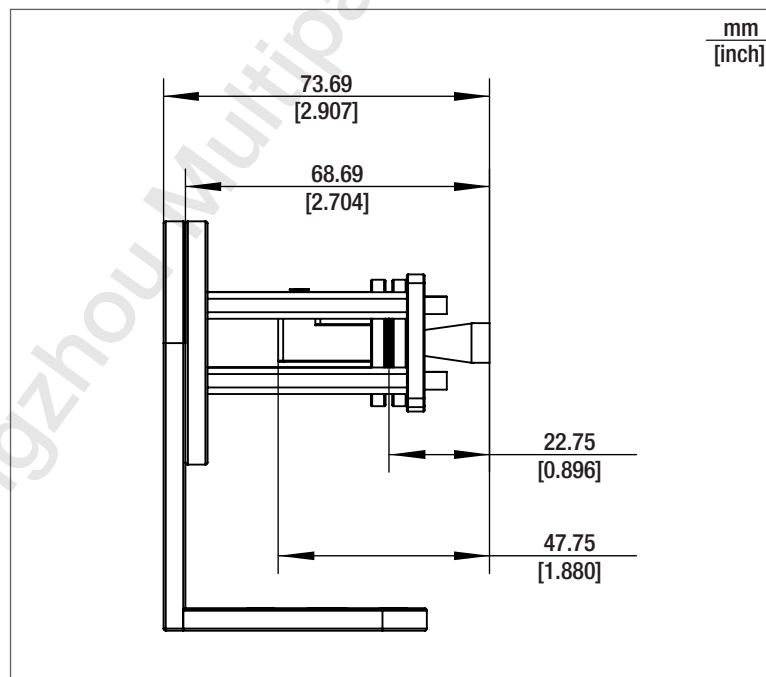
• Assembly dimensional drawing

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.

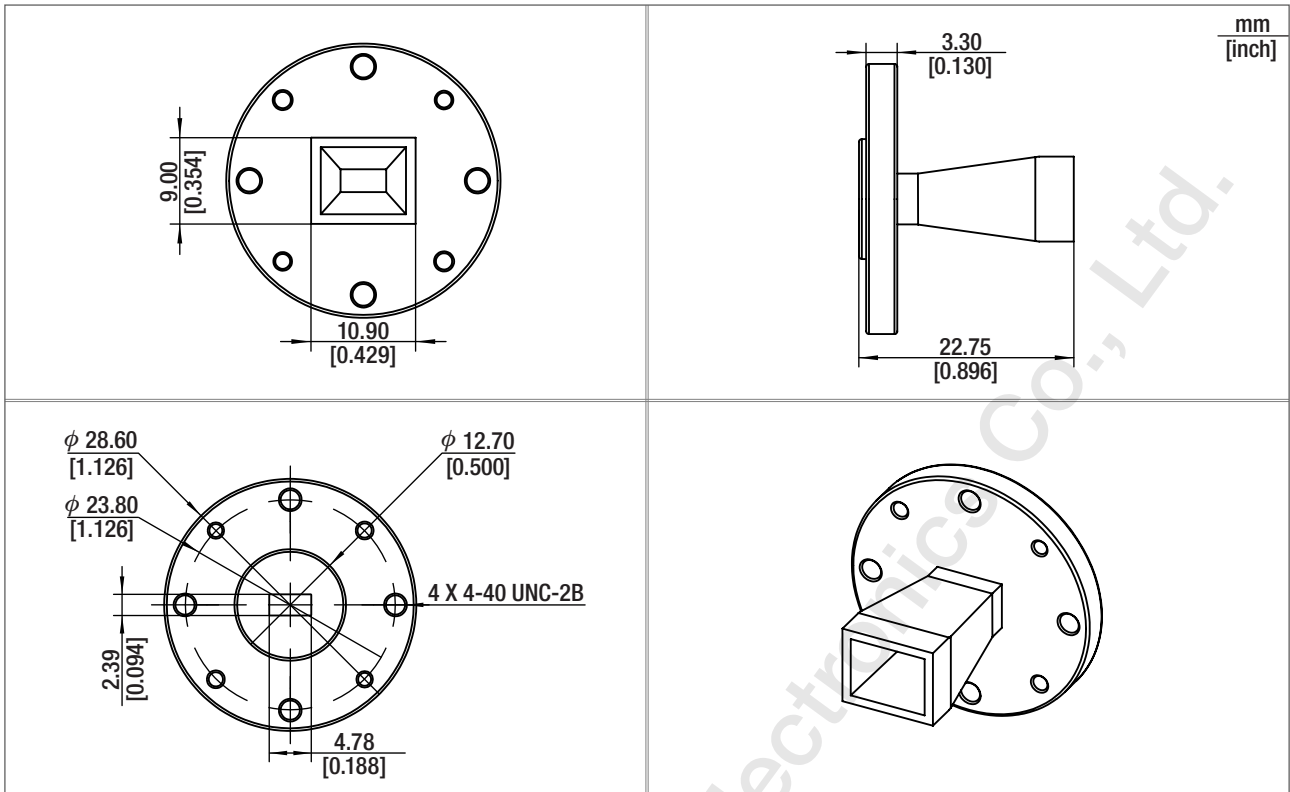


Side view of the mounting system.

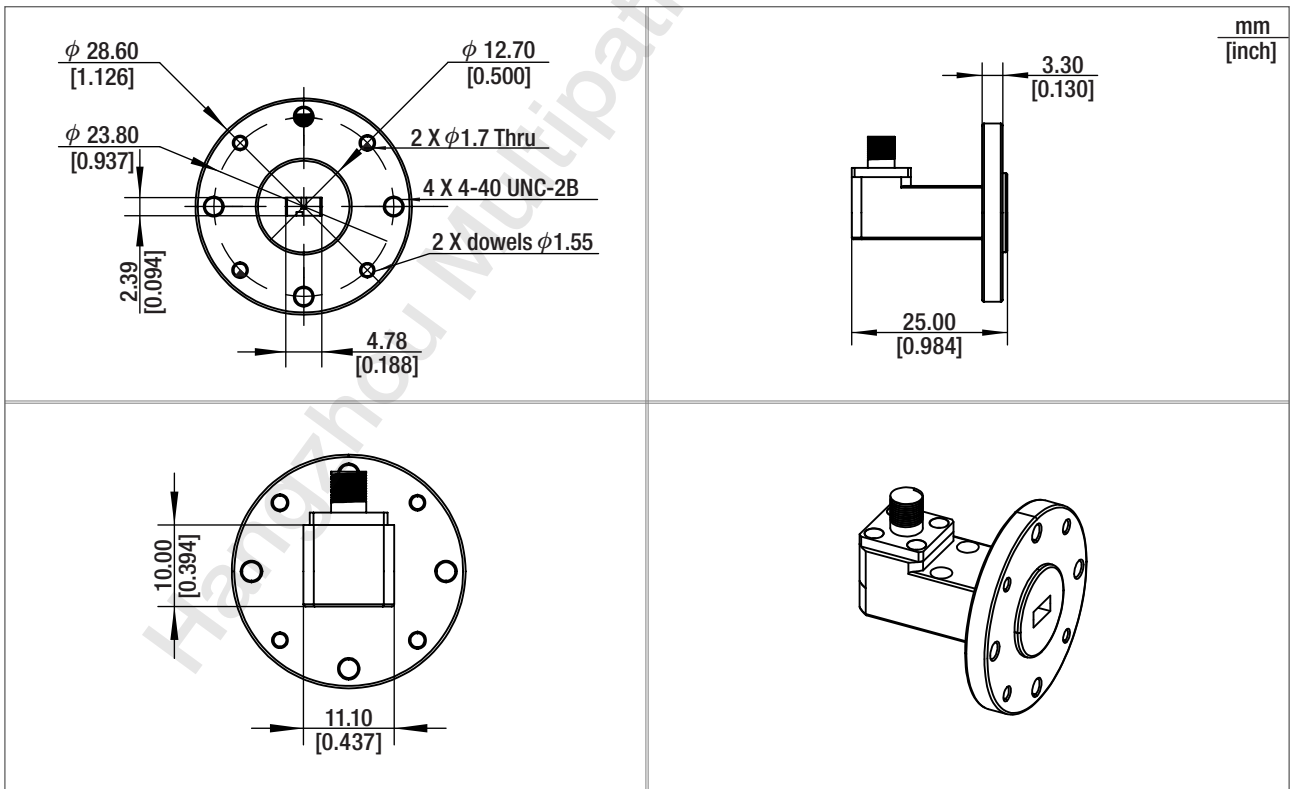
Detailed dimensions of the components will be given in subsequent diagrams.



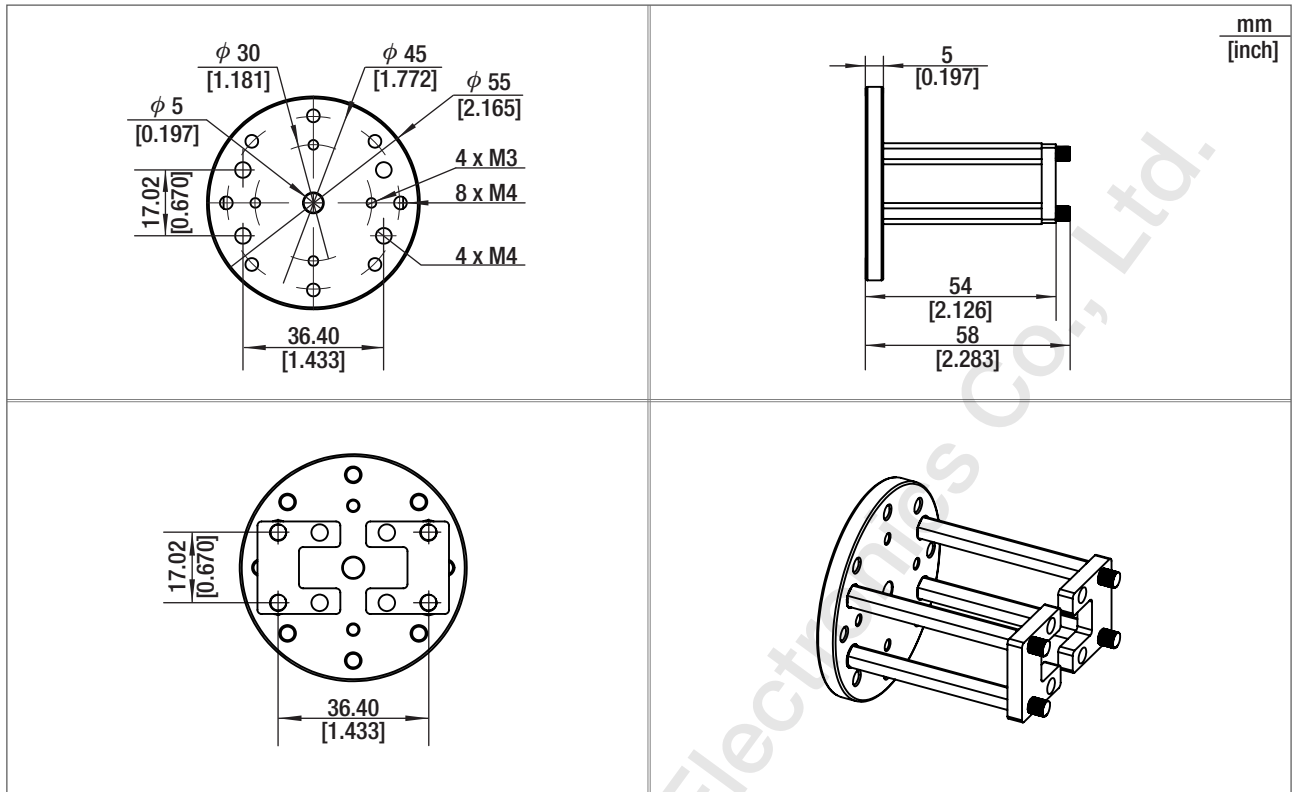
• Dimensional drawing: horn, HA-WR19-10



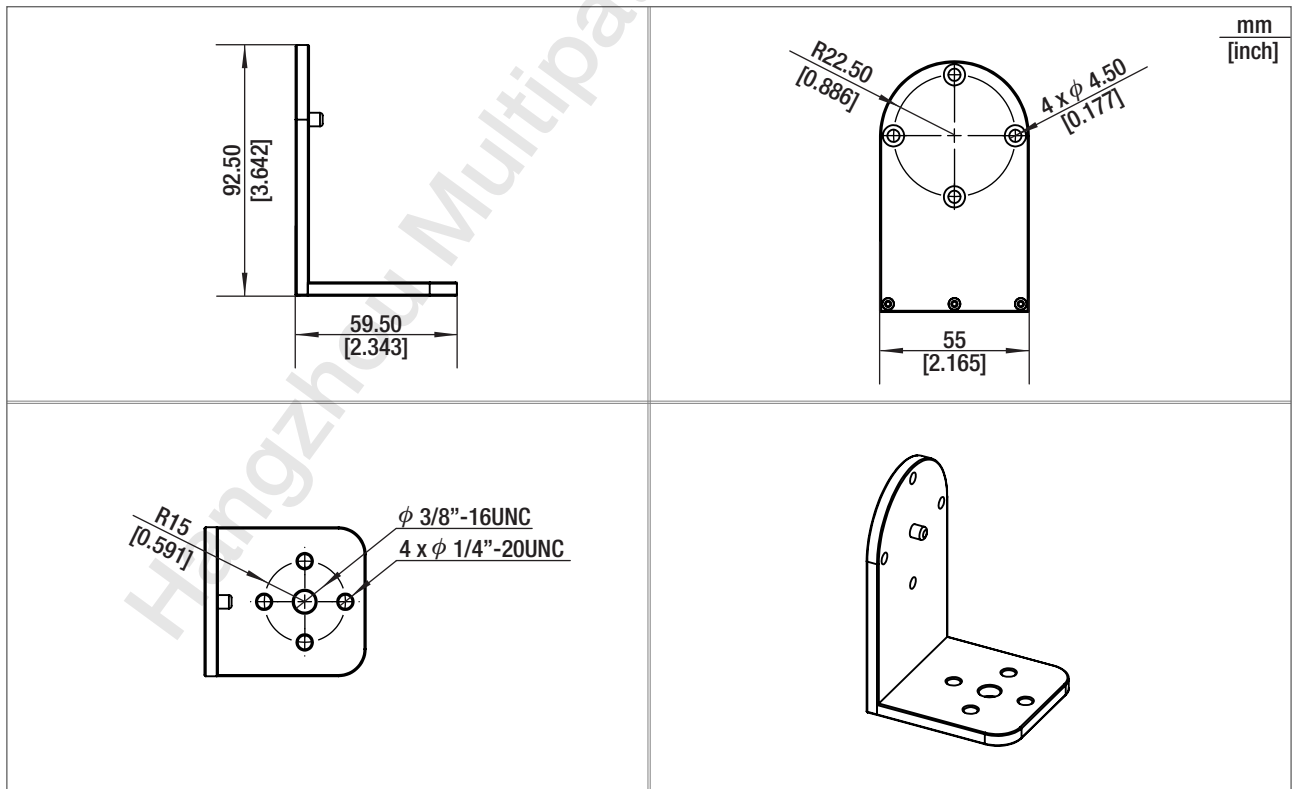
• Dimensional drawing: adapter, WR19-1.85-F (Optional)



• Dimensional drawing: round mounting bracket (Optional)

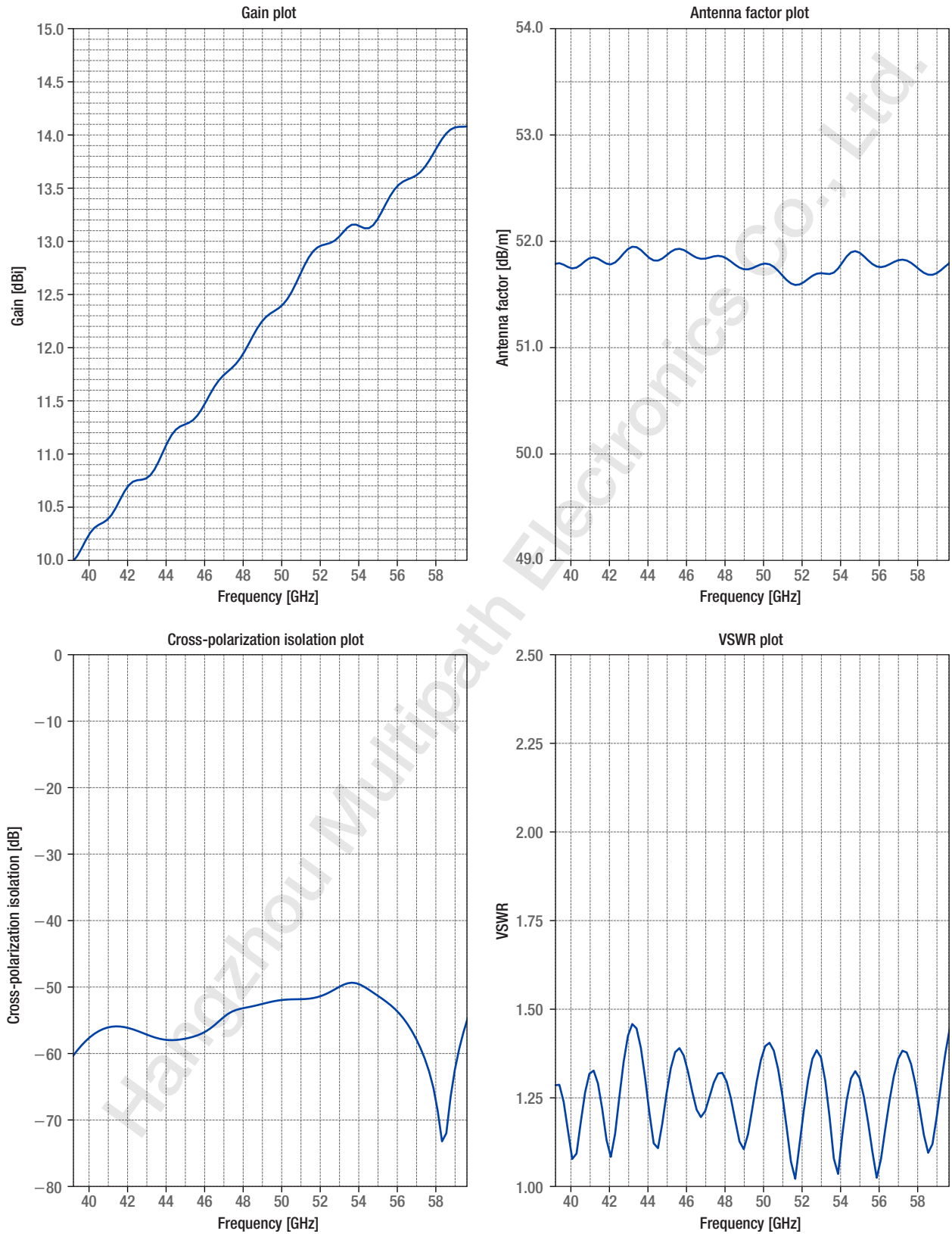


• Dimensional drawing: L type mounting bracket (Optional)



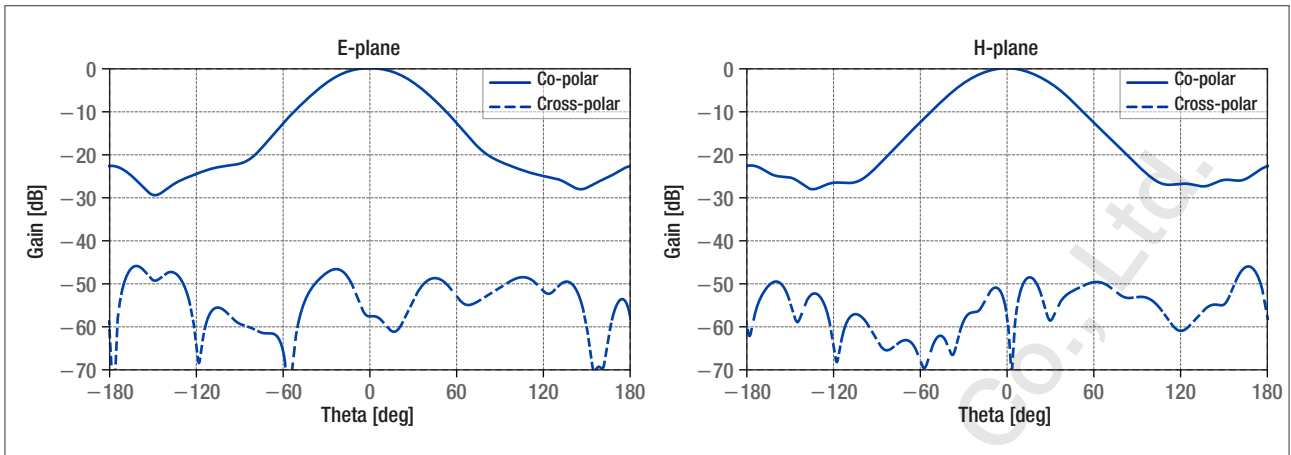
Electrical characteristics

Gain & Antenna factor & Cross-polarization isolation & VSWR

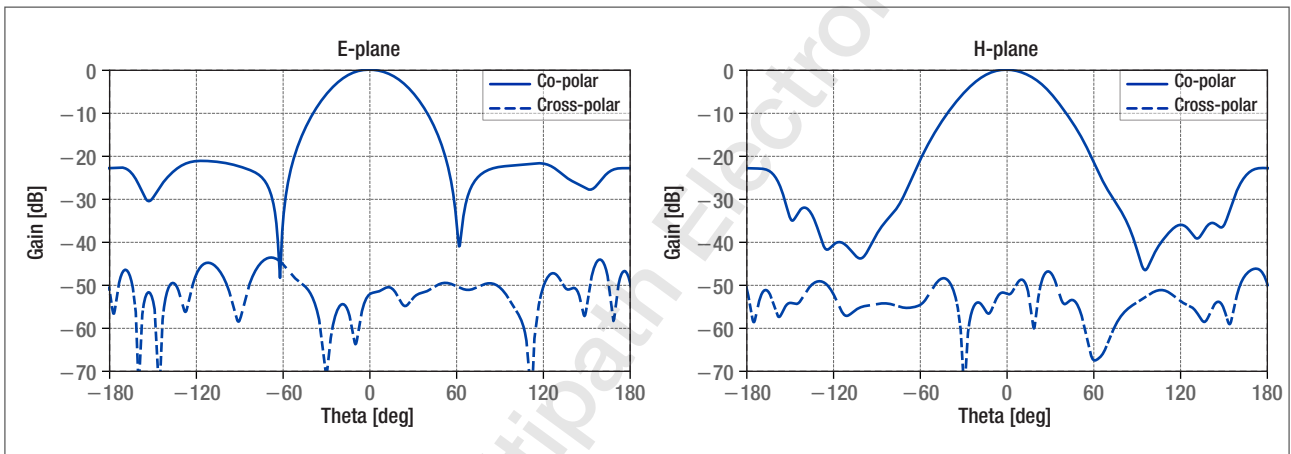


• Radiation patterns

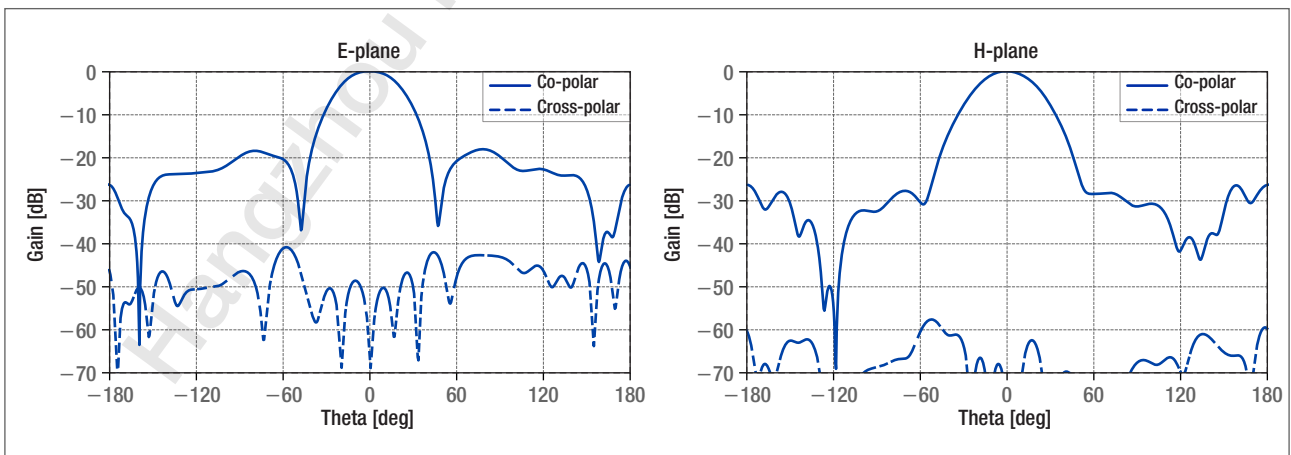
Patterns @ 39.0 GHz



Patterns @ 50.0 GHz



Patterns @ 60.0 GHz



• Data table

Frequency [GHz]	Gain [dBi]	Antenna factor [dB/m]	Cross-polarization isolation [dB]	VSWR
40	10.38	51.85	-55.99	1.32
41	10.65	51.80	-55.93	1.13
42	10.76	51.89	-56.75	1.35
43	10.93	51.93	-57.65	1.39
44	11.23	51.83	-57.86	1.10
45	11.32	51.93	-57.37	1.38
46	11.57	51.88	-56.11	1.26
47	11.78	51.85	-53.97	1.25
48	11.97	51.85	-53.01	1.29
49	12.25	51.74	-52.44	1.10
50	12.38	51.79	-51.88	1.35
51	12.61	51.73	-51.72	1.33
52	12.91	51.60	-51.53	1.02
53	12.99	51.68	-50.58	1.36
54	13.14	51.70	-49.30	1.19
55	13.13	51.87	-49.89	1.24
56	13.29	51.87	-51.62	1.25
57	13.54	51.76	-53.84	1.07
58	13.63	51.83	-57.74	1.36
59	13.83	51.77	-65.10	1.29

Frequency [GHz]	E-plane, 3dB beamwidth	H-plane, 3dB beamwidth
39	56.81°	55.45°
50	45.04°	45.00°
60	38.43°	37.89°



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.