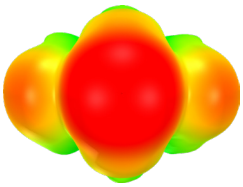
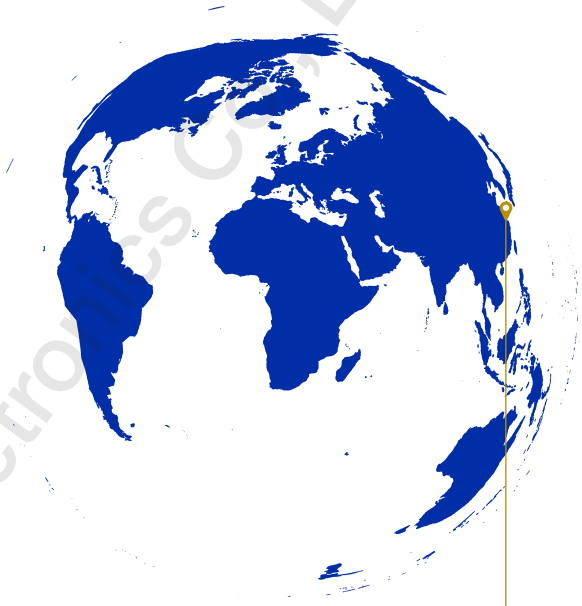
Standard Gain Horn Antennas

92.2 - 140.0 GHz, 15 dBi

Radiation pattern



QR code



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

Company Profile

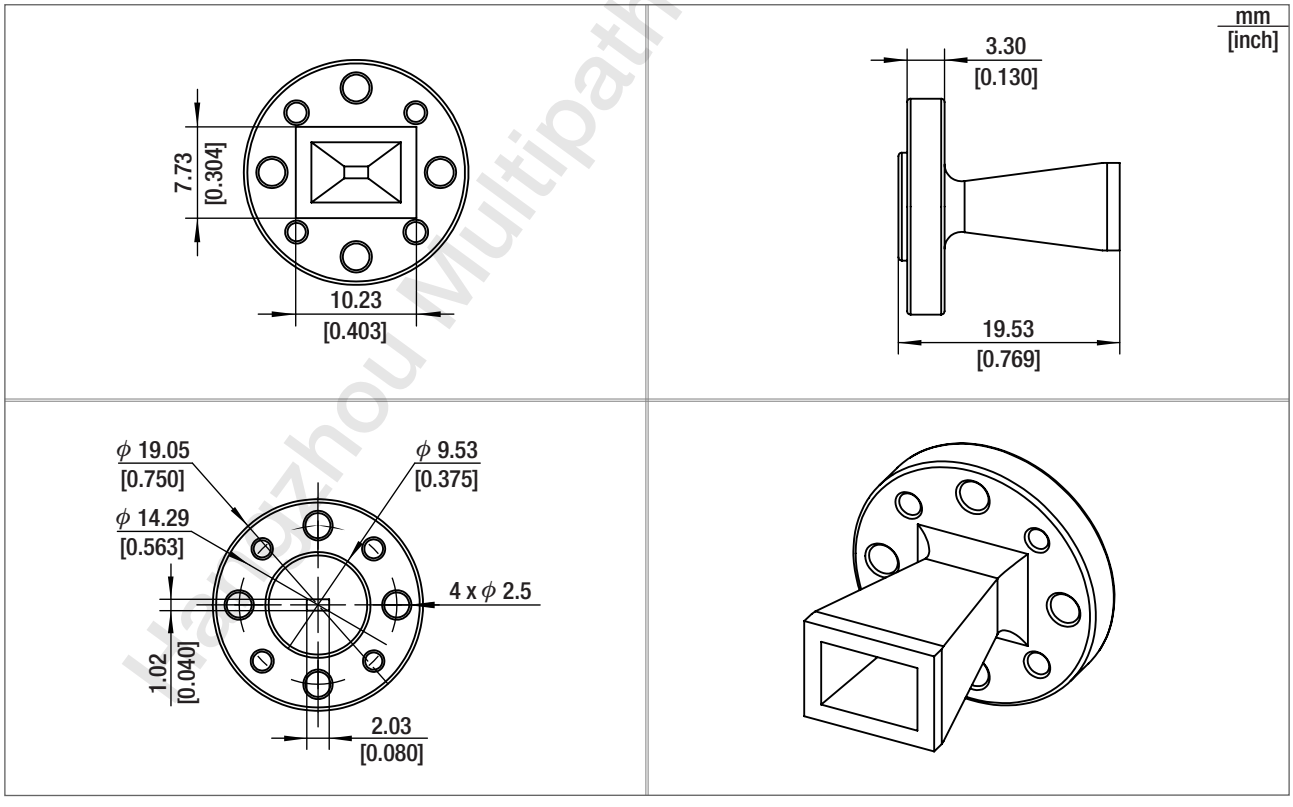
Hangzhou Multipath Electronics Co., Ltd. is a high-tech enterprise specializing in the research, production and sales of various high-performance standard gain horns, waveguide probes, transparent antennas, MIMO antennas for communication, and phased array radar antennas. The products cover various types of waveguide arrays, patch arrays, dipole arrays, and ultra-wideband angle scanning arrays, and the frequency range covers low frequency to millimeter waves. The founding team of the company has been deeply involved in the field of electromagnetic array structures for many years and has rich experience in array antenna design. The team first applied the principle of bionics to electromagnetic wave control, and the original wideband angle scanning, low loss, and high precision technology is at the leading level internationally, and related technologies have been applied in many large projects. The founding members currently have more than ten core invention patents in this field, and have published many SCI journal papers.

Hangzhou Multipath Electronics will be dedicated to the research of cutting-edge electromagnetic field technology, to be a leader in antenna arrays, to tap the potential of electromagnetic fields, and to contribute to the development of science and technology.

Product specifications

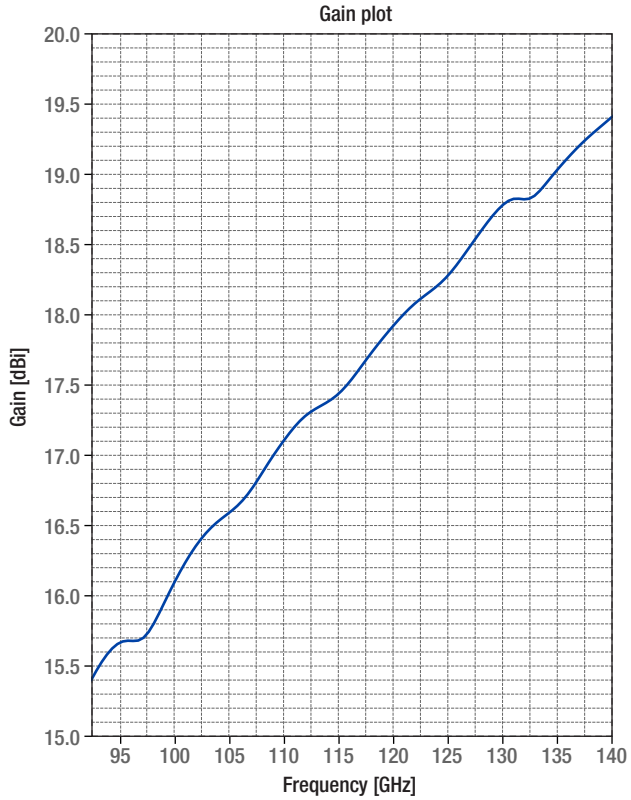
Part number	HA-WR8-15	**Polarization**	Single linear
Antenna type	Pyamidal horn	**Gain [dBi]**	15 Typ.
Frequency range [GHz]	92.2 – 140.0	**3dB beamwidth [deg]**	E-plane: 25 Typ. H-plane: 25 Typ.
Waveguide band	WR8	**Cross-polarization isolation [dB]**	50 Typ.
Dimensions (H x W x L) [mm; inch]	19.05 x 19.05 x 19.53; 0.75 x 0.75 x 0.77	**VSWR**	1.15 Typ.
Weight (approx.) [kg; lb]	0.01; 0.022	**RF connector**	UG-387/U-M
Material	Cu (Gold plated)		

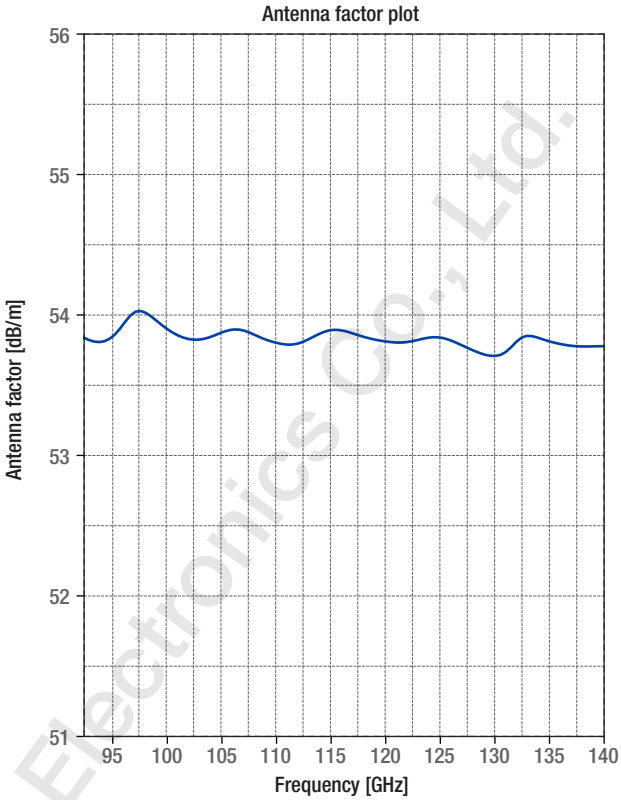
• Dimensional drawing: horn, HA-WR8-10

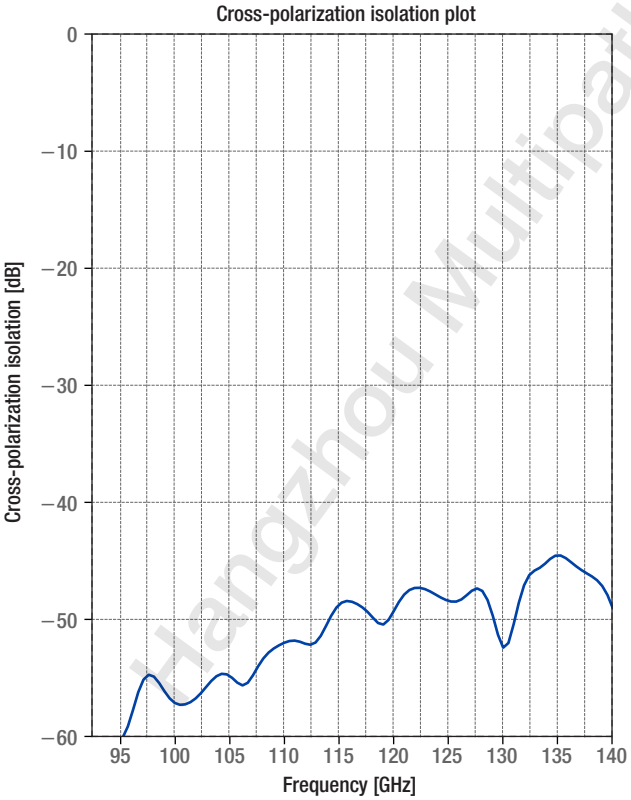


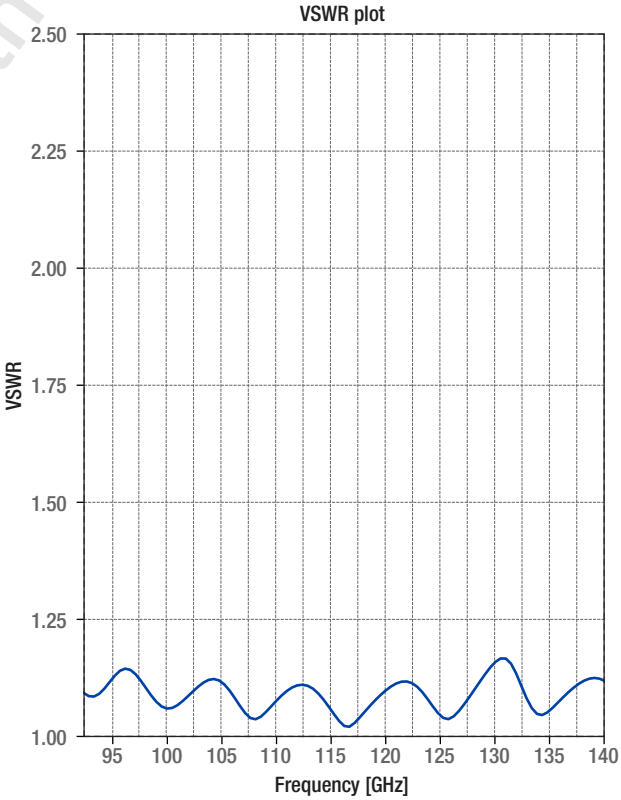
Electrical characteristics

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



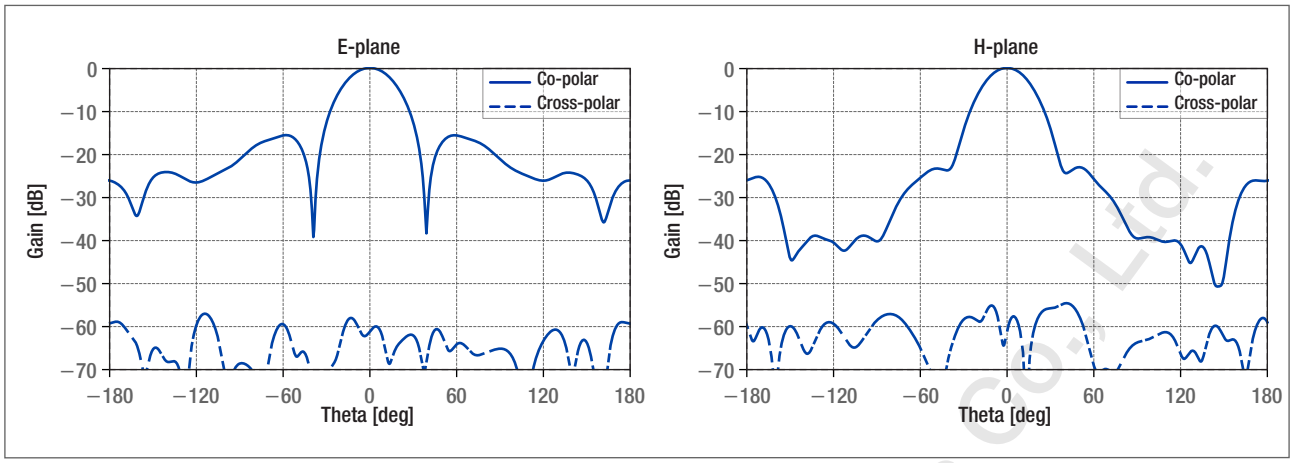




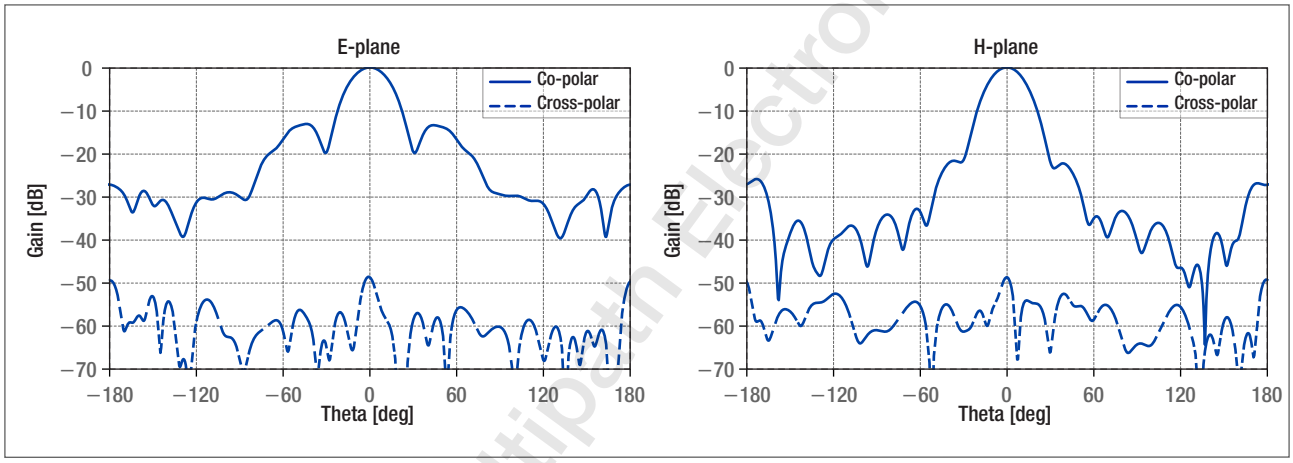


• Radiation patterns

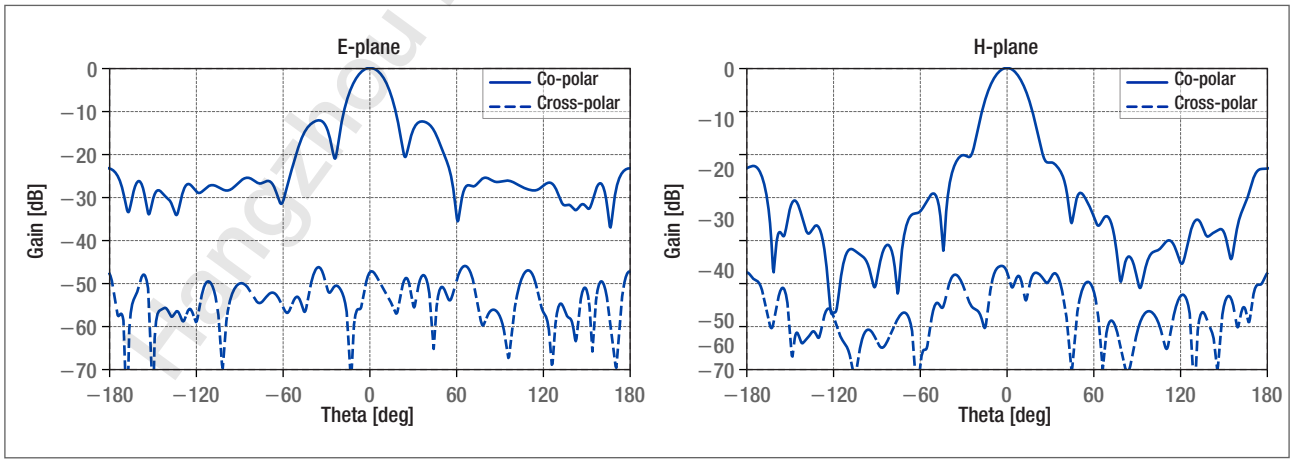
Patterns @ 93 GHz



Patterns @ 116 GHz



Patterns @ 140 GHz



• Data table

Frequency [GHz]	Gain [dBi]	Antenna factor [dB/m]	Cross-polarization isolation [dB]	VSWR
94	15.80	53.85	−59.71	1.12
96	15.83	54.01	−54.94	1.12
98	16.07	53.95	−55.87	1.07
100	16.34	53.85	−56.97	1.06
102	16.54	53.82	−55.54	1.10
104	16.67	53.86	−54.50	1.11
106	16.81	53.89	−55.19	1.06
108	17.03	53.83	−52.71	1.04
110	17.23	53.79	−51.76	1.08
112	17.37	53.80	−52.06	1.10
114	17.46	53.87	−49.69	1.07
116	17.60	53.88	−48.53	1.02
118	17.79	53.83	−49.84	1.05
120	17.97	53.80	−49.30	1.09
122	18.12	53.80	−47.39	1.11
124	18.23	53.83	−47.93	1.07
126	18.38	53.82	−48.51	1.03
128	18.58	53.76	−47.43	1.08
130	18.76	53.71	−51.25	1.14
132	18.84	53.76	−48.60	1.15
134	18.89	53.84	−45.74	1.05
136	19.06	53.80	−44.72	1.06
138	19.21	53.77	−45.92	1.10
140	19.34	53.77	−47.23	1.12

Frequency [GHz]	E-plane, 3dB beamwidth	H-plane, 3dB beamwidth
93	28.83°	31.75°
116	23.58°	26.01°
140	19.82°	21.13°

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.