

Waveguide Probe Antenna

8.2 - 12.5 GHz



QR code



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

Product specifications

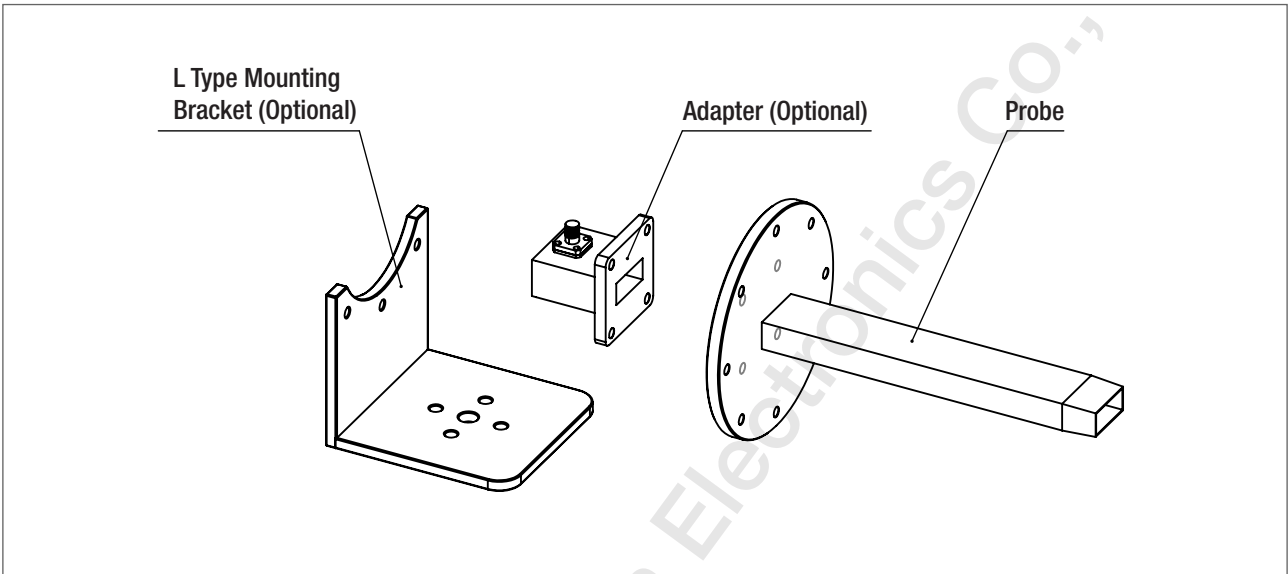
Part number	WP-WR90	Polarization	Single linear
Antenna type	Waveguide Probe Antenna	Gain [dBi]	6 Typ.
Frequency range [GHz]	8.2 – 12.5	3dB beamwidth [deg]	E-plane: 115 Typ. H-plane: 67 Typ.
Waveguide band	WR90	Cross-polarization isolation [dB]	35 Typ.
Dimensions (H x W x L) [mm; inch]	100 x 100 x 160.5; 3.94 x 3.94 x 6.32	VSWR	1.8 Typ.
Weight (approx.) [kg; lb]	0.23; 0.507	Impedance [Ohms]	50
Material	Aluminum	RF connector	SMA-Female

Outline dimensions

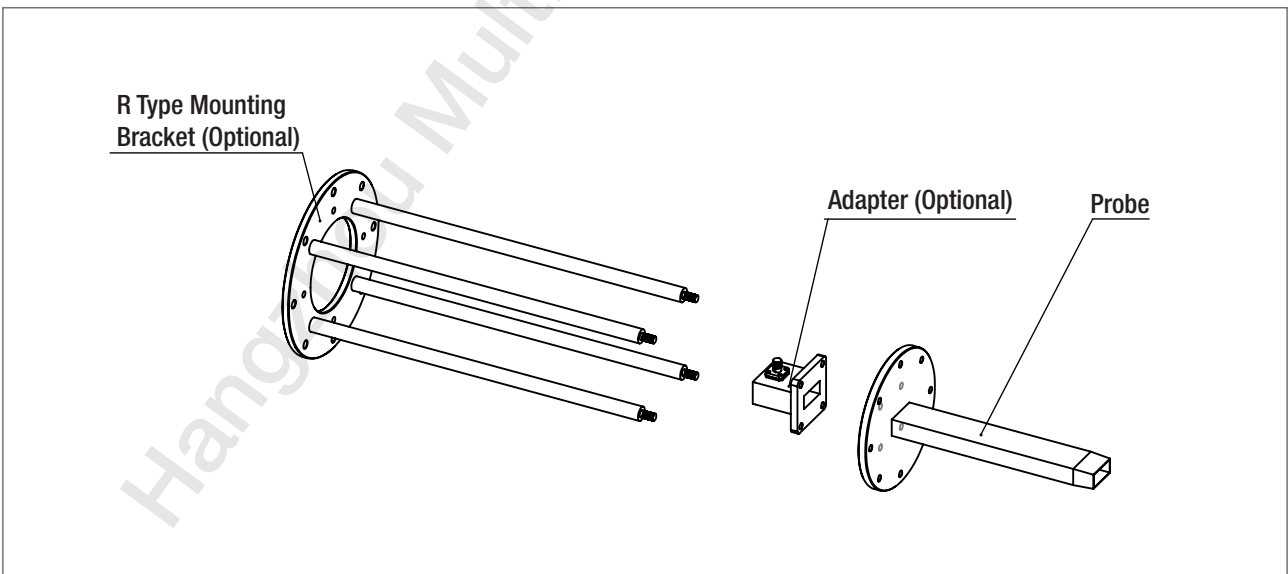
• Assembly dimensional drawing

Multipath Electronics provides complete Waveguide Probe Antennas, forming mounting systems, integreted with (optional) waveguide to coaxial adapters, L type and round mounting brackets. The following figure shows the disassembly diagram of such a system.

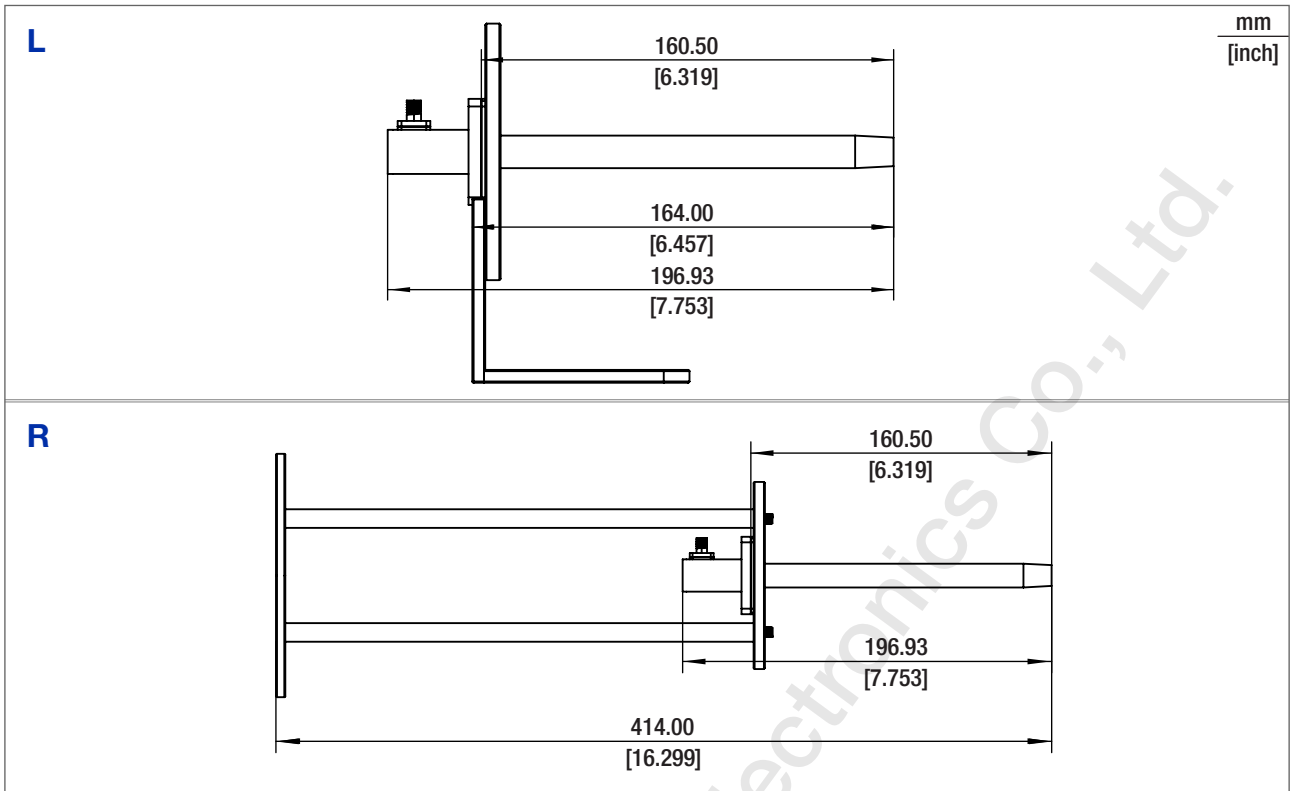
L_detector explosive body



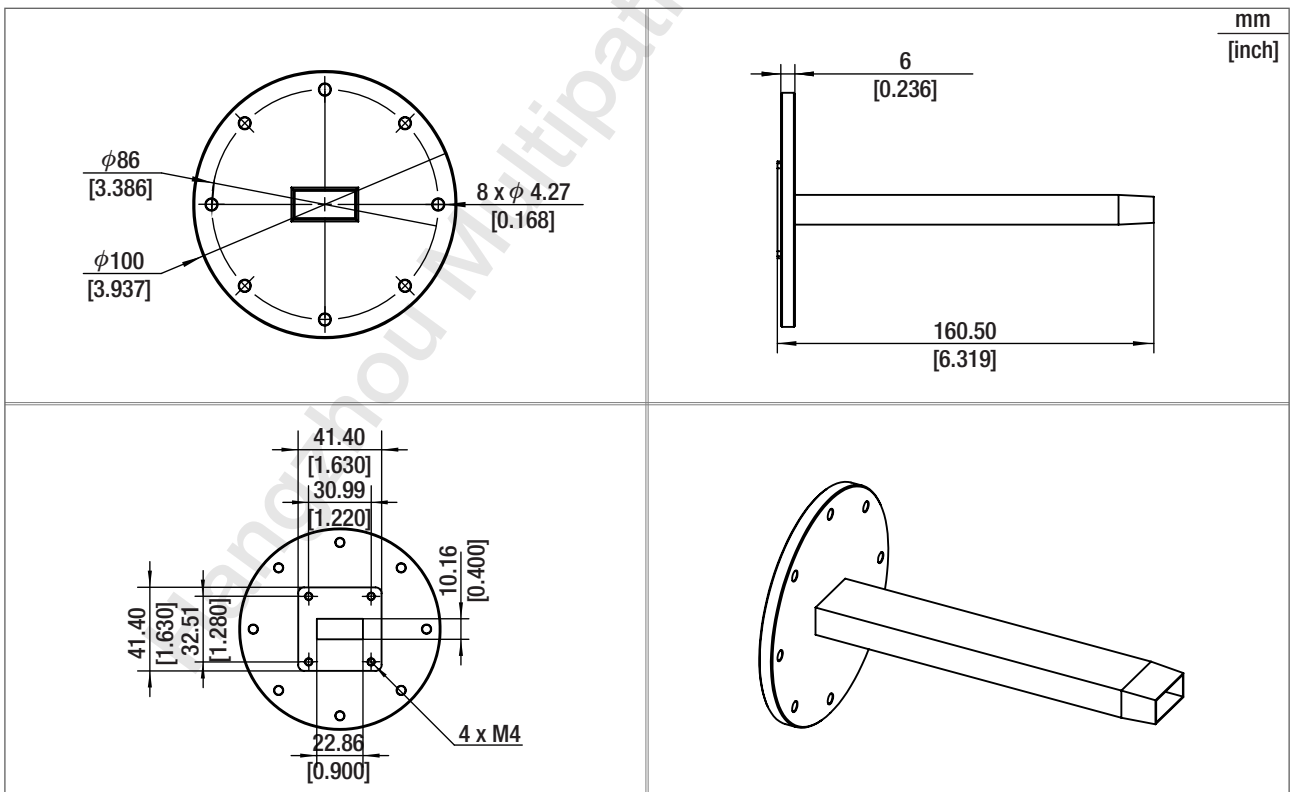
R_detector explosive body



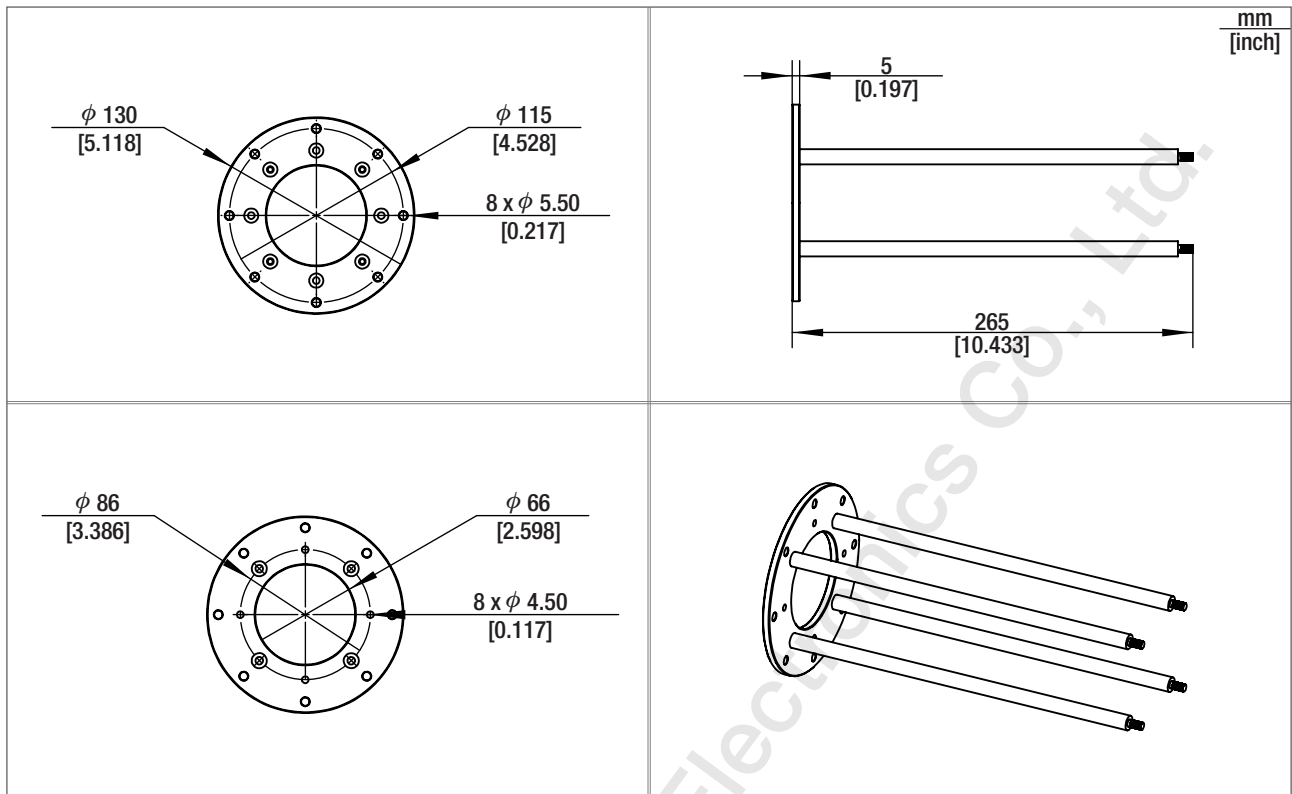
• Side view of the mounting system



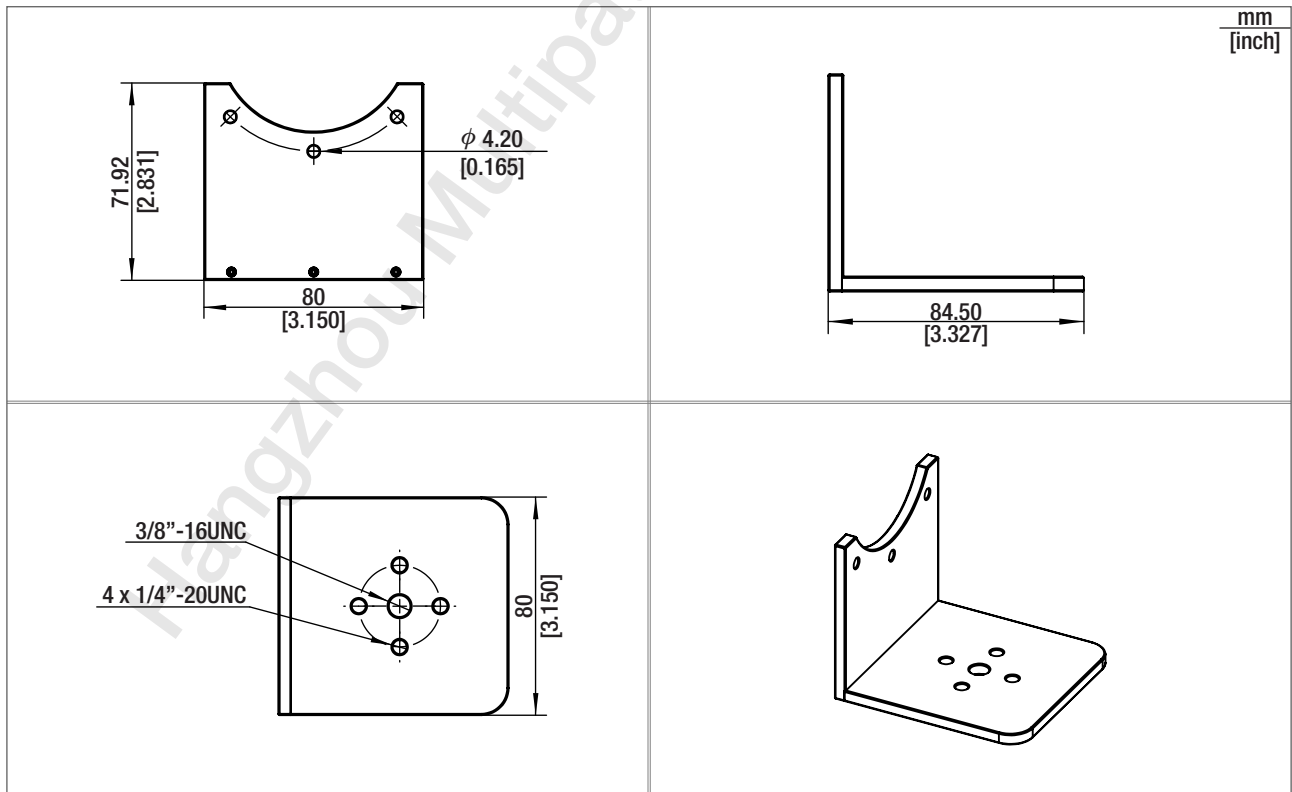
• Dimensional drawing: detectors, WP-WR90



• Dimensional drawing: round mounting bracket (Optional)

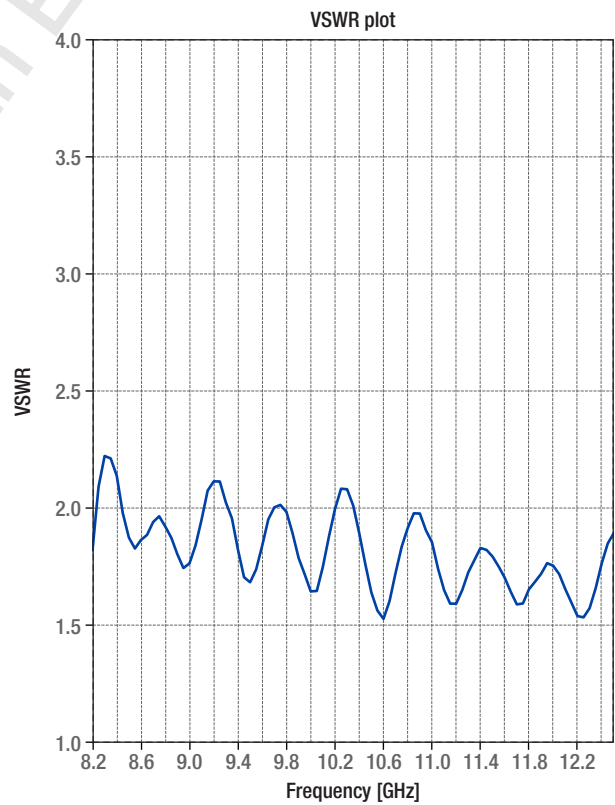
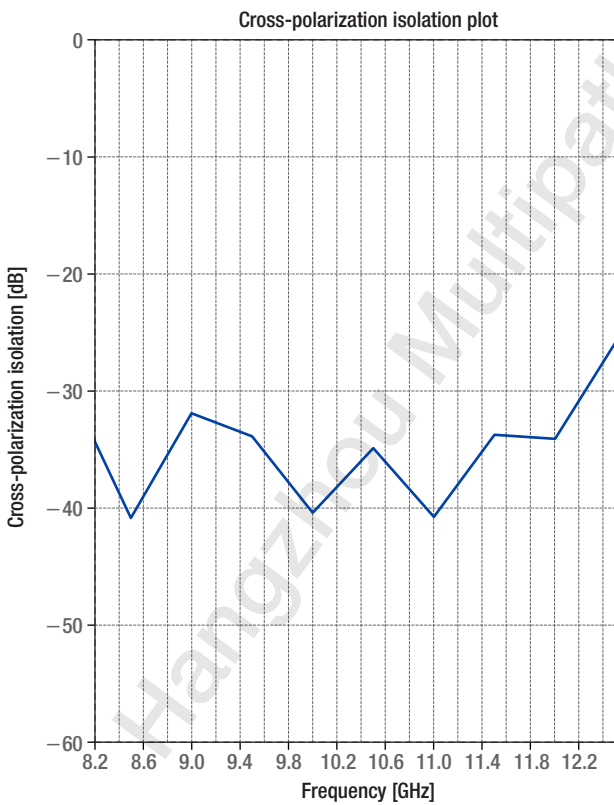
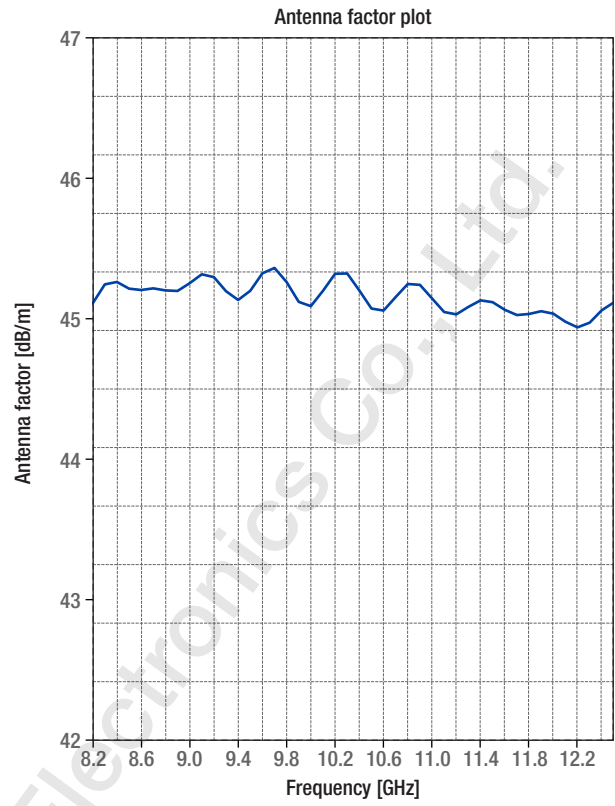
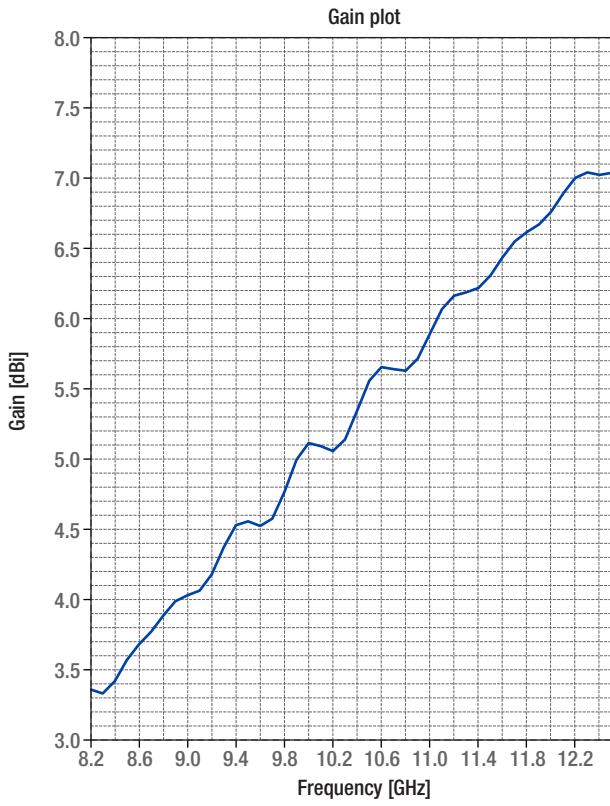


• Dimensional drawing: L type mounting bracket (Optional)



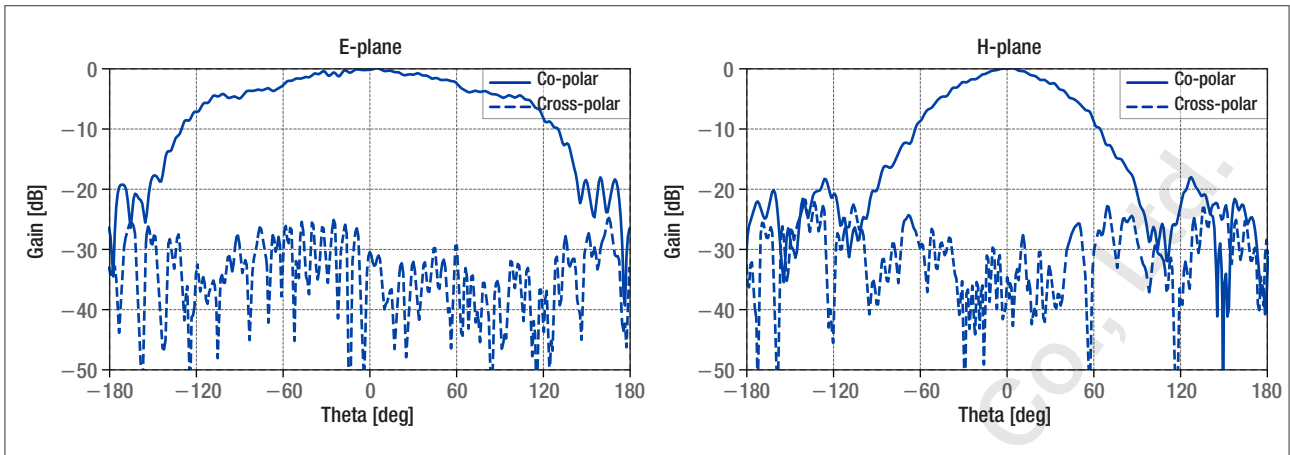
Electrical characteristics

Gain & Antenna factor & Cross-polarization isolation & VSWR

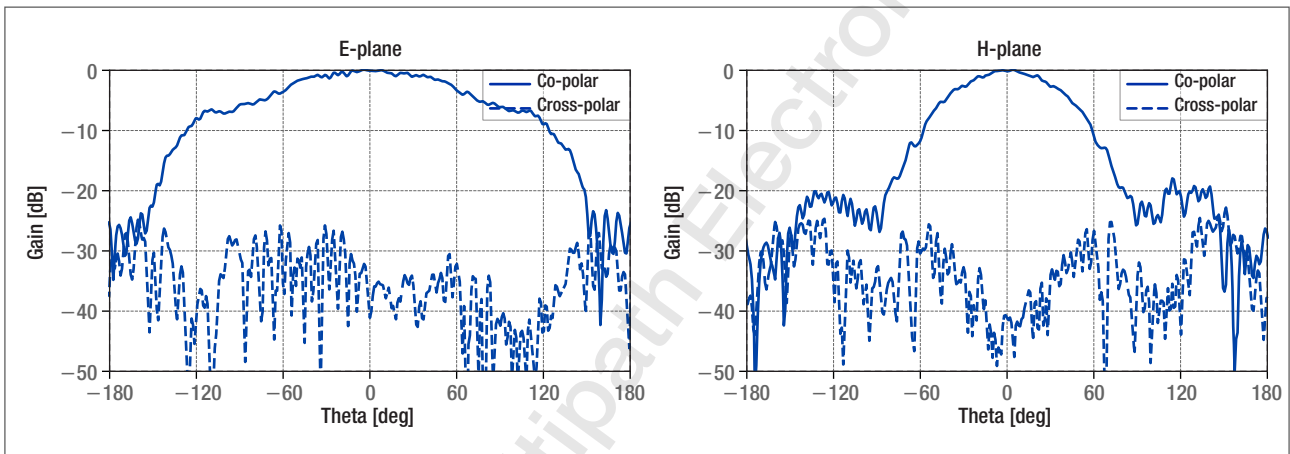


• Radiation patterns

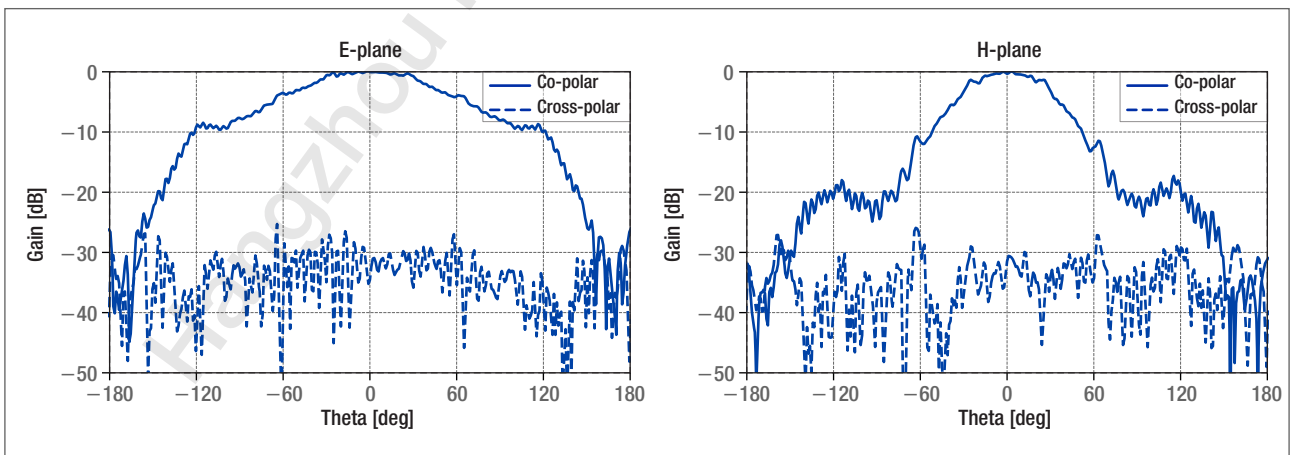
Patterns @ 8 GHz



Patterns @ 10 GHz



Patterns @ 12 GHz



• Data table

Frequency [GHz]	Gain [dBi]	Antenna factor [dB/m]	Cross-polarization isolation [dB]	VSWR
8.2	3.37	45.10	-34.33	1.82
8.4	3.43	45.25	-38.70	2.14
8.6	3.69	45.19	-39.11	1.86
8.8	3.89	45.19	-35.55	1.92
9.0	4.04	45.24	-31.99	1.76
9.2	4.18	45.28	-32.78	2.12
9.4	4.53	45.12	-33.56	1.82
9.6	4.53	45.31	-35.25	1.84
9.8	4.77	45.25	-37.84	1.98
10.0	5.11	45.08	-40.44	1.64
10.2	5.06	45.31	-38.25	2.00
10.4	5.34	45.19	-36.05	1.89
10.6	5.65	45.05	-36.12	1.53
10.8	5.62	45.23	-38.46	1.92
11.0	5.89	45.13	-40.79	1.85
11.2	6.16	45.02	-38.00	1.59
11.4	6.21	45.12	-35.21	1.83
11.6	6.43	45.05	-33.89	1.70
11.8	6.61	45.02	-34.03	1.65
12.0	6.75	45.02	-34.16	1.75
12.2	6.99	44.93	-30.88	1.54
12.4	7.01	45.05	-27.60	1.76

Frequency [GHz]	E-plane, 3dB beamwidth	H-plane, 3dB beamwidth
8	123.10°	68.59°
10	115.30°	67.42°
12	120.92°	58.78°



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.