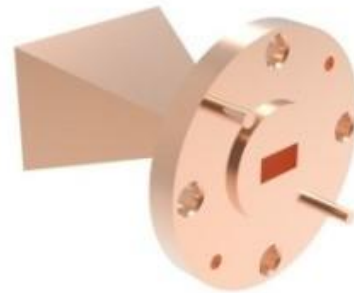


Standard Gain Horn Antennas

Standard Gain Horn Antennas have stable gain with frequency and low VSWR, they are often used for antenna testing, RF absorber testing or other testing reference, etc.

Lorentz's standard gain horn antennas are available to cover the frequency range from 0.32 to 330 GHz, with nominal gain 10 dBi, 15 dBi, 20 dBi and 25 dBi.



Features

- Stable gain with frequency
- Linear polarization
- Excellent VSWR
- Robust mechanical design

Customization services

- Gain
- RF interface
- Custom mount option
- Operating frequency
- Coating color

Solution for

- Gain reference for high gain antennas
- Antenna measurements

Applications

- General antenna testing
- Radome testing
- Satellite antenna testing
- Wireless communication

Horn Antennas



Typical product specifications - Standard gain horn antenna with integrated coaxial interface

Frequency (GHz)	Model				VSWR	Material	RF interface
	Nominal gain 10 dBi	Nominal gain 15 dBi	Nominal gain 20 dBi	Nominal gain 25 dBi			
0.32 - 0.49	ANTH01-0003N-10-111				≤ 1.5	Aluminum	N (f)
0.35 - 0.53	ANTH01-0004N-10-111				≤ 1.5	Aluminum	N (f)
0.41 - 0.62	ANTH01-0005N-10-111				≤ 1.5	Aluminum	N (f)
0.49 - 0.75	ANTH01-0006N-10-111				≤ 1.5	Aluminum	N (f)
0.64 - 0.98	ANTH01-0008N-10-111				≤ 1.5	Aluminum	N (f)
0.76 - 1.15	ANTH01-0009N-10-111	ANTH01-0009N-15-111			≤ 1.5	Aluminum	N (f)
0.96 - 1.46	ANTH01-0012N-10-111	ANTH01-0012N-15-111			≤ 1.5	Aluminum	N (f)
1.13 - 1.73	ANTH01-0014N-10-111	ANTH01-0014N-15-111			≤ 1.5	Aluminum	N (f)
1.45 - 2.20	ANTH01-0018N-10-111	ANTH01-0018N-15-111			≤ 1.5	Aluminum	N (f)
1.72 - 2.61	ANTH01-0022N-10-111	ANTH01-0022N-15-111			≤ 1.5	Aluminum	N (f)
2.17 - 3.30	ANTH01-0026N-10-111	ANTH01-0026N-15-111			≤ 1.5	Aluminum	N (f)
2.60 - 3.95	ANTH01-0032N-10-111	ANTH01-0032N-15-111	ANTH01-0032N-20-111		≤ 1.5	Aluminum	N (f)
3.22 - 4.90	ANTH01-0040N-10-111	ANTH01-0040N-15-111	ANTH01-0040N-20-111		≤ 1.5	Aluminum	N (f)
3.94 - 5.99	ANTH01-0048N-10-111	ANTH01-0048N-15-111	ANTH01-0048N-20-111		≤ 1.5	Aluminum	N (f)
4.64 - 7.05	ANTH01-0058N-10-111	ANTH01-0058N-15-111	ANTH01-0058N-20-111		≤ 1.5	Aluminum	N (f)
5.38 - 8.17	ANTH01-0070N-10-111	ANTH01-0070N-15-111	ANTH01-0070N-20-111		≤ 1.5	Aluminum	N (f)
6.57 - 9.99	ANTH01-0084N-10-111	ANTH01-0084N-15-111	ANTH01-0084N-20-111	ANTH01-0084N-25-111	≤ 1.5	Aluminum	N (f)
8.20 - 12.5	ANTH01-0100N-10-111	ANTH01-0100N-15-111	ANTH01-0100N-20-111	ANTH01-0100N-25-111	≤ 1.5	Aluminum	N (f)
9.84 - 15.0	ANTH01-0120N-10-111	ANTH01-0120N-15-111	ANTH01-0120N-20-111	ANTH01-0120N-25-111	≤ 1.5	Aluminum	N (f)
11.9 - 18.0	ANTH01-0140S-10-111	ANTH01-0140S-15-111	ANTH01-0140S-20-111	ANTH01-0140S-25-111	≤ 1.5	Aluminum	SMA (f)
14.5 - 22.0	ANTH01-0180S-10-111	ANTH01-0180S-15-111	ANTH01-0180S-20-111	ANTH01-0180S-25-111	≤ 1.5	Aluminum	SMA (f)
17.6 - 26.7	ANTH01-0220K-10-211	ANTH01-0220K-15-211	ANTH01-0220K-20-211	ANTH01-0220K-25-211	≤ 1.5	Copper	2.92mm (f)
21.7 - 33.0	ANTH01-0260K-10-211	ANTH01-0260K-15-211	ANTH01-0260K-20-211	ANTH01-0260K-25-211	≤ 1.5	Copper	2.92mm (f)
26.3 - 40.0	ANTH01-0320K-10-211	ANTH01-0320K-15-211	ANTH01-0320K-20-211	ANTH01-0320K-25-211	≤ 1.5	Copper	2.92mm (f)
32.9 - 50.1		ANTH01-040024-15-211	ANTH01-040024-20-211	ANTH01-040024-25-211	≤ 1.5	Copper	2.4 mm (f)
39.2 - 59.6				ANTH01-0500185-25-2D1	≤ 1.8	Copper	1.85mm (f)
60.5 - 91.9				ANTH01-074010-25-2D1	≤ 2.0	Copper	1.0mm (f)

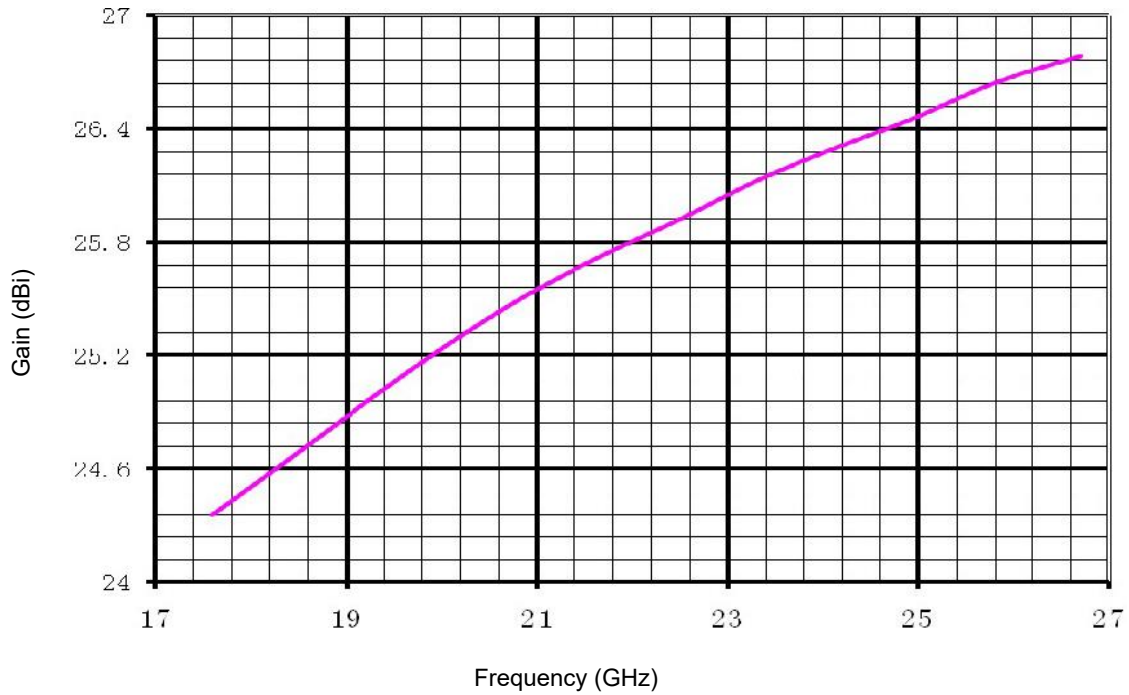
Horn Antennas



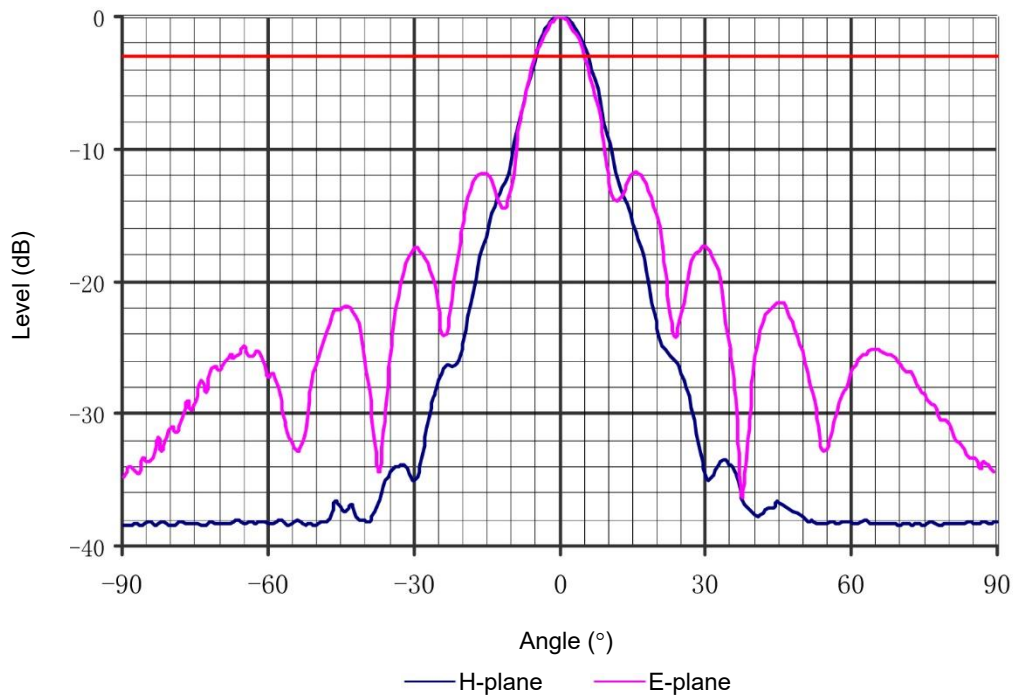
Typical product specifications - Standard gain horn antenna with waveguide interface

Frequency (GHz)	Model				VSWR	Material	RF interface
	Nominal gain 10 dBi	Nominal gain 15 dBi	Nominal gain 20 dBi	Nominal gain 25 dBi			
0.96 - 1.46	ANTH01-0012W-10-111	ANTH01-0012W-15-111			≤ 1.25	Aluminum	Waveguide
1.13 - 1.73	ANTH01-0014W-10-111	ANTH01-0014W-15-111			≤ 1.25	Aluminum	Waveguide
1.45 - 2.20	ANTH01-0018W-10-111	ANTH01-0018W-15-111			≤ 1.25	Aluminum	Waveguide
1.72 - 2.61	ANTH01-0022W-10-111	ANTH01-0022W-15-111			≤ 1.25	Aluminum	Waveguide
2.17 - 3.30	ANTH01-0026W-10-111	ANTH01-0026W-15-111			≤ 1.25	Aluminum	Waveguide
2.60 - 3.95	ANTH01-0032W-10-111	ANTH01-0032W-15-111	ANTH01-0032W-20-111		≤ 1.25	Aluminum	Waveguide
3.22 - 4.90	ANTH01-0040W-10-111	ANTH01-0040W-15-111	ANTH01-0040W-20-111		≤ 1.25	Aluminum	Waveguide
3.94 - 5.99	ANTH01-0048W-10-111	ANTH01-0048W-15-111	ANTH01-0048W-20-111		≤ 1.25	Aluminum	Waveguide
4.64 - 7.05	ANTH01-0058W-10-111	ANTH01-0058W-15-111	ANTH01-0058W-20-111		≤ 1.25	Aluminum	Waveguide
5.38 - 8.17	ANTH01-0070W-10-111	ANTH01-0070W-15-111	ANTH01-0070W-20-111		≤ 1.25	Aluminum	Waveguide
6.57 - 9.99	ANTH01-0084W-10-111	ANTH01-0084W-15-111	ANTH01-0084W-20-111	ANTH01-0084W-25-111	≤ 1.25	Aluminum	Waveguide
8.20 - 12.5	ANTH01-0100W-10-111	ANTH01-0100W-15-111	ANTH01-0100W-20-111	ANTH01-0100W-25-111	≤ 1.25	Aluminum	Waveguide
9.84 - 15.0	ANTH01-0120W-10-111	ANTH01-0120W-15-111	ANTH01-0120W-20-111	ANTH01-0120W-25-111	≤ 1.25	Aluminum	Waveguide
11.9 - 18.0	ANTH01-0140W-10-111	ANTH01-0140W-15-111	ANTH01-0140W-20-111	ANTH01-0140W-25-111	≤ 1.25	Aluminum	Waveguide
14.5 - 22.0	ANTH01-0180W-10-111	ANTH01-0180W-15-111	ANTH01-0180W-20-111	ANTH01-0180W-25-111	≤ 1.25	Aluminum	Waveguide
17.6 - 26.7	ANTH01-0220W-10-211	ANTH01-0220W-15-211	ANTH01-0220W-20-211	ANTH01-0220W-25-211	≤ 1.25	Copper	Waveguide
21.7 - 33.0	ANTH01-0260W-10-211	ANTH01-0260W-15-211	ANTH01-0260W-20-211	ANTH01-0260W-25-211	≤ 1.25	Copper	Waveguide
26.3 - 40.0	ANTH01-0320W-10-211	ANTH01-0320W-15-211	ANTH01-0320W-20-211	ANTH01-0320W-25-211	≤ 1.25	Copper	Waveguide
32.9 - 50.1		ANTH01-0400W-15-211	ANTH01-0400W-20-211	ANTH01-0400W-25-211	≤ 1.25	Copper	Waveguide
39.2 - 59.6		ANTH01-0500W-15-2D1	ANTH01-0500W-20-2D1	ANTH01-0500W-25-2D1	≤ 1.25	Copper	Waveguide
49.8 - 75.8		ANTH01-0620W-15-2D1	ANTH01-0620W-20-2D1	ANTH01-0620W-25-2D1	≤ 1.25	Copper	Waveguide
60.5 - 91.9		ANTH01-0740W-15-2D1	ANTH01-0740W-20-2D1	ANTH01-0740W-25-2D1	≤ 1.25	Copper	Waveguide
73.8 - 112		ANTH01-0900W-15-2D1	ANTH01-0900W-20-2D1	ANTH01-0900W-25-2D1	≤ 1.25	Copper	Waveguide
92.2 - 140		ANTH01-1200W-15-2D1	ANTH01-1200W-20-2D1	ANTH01-1200W-25-2D1	≤ 1.25	Copper	Waveguide
113 - 173			ANTH01-1400W-20-2D1	ANTH01-1400W-25-2D1	≤ 1.25	Copper	Waveguide
145 - 220			ANTH01-1800W-20-2D1	ANTH01-1800W-25-2D1	≤ 1.25	Copper	Waveguide
172 - 261			ANTH01-2200W-20-2D1	ANTH01-2200W-25-2D1	≤ 1.25	Copper	Waveguide
217 - 330			ANTH01-2600W-20-2D1	ANTH01-2600W-25-2D1	≤ 1.25	Copper	Waveguide

Typical measured data

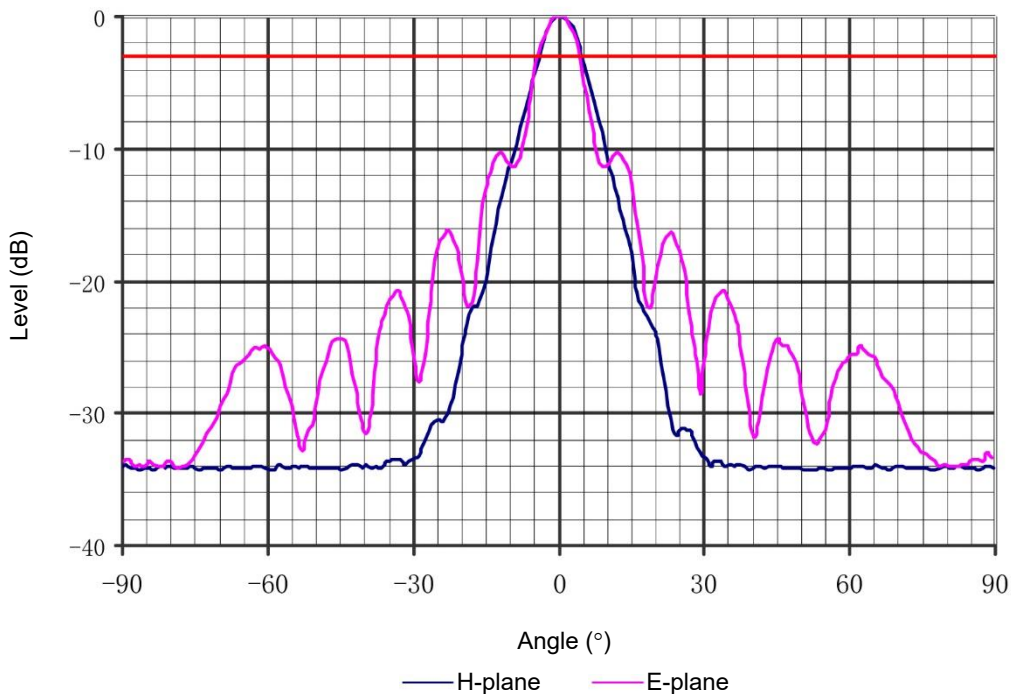


The typical gain curve of ANTH01-0220K-25-211

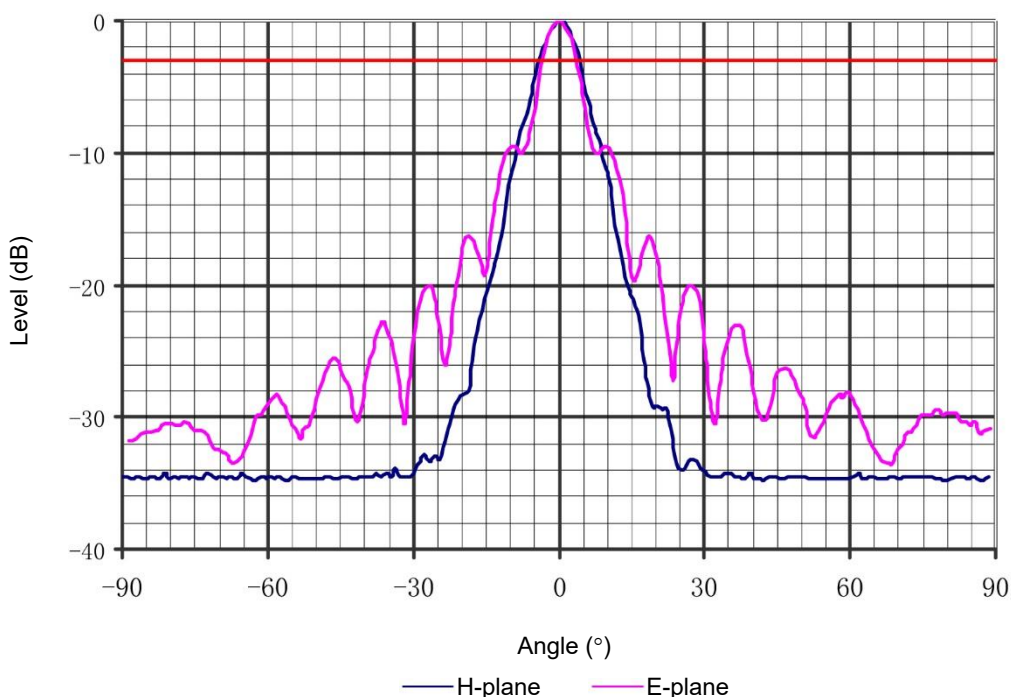


The typical radiation pattern of ANTH01-0220K-25-211 (low band)

Typical measured data



The typical radiation pattern of ANTH01-0220K-25-211 (mid band)



The typical radiation pattern of ANTH01-0220K-25-211 (high band)