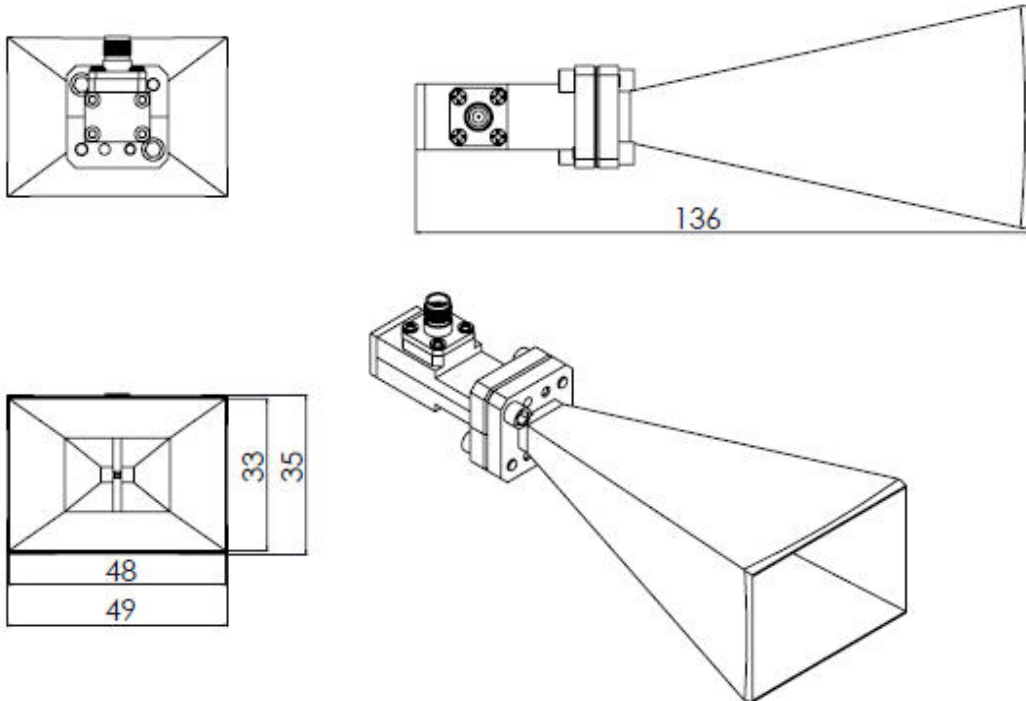


Broadband Horn Antenna *Dual Ridged Horn*



Description:

Broadband Horn Antenna for EMC/EMI
Gain Test System Applications.

Specifications:	
Nominal Frequency Range:	18GHz...50GHz
Usable Frequency Range:	25GHz ... 55 GHz
Isotropic Gain:	15-25 dBi
Antenna Factor:	37... 44 dB/m
Nominal Impedance:	50 Ω
Standing Wave Ratio SWR typical:	≈ 1.5
Front to Back Ratio:	> 25 dB
Cross Polarisation:	> 25dB (18GHz...40GHz)
3 dB Beamwidth typ. (E-Plane):	107°-30°
3 dB Beamwidth typ. (H-Plane):	69°-18°
Max. Input Power:	see diagram
N-Connector female	
Mount: Custom design	
Width x Length x Thickness:	49x 35 x 136mm
Weight:	1.62kg

Frequency GHz	Max Gain over Frequency dBi	Ant.-Factor dB/m
18	17.429	37.90
18.5	17.738	37.83
19	16.998	38.80
19.5	14.787	41.23
20	15.566	40.67
20.5	17.122	39.33
21	17.377	39.29
21.5	17.466	39.40
22	17.685	39.38
22.5	17.848	39.42
23	18.220	39.23
23.5	18.905	38.74
24	19.403	38.42
24.5	19.811	38.19
25	20.199	37.98
25.5	20.261	38.09
26	20.451	38.07
26.5	20.739	37.95
27	20.887	37.96
27.5	21.000	38.01
28	21.079	38.08
28.5	21.181	38.14
29	21.393	38.07
29.5	21.609	38.01
30	21.807	37.96
30.5	22.074	37.83
31	22.182	37.87
31.5	22.252	37.93
32	22.451	37.87
32.5	22.551	37.91
33	22.472	38.12
33.5	22.375	38.35
34	22.375	38.47
34.5	22.164	38.81
35	22.144	38.96
35.5	22.571	38.65
36	22.679	38.67
36.5	22.514	38.95
37	22.589	39.00
37.5	22.491	39.21
38	22.255	39.56

Frequency GHz	Max Gain over Frequency dBi	Ant.-Factor dB/m
38.5	22.372	39.56
39	22.408	39.63
39.5	22.279	39.87
40	22.282	39.98
40.5	22.422	39.95
41	22.383	40.09
41.5	22.560	40.02
42	22.741	39.94
42.5	22.439	40.35
43	22.224	40.67
43.5	22.278	40.71
44	22.109	40.98
44.5	21.979	41.21
45	21.866	41.42
45.5	22.007	41.37
46	21.828	41.65
46.5	21.278	42.29
47	21.464	42.20
47.5	21.274	42.48
48	20.769	43.08
48.5	20.814	43.12
49	20.408	43.62
49.5	20.160	43.95
50	20.374	43.83

Calibration Uncertainty (k=2):
Frequency range $f < 30$ GHz
Frequency range $30 \text{ GHz} < f < 50 \text{ GHz}$

