



LB-7180-NFSPO Broadband Horn Antenna 0.7-18GHz 12dB Gain N Type Female

Broadband Horn Antenna Operating From 0.7GHz to 18 GHz With a Nominal 12dB Gain With N Type Female Connector

Product Information

SKU	LB-7180-NFSPO	Patents	ZL201621014310.X (China) ZL201630454754.4 (China)
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Description

Broadband horn antenna LB-7180-NFSPO, operating from 0.7 to 18GHz with a nominal 12dB gain and low VSWR 2.0:1 with N Type Female output connector. The model LB-7180-NFSPO has uniform gain through its frequency span, providing efficient performance characteristics and directionality. It can handle 300W continuously and 500W peak power. Constructed of lightweight corrosion-resistant aluminum, the horn comes with a specially designed weatherproof radome which provides excellent protection against the rain and dust but has very little loss across the full operating frequency band. This broadband horn antenna is linearly polarized and ideally suited for EMI testing, direction finding, surveillance, antenna gain and pattern measurements and other applications.

Technical Specification

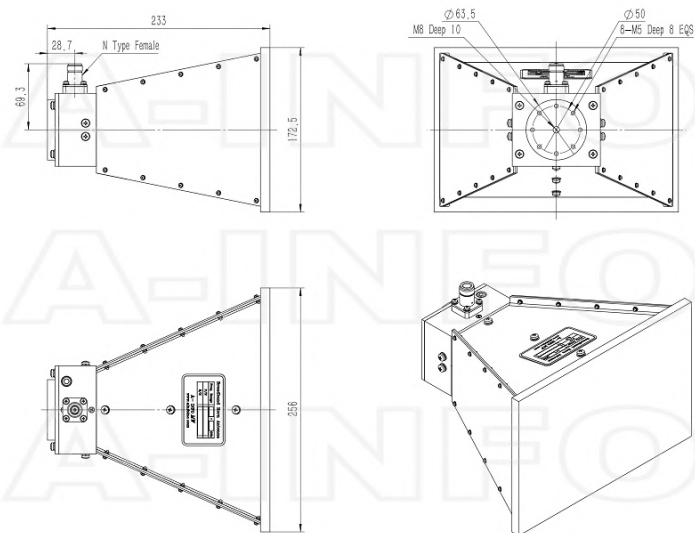
Electrical Specification		Interface	
Frequency, Min (GHz)	0.7	Output Type	Coaxial
Frequency, Max (GHz)	18	Connector	N Type
Gain, Typ (dBi)	12	Connector Gender	Female
Polarization	Linear	Mechanical Specification	
3dB Beamwidth, E-Plane, Min (Deg.)	13	Body Material	Al
3dB Beamwidth, E-Plane, Max (Deg.)	111	Finish	Chemical Conversion Coating, Gray Paint
3dB Beamwidth, H-Plane, Min (Deg.)	10	Size, W (mm)	256
3dB Beamwidth, H-Plane, Max (Deg.)	78	Size, H (mm)	172.5
Cross Pol. Isolation, Typ (dB)	25	Size, L (mm)	233
VSWR, Typ	2.0:1	Weight, (kg)	1.67
Impedance, (Ohm)	50		
Power Handling, CW, (W)	300		
Power Handling, Peak, (W)	500		

Additional Information

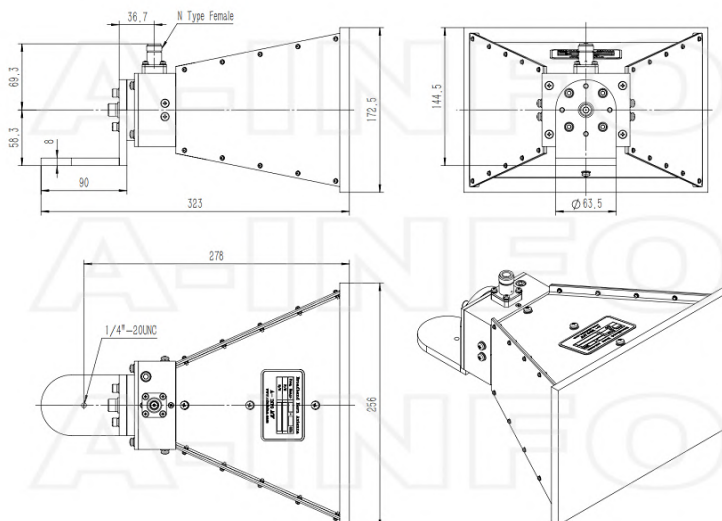
Application	Outdoor, Waterproof and Dustproof, Fixed	Solution for	Gain Reference Antenna Measurement Reflector Feed Far-field Measurement System Intergration
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Outline Drawing

N-Female Output with Radome (Option, P/N: LB-7180-NFSPO, Outdoor Application)

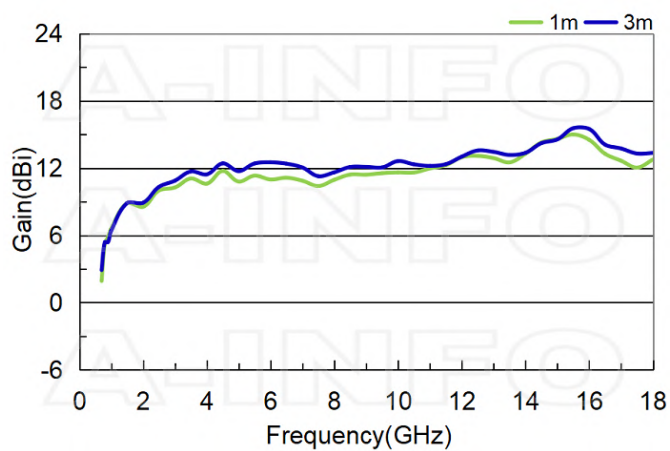


N-Female Output with L Type Mounting Bracket & Radome (Option, P/N: LB-10180-L & LB-7180-NFSPO, Outdoor Application)

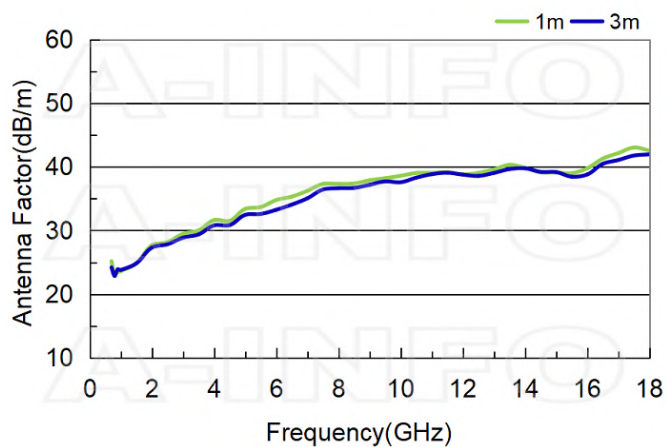


Typical Test Results

Gain



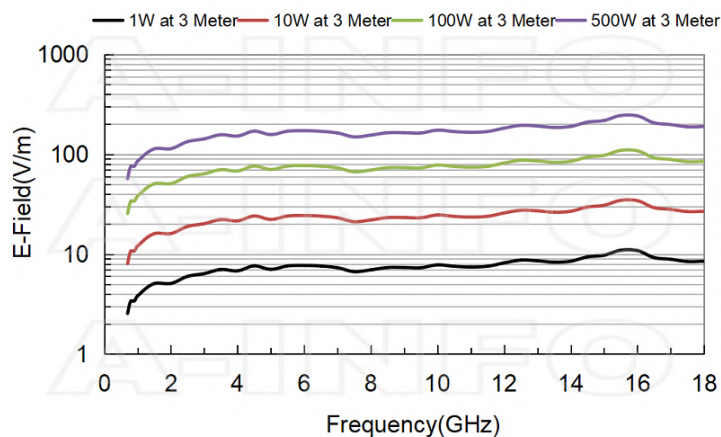
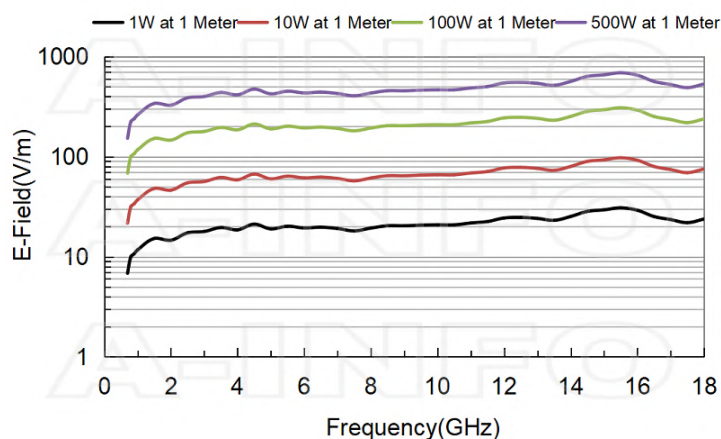
Antenna Factor



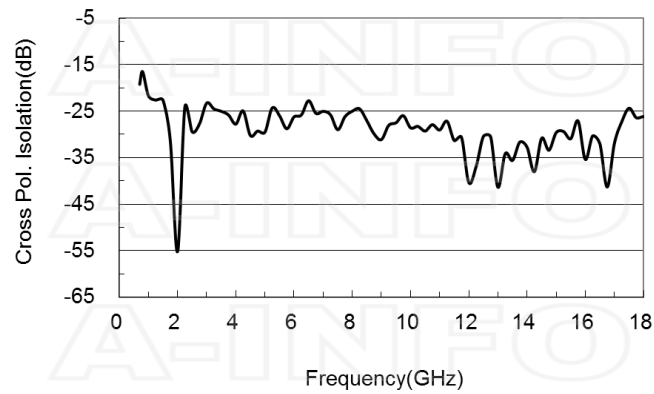
Antenna Factor (Table)

Frequency(GHz)	1m		3m	
	Gain(dBi)	AF(dB/m)	Gain(dBi)	AF(dB/m)
0.7	1.93	25.18	2.90	24.21
0.8	5.25	23.02	5.39	22.88
0.9	5.83	23.46	5.40	23.89
1.0	6.59	23.62	6.40	23.81
2.0	8.54	27.69	8.90	27.33
3.0	10.27	29.48	10.88	28.88
4.0	10.61	31.64	11.44	30.81
5.0	10.79	33.40	11.73	32.46
6.0	10.98	34.79	12.51	33.26
7.0	10.87	36.24	12.05	35.06
8.0	10.95	37.32	11.62	36.65
9.0	11.41	37.88	12.11	37.19
10.0	11.61	38.60	12.62	37.59
12.0	12.97	38.82	13.02	38.78
14.0	13.28	39.85	13.36	39.77
16.0	14.51	39.78	15.48	38.81
18.0	12.76	42.55	13.35	41.97

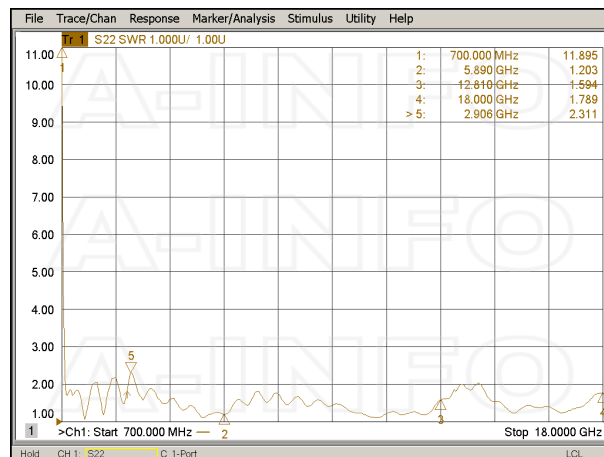
Field Strength



Cross Polarization Isolation

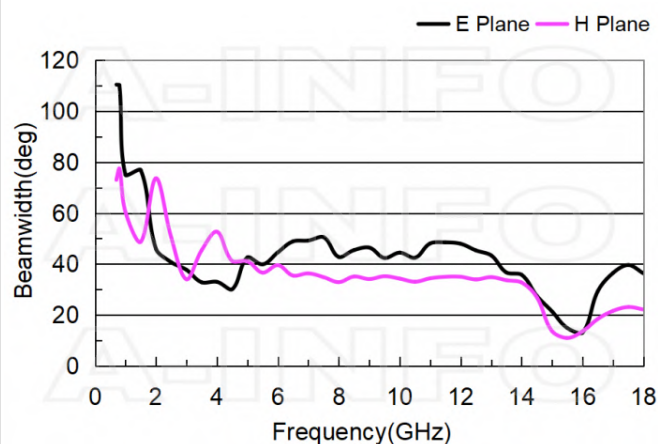


VSWR

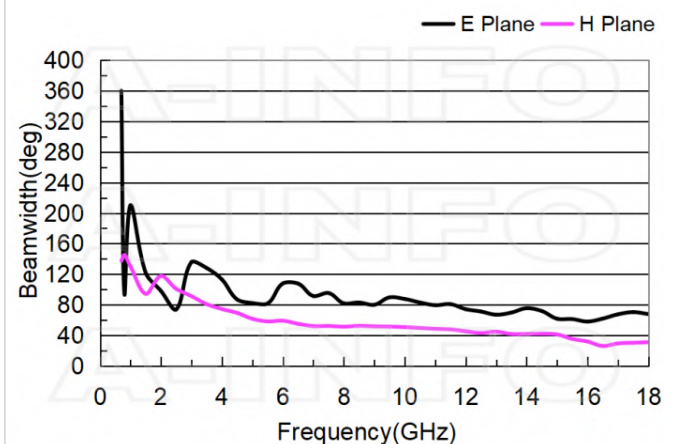


Beamwidth

3dB Beamwidth

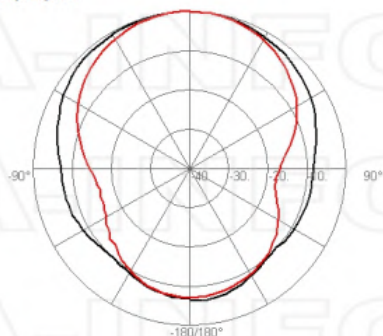


10dB Beamwidth



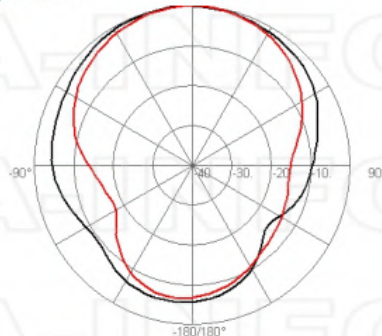
Pattern

Frequency: 0.7GHz



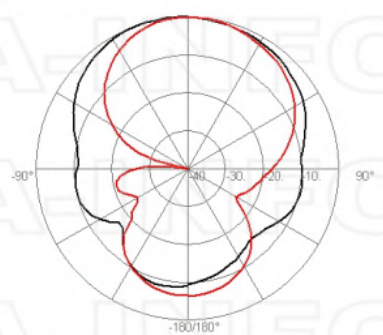
H-Plane — 3dB Beamwidth (deg): 73.02
E-Plane — 3dB Beamwidth (deg): 110.37

Frequency: 0.8GHz



H-Plane — 3dB Beamwidth (deg): 77.35
E-Plane — 3dB Beamwidth (deg): 110.18

Frequency: 0.9GHz



H-Plane — 3dB Beamwidth (deg): 62.92
E-Plane — 3dB Beamwidth (deg): 94.85

Frequency: 1.0GHz



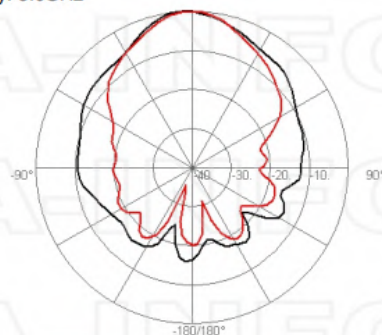
H-Plane — 3dB Beamwidth (deg): 60.33
E-Plane — 3dB Beamwidth (deg): 74.98

Frequency: 2.0GHz



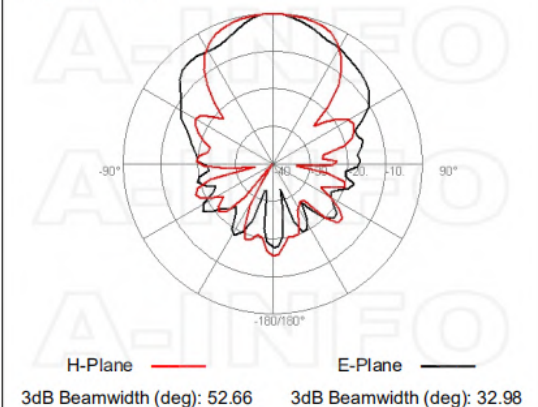
H-Plane — 3dB Beamwidth (deg): 73.65
E-Plane — 3dB Beamwidth (deg): 45.94

Frequency: 3.0GHz

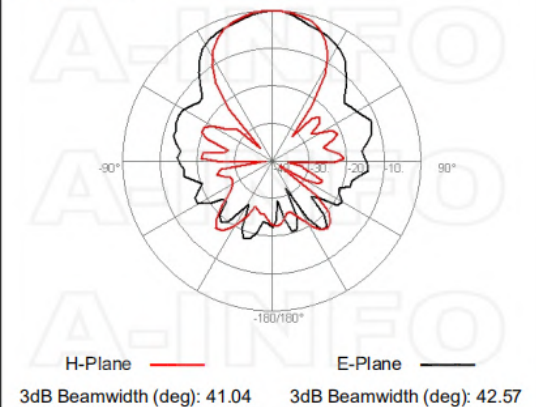


H-Plane — 3dB Beamwidth (deg): 34.00
E-Plane — 3dB Beamwidth (deg): 37.71

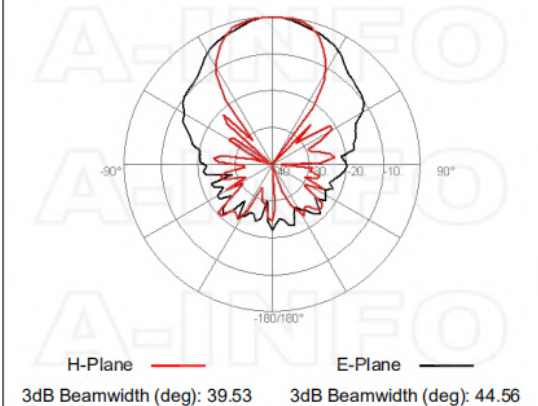
Frequency: 4.0GHz



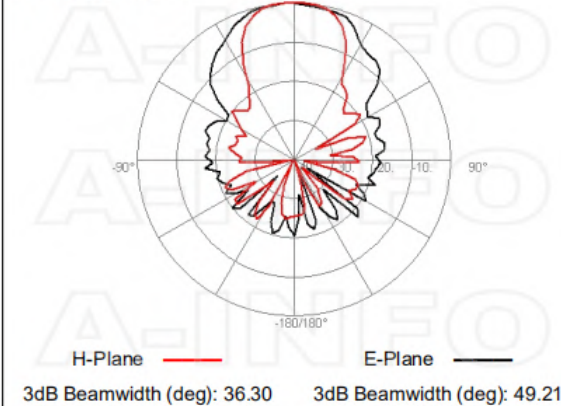
Frequency: 5.0GHz



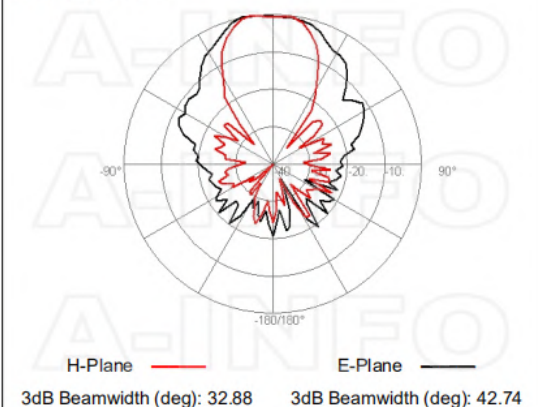
Frequency: 6.0GHz



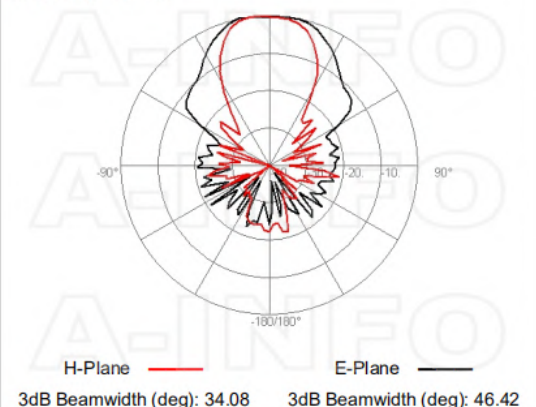
Frequency: 7.0GHz



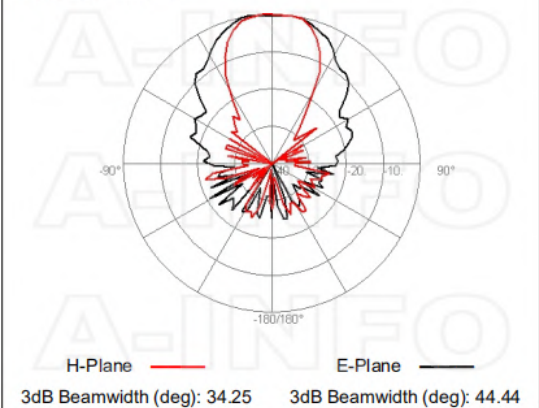
Frequency: 8.0GHz



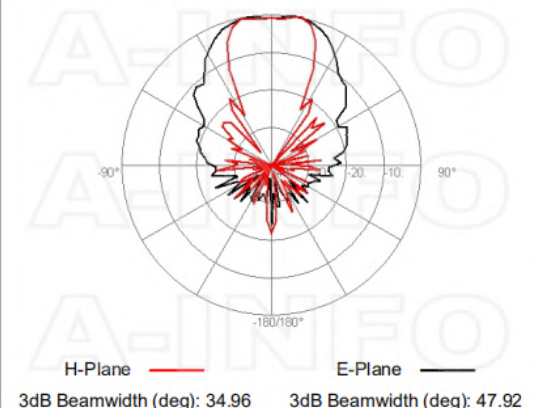
Frequency: 9.0GHz



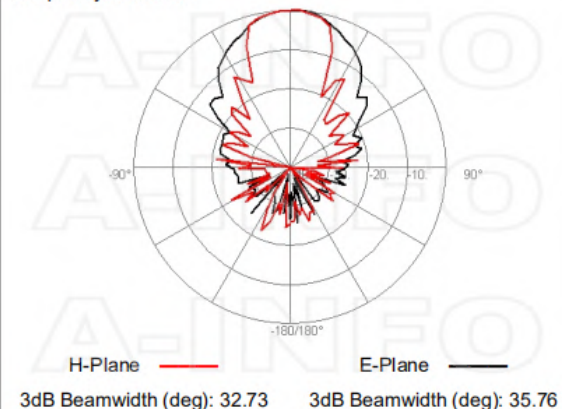
Frequency: 10.0GHz



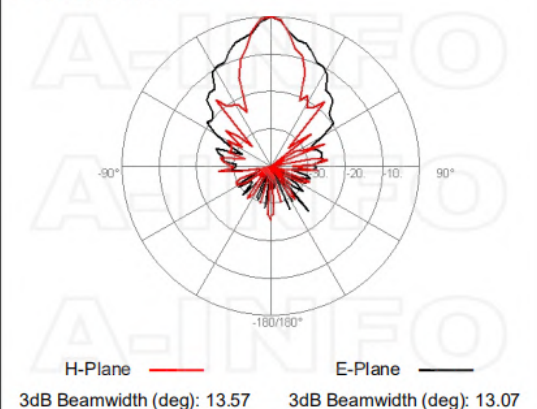
Frequency: 12.0GHz



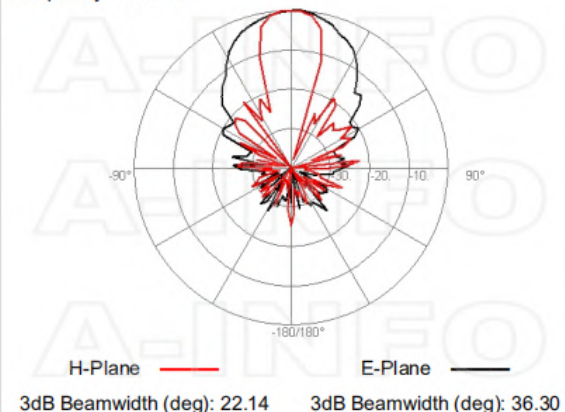
Frequency: 14.0GHz



Frequency: 16.0GHz



Frequency: 18.0GHz



Related Products



LB-10180-L L type mounting bracket



LB-10180-MA Stinger Type Mounting Bracket



Tripod_15Kg Al Alloy Tripod



3033HL Wooden Tripod



3033QM Wooden Tripod Metalfree



Carrying Case_LB-8180 Al Alloy Carrying Case



NM-NM-A050-1000 Flexible Cable Assembly 1000mm DC-18GHz N Male to N Male



NM-NM-A050-1500 Flexible Cable Assembly 1500mm DC-18GHz N Male to N Male



NM-NM-A050-2000 Flexible Cable Assembly 2000mm DC-18GHz N Male to N Male



NM-NM-A050-3000 Flexible Cable Assembly 3000mm DC-18GHz N Male to N Male



NM-NM-A050-5000 Flexible Cable Assembly 5000mm DC-18GHz N Male to N Male



NM-NM-A050-10000 Flexible Cable Assembly 10000mm DC-18GHz N Male to N Male



NM-NM-A050-20000 Flexible Cable Assembly 20000mm DC-18GHz N Male to N Male



NM-NM-A100-500 Flexible Cable Assembly 500mm DC-18GHz N Male to N Male



NM-NM-A100-1000 Flexible Cable Assembly 1000mm DC-18GHz N Male to N Male



NM-NM-A100-1500 Flexible Cable Assembly 1500mm DC-18GHz N Male to N Male



NM-NM-A100-2000 Flexible Cable Assembly 2000mm DC-18GHz N Male to N Male



NM-NM-A100-3000 Flexible Cable Assembly 3000mm DC-18GHz N Male to N Male



NM-NM-A100-5000 Flexible Cable Assembly 5000mm DC-18GHz N Male to N Male



NM-NM-A100-10000 Flexible Cable Assembly 10000mm DC-18GHz N Male to N Male



NM-NM-A100-20000 Flexible Cable Assembly 20000mm DC-18GHz N Male to N Male

Similar Products



LB-7180-NF Broadband Horn Antenna 0.7-18.0 GHz 12dB Gain N Type Female



LB-7180-SF Broadband Horn Antenna 0.7-18.0 GHz 12dB Gain SMA Female



LB-7180-SFSPO Broadband Horn Antenna 0.7-18GHz 12dB Gain SMA Female



LB-8180-NF Broadband Horn Antenna 0.8-18GHz 12dB Gain N Type Female



LB-8180-NFSPO Broadband Horn Antenna 0.8-18GHz 12dB Gain N Type Female



LB-8180-SF Broadband Horn Antenna 0.8-18GHz 12dB Gain SMA Female



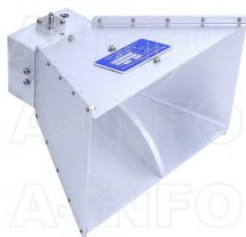
LB-8180-SFSPO Broadband Horn Antenna 0.8-18GHz 12dB Gain SMA Female



LB-1080-NF Broadband Horn Antenna 1-8GHz 11dB Gain N Type Female



LB-1080-NFSP0 Broadband Horn
Antenna 1-8GHz 11dB Gain N
Type Female



LB-1080-SF Broadband Horn
Antenna 1-8GHz 11dB Gain SMA
Female



LB-1080-SFSP0 Broadband Horn
Antenna 1-8GHz 11dB Gain SMA
Female



LB-1080-M-NF Broadband Horn
Antenna 1-8GHz 10dB Gain N
Type Female



LB-1080-M-SF Broadband Horn
Antenna 1-8GHz 10dB Gain SMA
Female



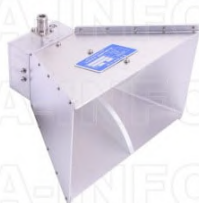
LB-10180-NF Broadband Horn
Antenna 1-18GHz 11dB Gain N
Type Female



LB-10180-NFSP0 Broadband
Horn Antenna 1-18GHz 11dB
Gain N Type Female



LB-10180-NFSPS Broadband
Horn Antenna 1-18GHz 11dB
Gain N Type Female



LB-10180-NFP Broadband Horn
Antenna 1-18GHz 11dB Gain N
Type Female



LB-10180-SF Broadband Horn
Antenna 1-18GHz 11dB Gain
SMA Female



LB-10180-SFSP0 Broadband
Horn Antenna 1-18GHz 11dB
Gain SMA Female



LB-OSJ-10180-NF Open
Boundary Quad-Ridged Dual
Polarization Horn Antenna
1-18GHz 10dB Gain N Type
Female



LB-OSJ-10180-SF Open Boundary
Quad-Ridged Dual Polarization
Horn Antenna 1-18GHz 10dB
Gain SMA Female

About this Datasheet

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