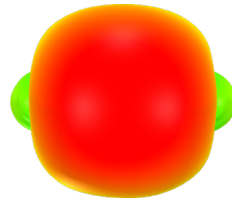


# Standard Gain Horn Antennas

73.8 - 112.0 GHz, 10 dBi

Radiation pattern



QR code



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

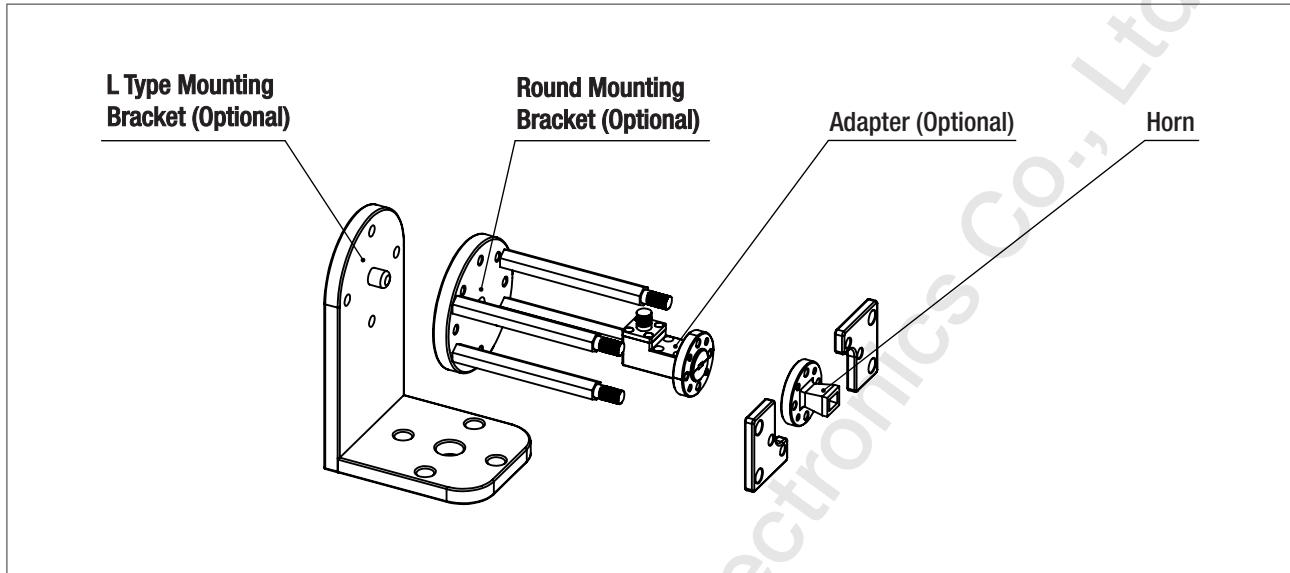
## ⚙️ Product specifications

Part number	HA-WR10-10	Polarization	Single linear
Antenna type	Pyamidal horn	Gain [dBi]	10 Typ.
Frequency range [GHz]	73.8 – 112.0	3dB beamwidth [deg]	E-plane: 45 Typ. H-plane: 45 Typ.
Waveguide band	WR10	Cross-polarization isolation [dB]	50 Typ.
Dimensions (H x W x L) [mm; inch]	19.05 x 19.05 x 12.73; 0.75 x 0.75 x 0.50	VSWR	1.4 Typ.
Weight (approx.) [kg; lb]	0.03; 0.066	Impedance [Ohms]	50
Material	Cu (Gold plated)	RF connector	1.0-Female

## Outline dimensions

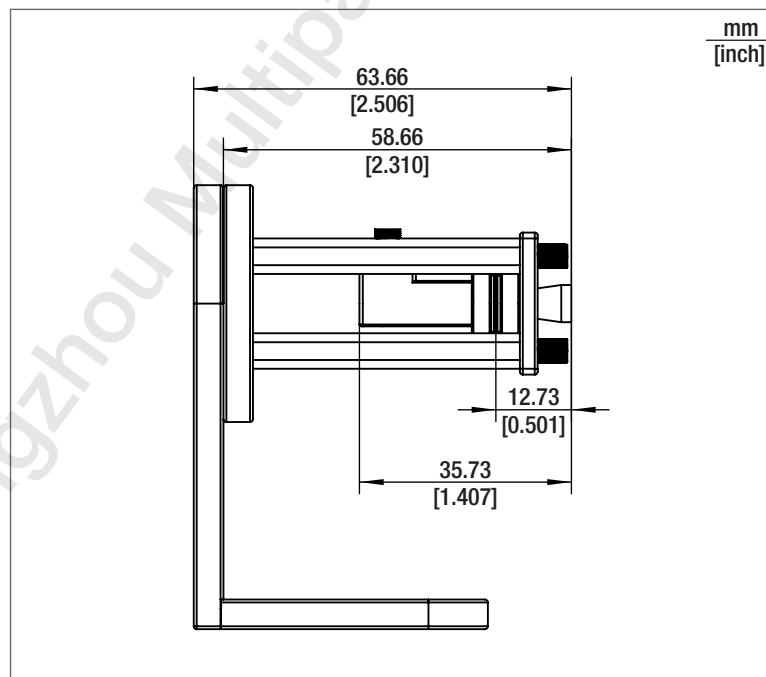
### • Assembly dimensional drawing

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.

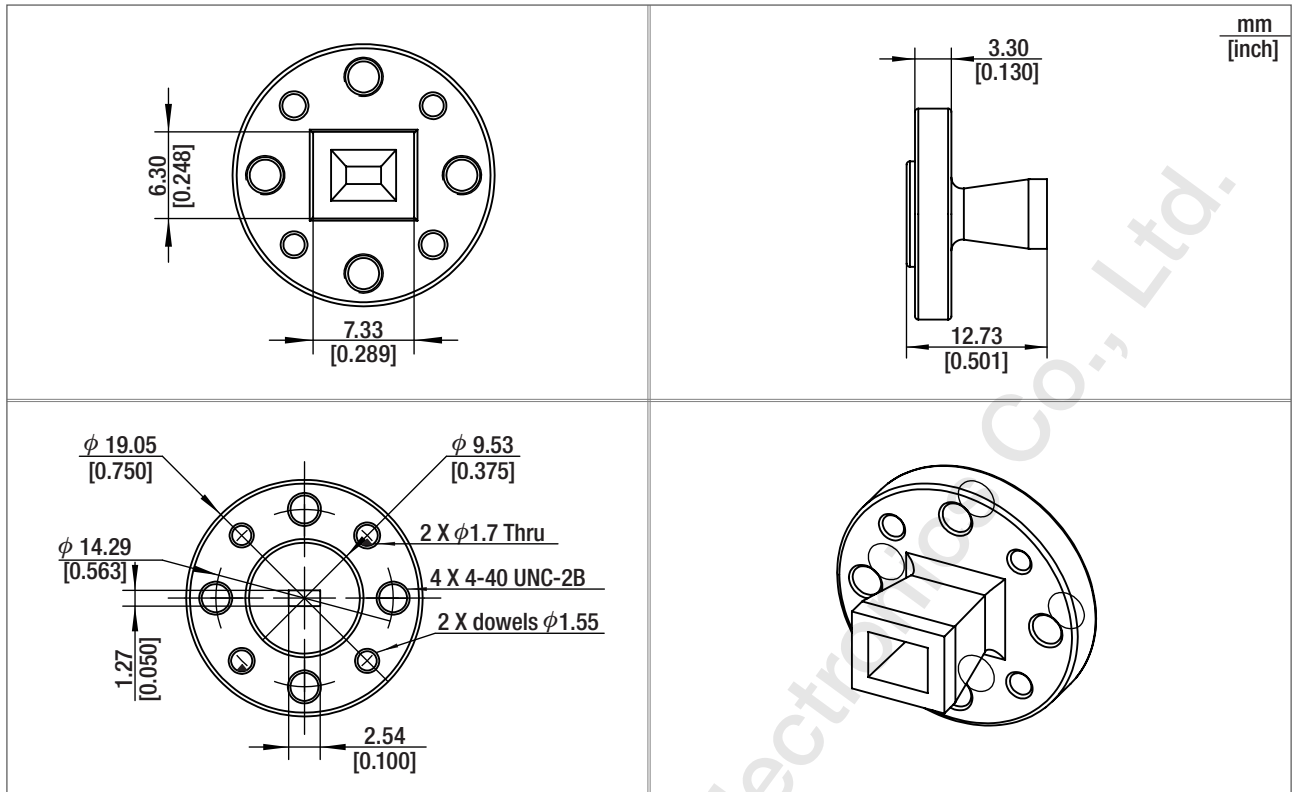


Side view of the mounting system.

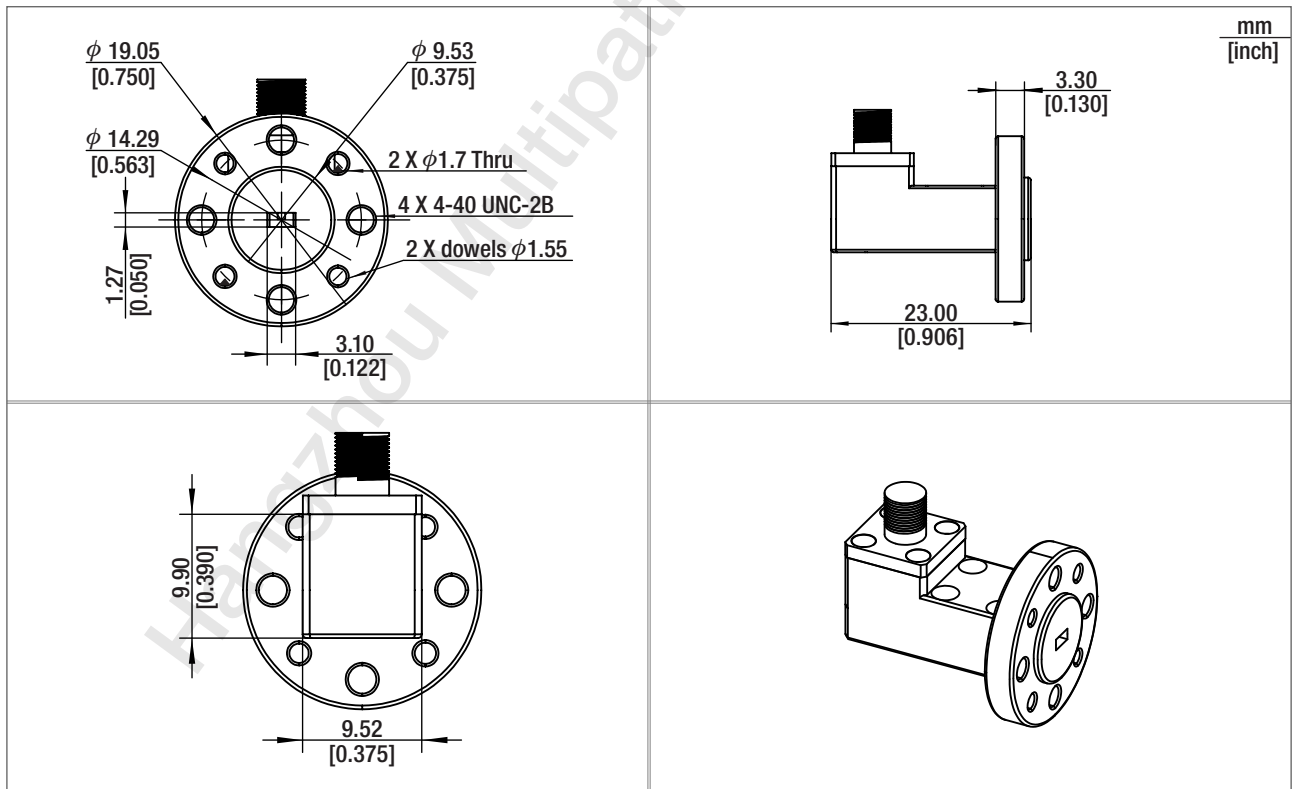
Detailed dimensions of the components will be given in subsequent diagrams.



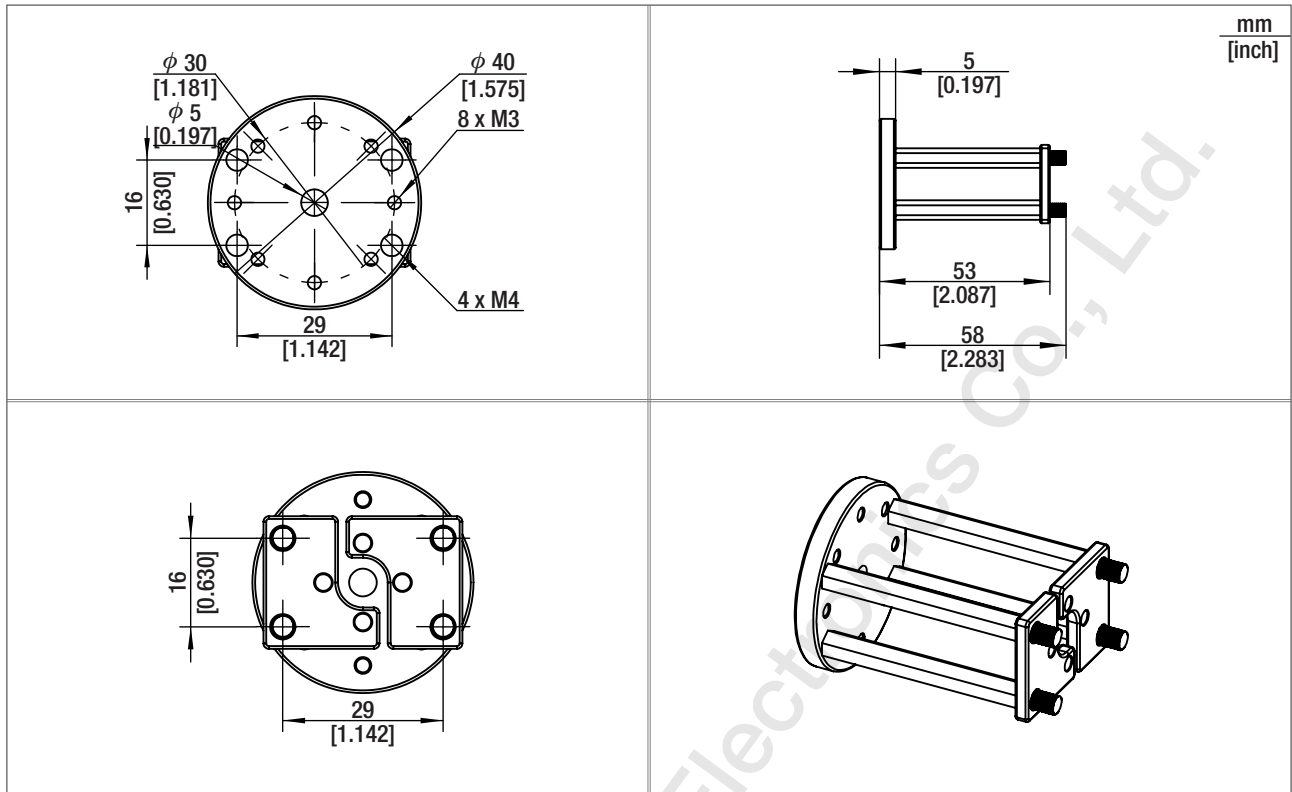
• Dimensional drawing: horn, HA-WR10-10



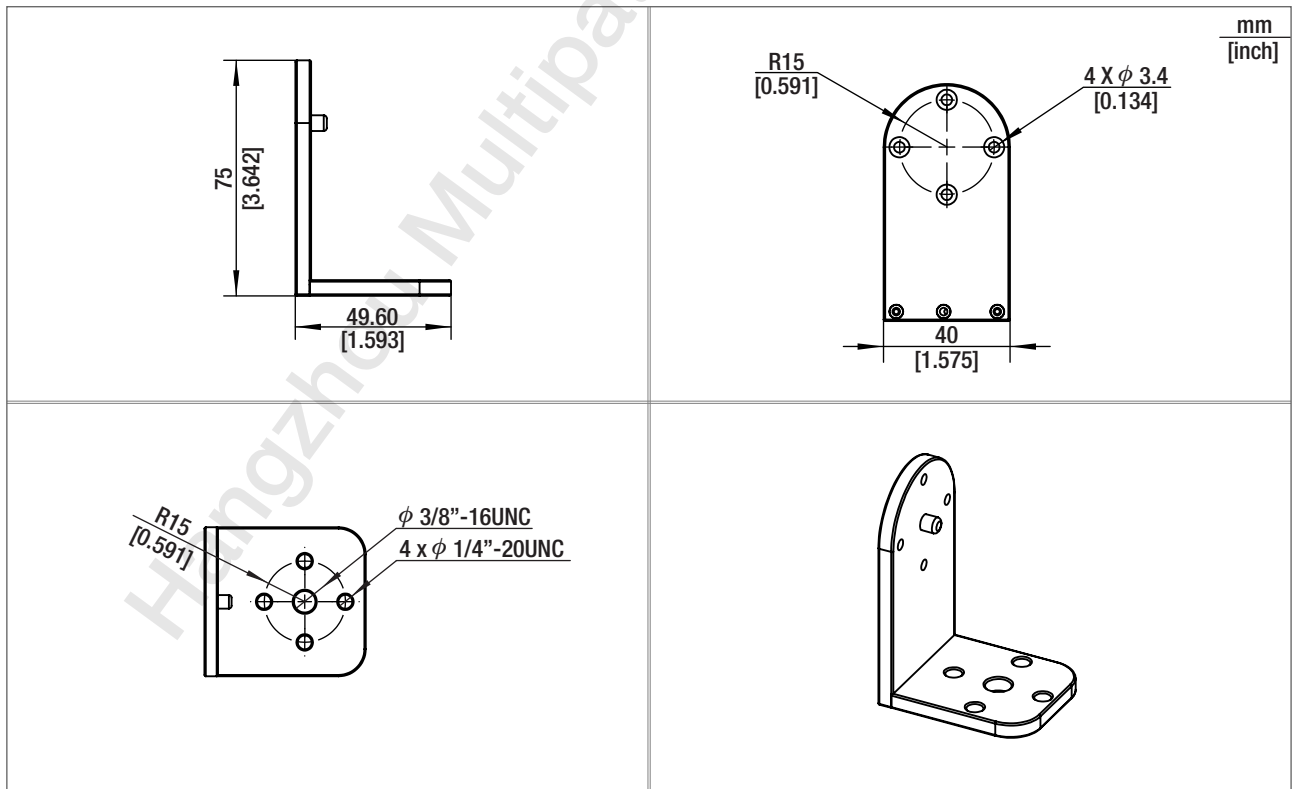
• Dimensional drawing: adapter, WR10-1.0-F (Optional)



• Dimensional drawing: round mounting bracket (Optional)

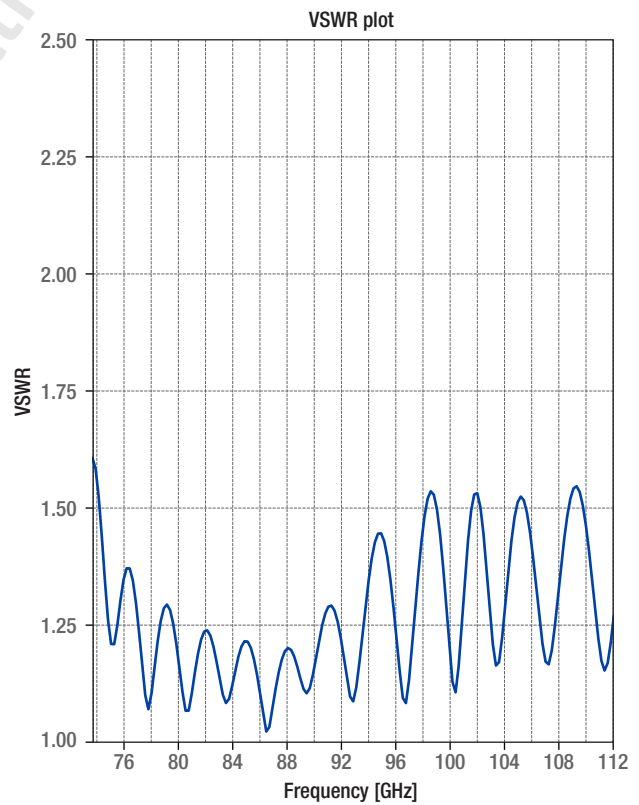
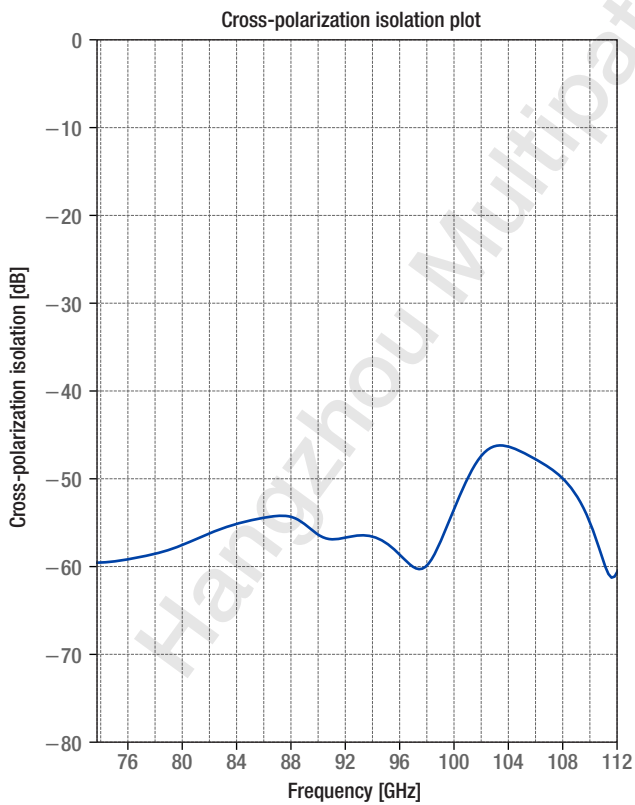
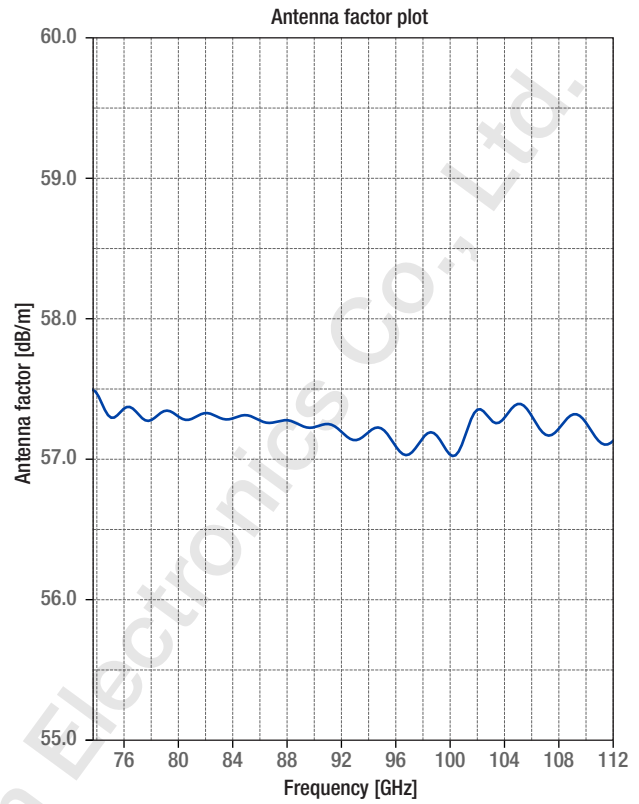
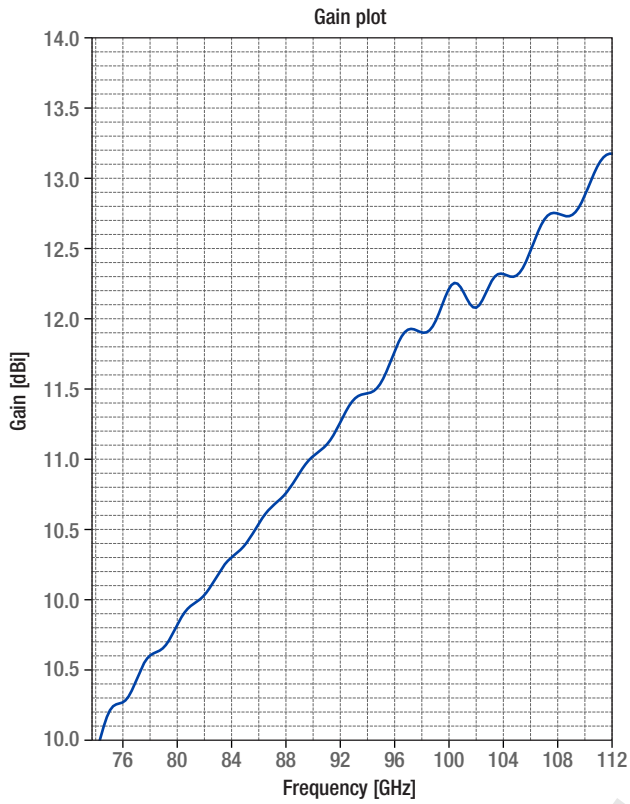


• Dimensional drawing: L type mounting bracket (Optional)



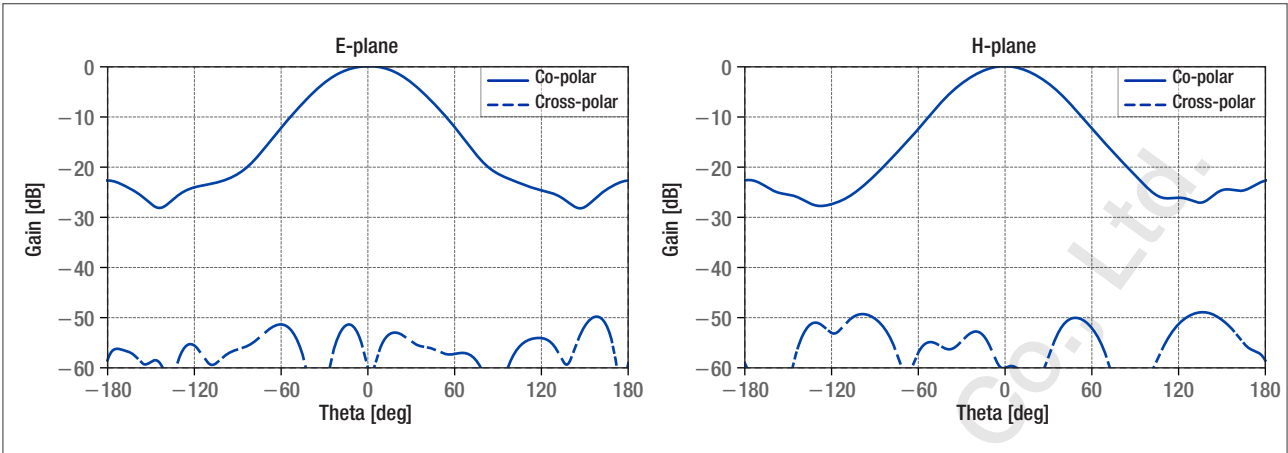
## Electrical characteristics

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

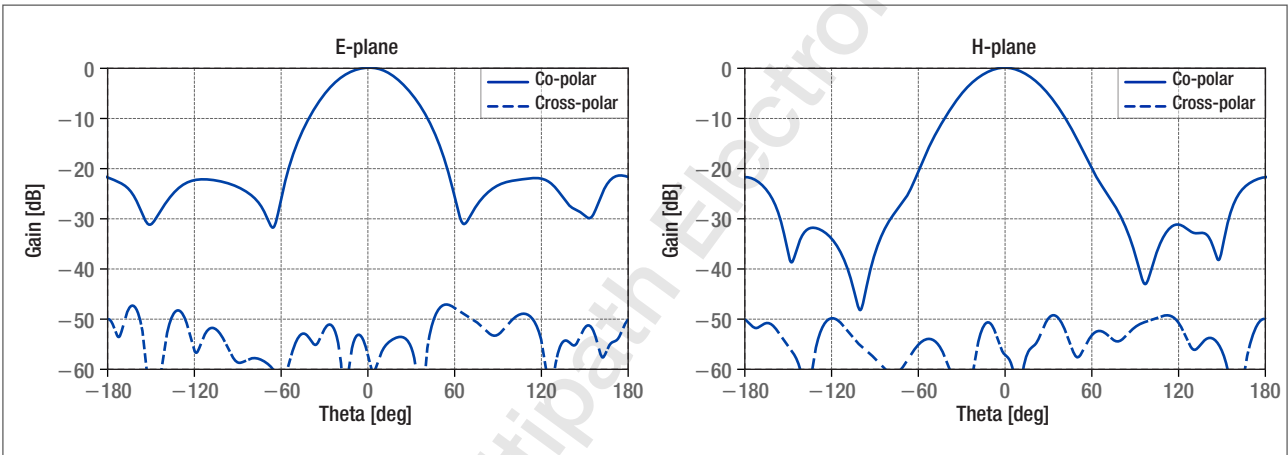


## • Radiation patterns

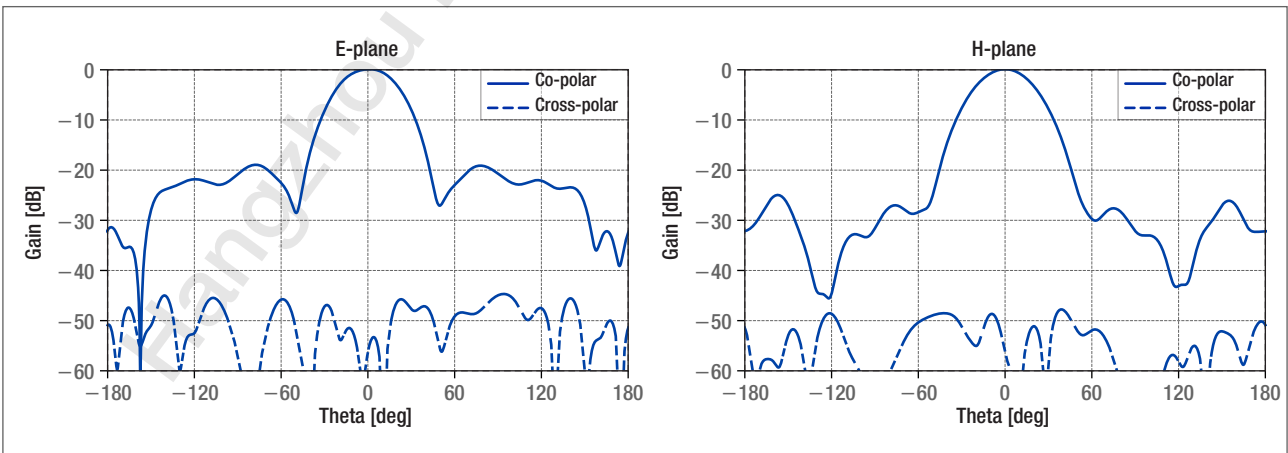
Patterns @ 72 GHz



Patterns @ 92 GHz



Patterns @ 112 GHz



• Data table

Frequency [GHz]	Gain [dBi]	Antenna factor [dB/m]	Cross-polarization isolation [dB]	VSWR
74	10.26	57.32	-59.54	1.25
76	10.51	57.30	-59.01	1.16
78	10.68	57.35	-58.26	1.29
80	10.96	57.29	-57.12	1.10
82	11.15	57.31	-55.95	1.17
84	11.36	57.32	-55.10	1.20
86	11.61	57.27	-54.54	1.02
88	11.80	57.28	-54.71	1.19
90	12.04	57.24	-56.71	1.18
92	12.26	57.21	-56.95	1.22
94	12.47	57.18	-56.73	1.29
96	12.68	57.16	-58.28	1.34
98	12.93	57.08	-60.53	1.28
100	13.05	57.14	-56.48	1.44
102	13.19	57.17	-49.90	1.34
104	13.24	57.29	-46.53	1.28
106	13.31	57.39	-46.96	1.48
108	13.63	57.23	-48.49	1.26
110	13.75	57.27	-50.82	1.43
112	13.94	57.23	-56.07	1.41

Frequency [GHz]	E-plane, 3dB beamwidth	H-plane, 3dB beamwidth
72	57.56°	55.73°
92	45.98°	45.36°
112	38.86°	37.74°



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.