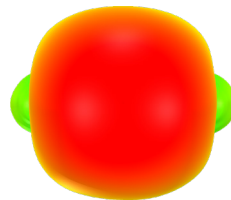


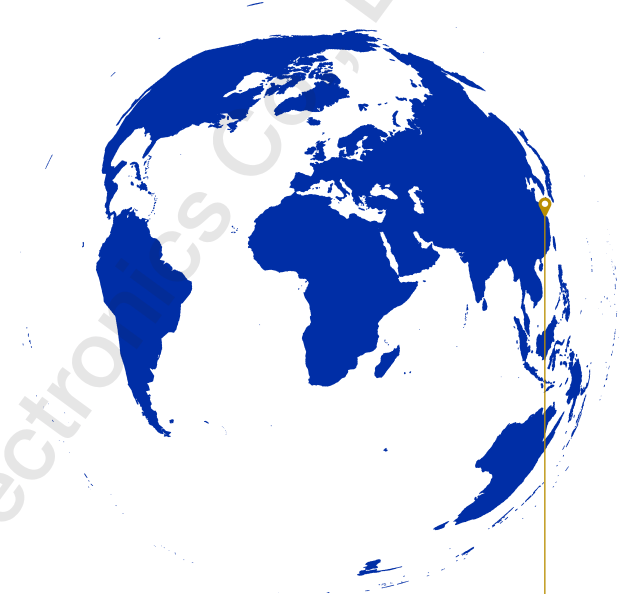
Broadband Horn Antennas

0.8 - 12.0 GHz, 20 dBi

Radiation pattern



QR code



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

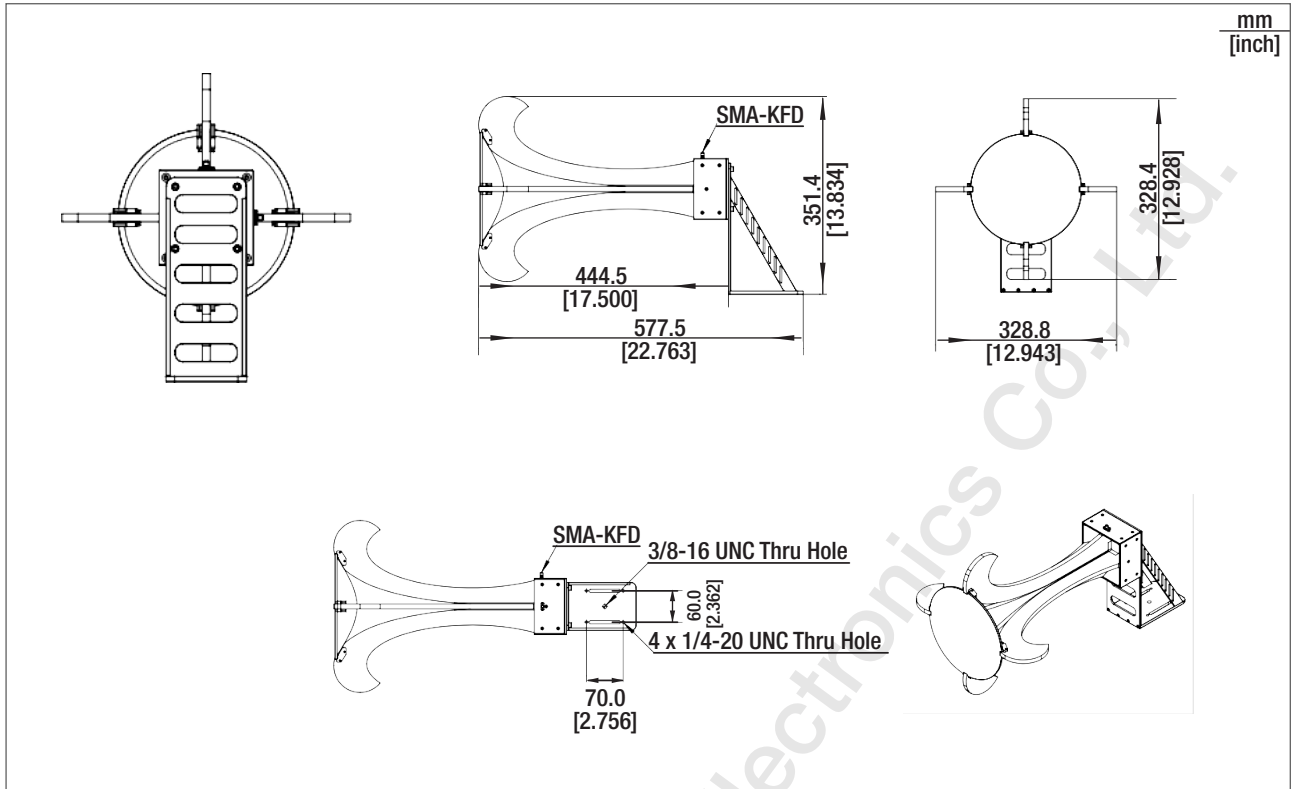
Product specifications

Part number	BDHA-0812-20	Polarization	Dual Linear
Antenna type	Quad-ridge horn	Gain [dBi]	20 Typ.
Frequency range [GHz]	0.8 - 12.0	Cross-polarization isolation [dB]	30 Typ.
Waveguide band	BDHA-0812-20	VSWR	1.50 Typ.
Dimensions (H x W x L) [mm; inch]	443.5 x 328.8 x 328.8; 17.46 x 12.94 x 12.94	Impedance [Ohms]	50
Weight (approx.) [kg; lb]	4.45; 9.811	RF connector	SMA-Female
Material	Aluminum	Port Isolation [dB]	40 Typ.

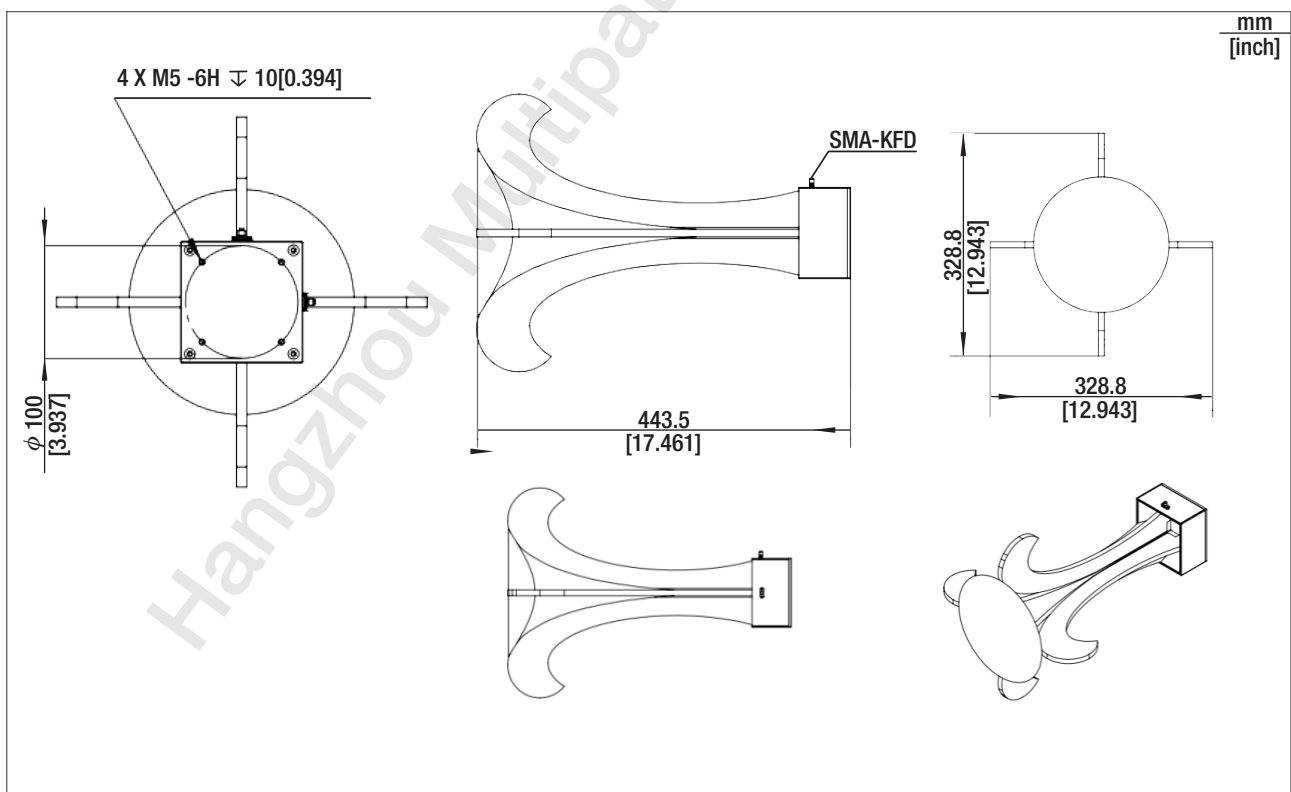
Outline dimensions

Multipath Electronics provides complete broadband horn antenna, forming mounting systems, integrated with waveguide to coaxial adapters, L type mounting brackets.

• Assembly dimensional drawing

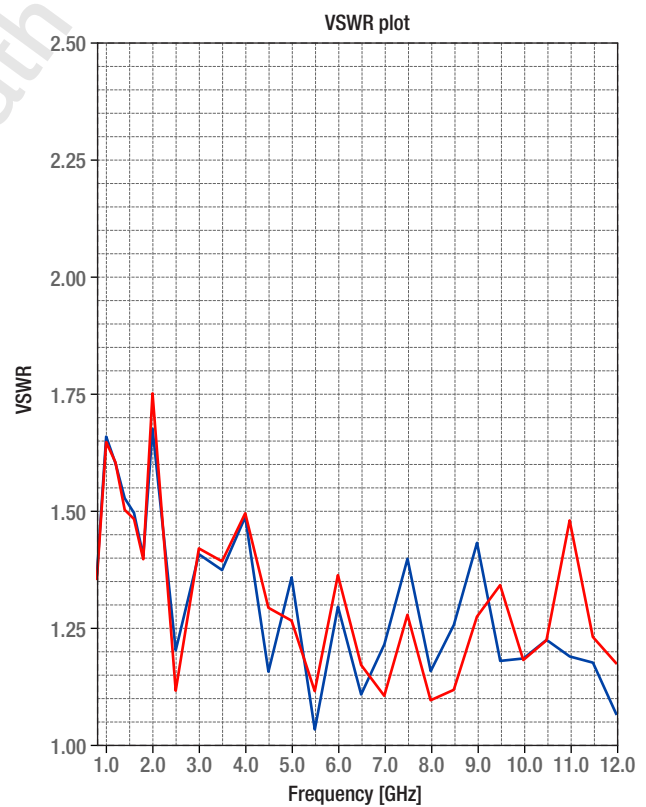
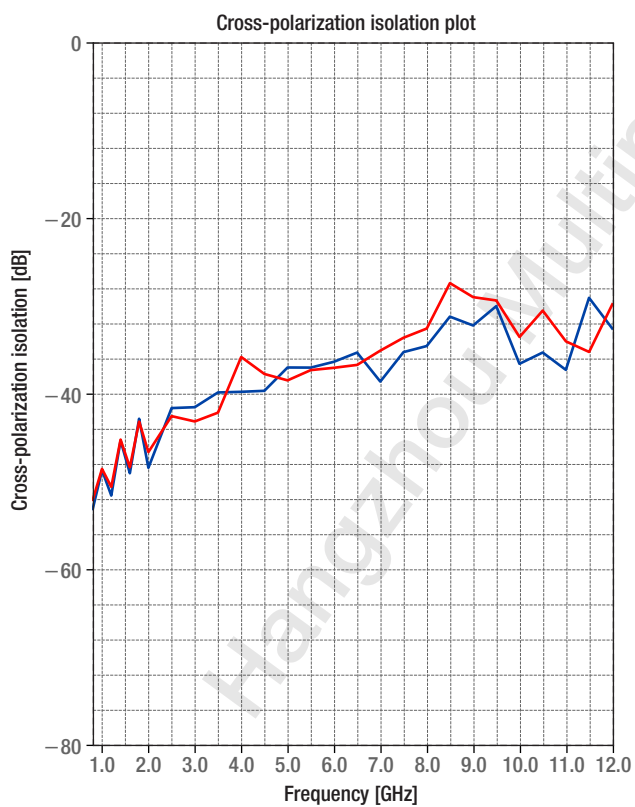
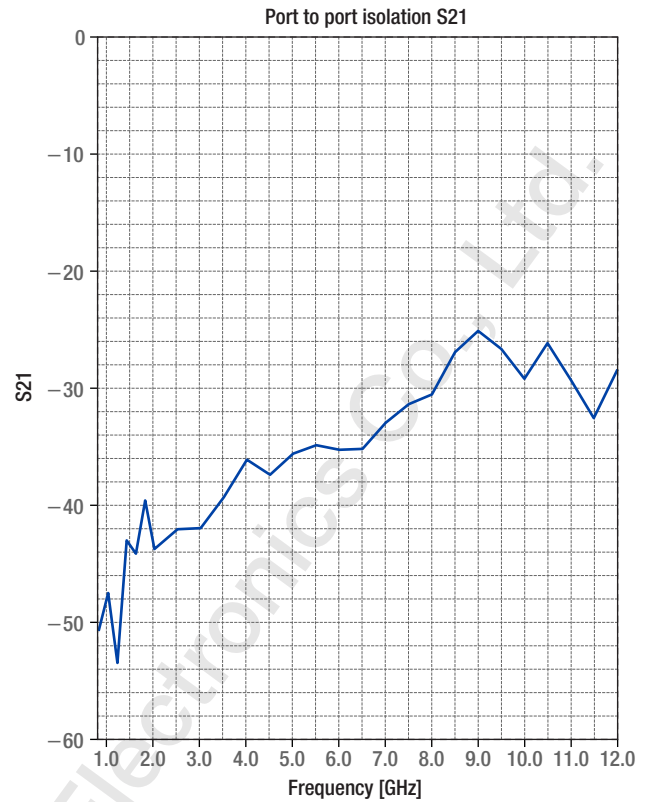
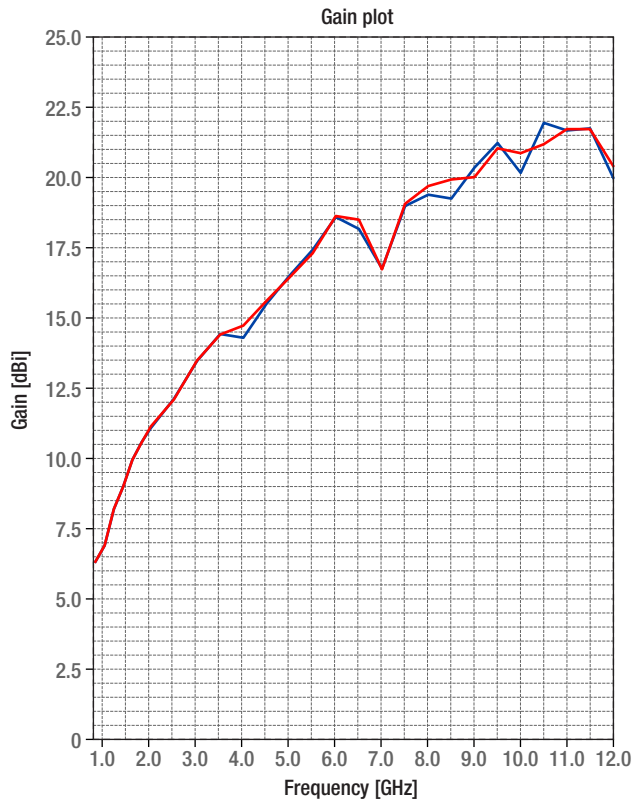


• Dimensional drawing



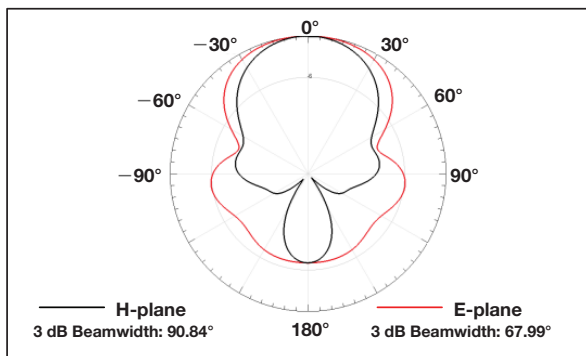
Electrical characteristics

• Gain & VSWR & Cross-polarization isolation & S21

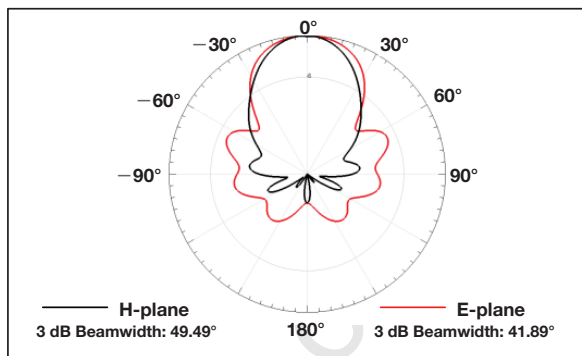


• Radiation patterns

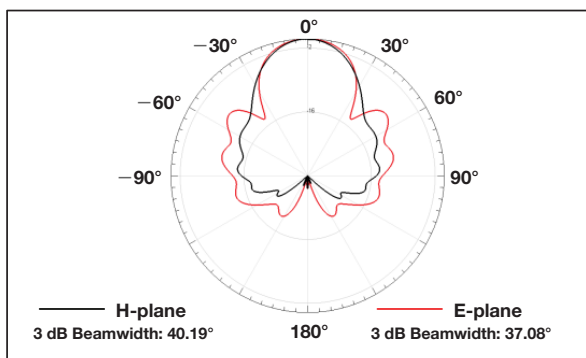
Frequency: 0.8 GHz



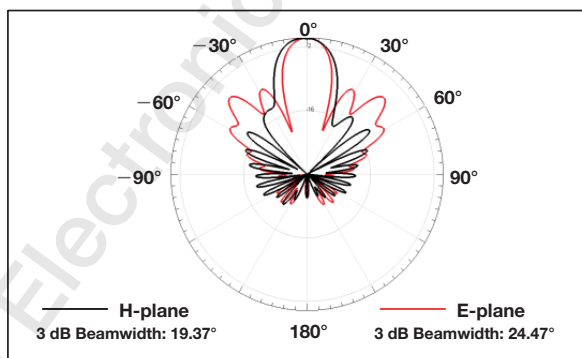
Frequency: 1.4 GHz



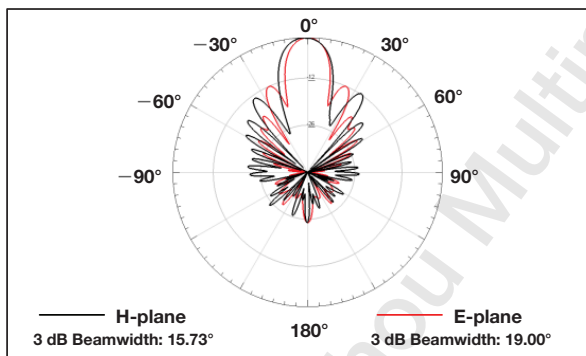
Frequency: 2.0 GHz



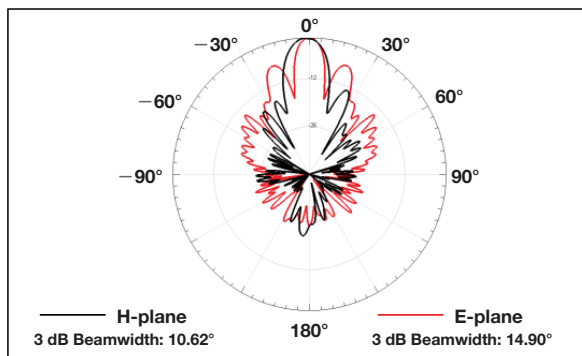
Frequency: 4.0 GHz



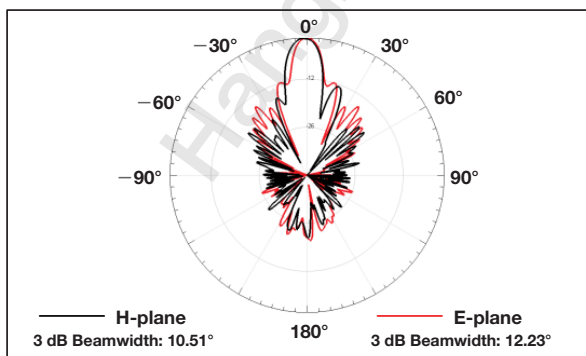
Frequency: 6.0 GHz



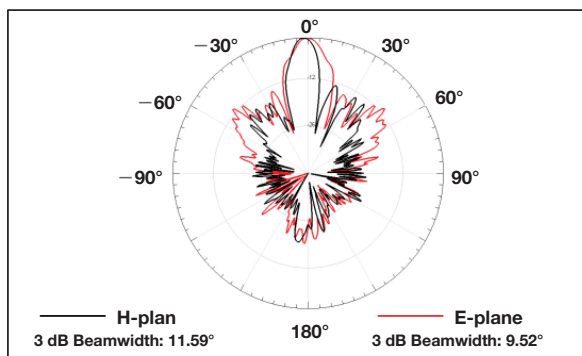
Frequency: 8.0 GHz



Frequency: 10.0 GHz



Frequency: 12.0 GHz



• Data table

Frequency [GHz]	Gain [dBi]		Antenna factor [dB/m]		Cross-polarization isolation [dB]		VSWR		S21
0.8	6.36	6.36	21.89	21.89	-52.92	-51.87	1.36	1.35	-50.24
1.0	6.94	6.95	23.26	23.25	-48.48	-48.34	1.66	1.65	-47.15
1.5	9.04	9.04	24.08	24.08	-45.10	-44.99	1.53	1.51	-42.71
2.0	11.14	11.20	25.08	25.03	-48.21	-46.42	1.68	1.76	-43.44
2.5	12.18	12.16	25.97	26.00	-41.39	-42.31	1.21	1.12	-41.77
3.0	13.53	13.55	26.21	26.19	-41.29	-42.92	1.41	1.42	-41.68
3.5	14.49	14.48	26.59	26.61	-39.61	-41.91	1.38	1.40	-39.07
4.0	14.36	14.79	27.88	27.45	-39.53	-35.56	1.49	1.50	-35.91
4.5	15.57	15.67	27.70	27.59	-39.42	-37.50	1.16	1.30	-37.18
5.0	16.58	16.51	27.60	27.66	-36.76	-38.23	1.36	1.27	-35.40
5.5	17.50	17.38	27.51	27.63	-36.77	-37.05	1.04	1.12	-34.68
6.0	18.67	18.71	27.10	27.06	-36.10	-36.79	1.30	1.37	-35.07
6.5	18.24	18.57	28.21	27.88	-35.05	-36.46	1.11	1.17	-34.99
7.0	16.83	16.80	30.27	30.30	-38.36	-34.83	1.22	1.11	-32.79
7.5	19.06	19.14	28.64	28.56	-35.00	-33.36	1.40	1.28	-31.23
8.0	19.47	19.77	28.80	28.49	-34.31	-32.31	1.16	1.10	-30.40
8.5	19.33	20.01	29.46	28.78	-30.95	-27.12	1.26	1.12	-26.84
9.0	20.43	20.09	28.85	29.19	-31.96	-28.72	1.44	1.28	-25.05
9.5	21.31	21.12	28.44	28.63	-29.75	-29.10	1.18	1.34	-26.57
10.0	20.24	20.95	29.96	29.25	-36.34	-33.27	1.19	1.18	-29.08
10.5	22.03	21.27	28.59	29.36	-35.05	-30.25	1.23	1.23	-26.08
11.0	21.76	21.81	29.27	29.22	-37.03	-33.77	1.19	1.48	-29.15
11.5	21.83	21.81	29.58	29.61	-28.80	-34.98	1.18	1.23	-32.04
12.0	20.08	20.50	31.71	31.29	-32.30	-29.54	1.07	1.18	-28.40

Frequency [GHz]	E-plane, 3dB	H-plane, 3dB beamwidth
0.8	90.84°	67.99°
1.6	49.49°	41.89°
2.0	40.19°	37.08°
4.0	19.37°	24.47°
6.0	15.73°	19.00°
8.0	10.62°	14.90°
10.0	10.51°	12.23°
12.0	11.59°	9.52°



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Technical specifications in this datasheet are subject to change without notice.
Actual products may differ from the shown images.