



### LB-20180-NF Broadband Horn Antenna 2-18GHz 12dB Gain N Type Female

Broadband Horn Antenna Operating From 2GHz to 18GHz With a Nominal 12dB Gain With N Type Female Connector

## Product Information

SKU	LB-20180-NF	Patents	ZL201630458551.2 (China)
-----	-------------	---------	--------------------------

## Description

Broadband horn antenna LB-20180-NF, operating from 2 to 18GHz with a nominal 12dB gain and low VSWR 2.0:1 with N Type Female output connector. The model LB-20180-NF has uniform gain through its frequency span, providing efficient performance characteristics and directionality. It can handle 150W continuously and 300W peak power. Constructed of lightweight corrosion-resistant aluminum, the antenna will provide years of trouble-free indoor and outdoor service. 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

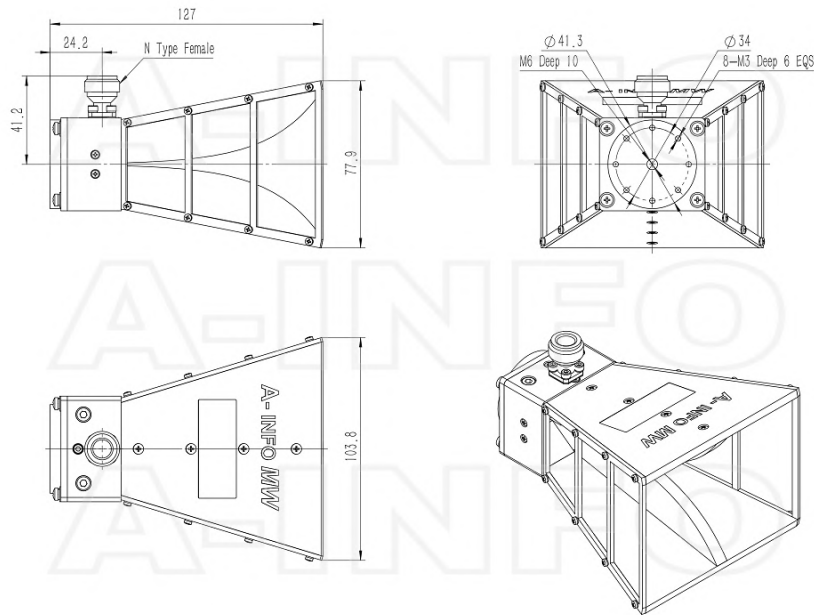
Electrical Specification		Interface	
Frequency, Min (GHz)	2	Output Type	Coaxial
Frequency, Max (GHz)	18	Connector	N Type
Gain, Typ (dBi)	12	Connector Gender	Female
Polarization	Linear	Mechanical Specification	
3dB Beamwidth, E-Plane, Min (Deg.)	19	Body Material	Al
3dB Beamwidth, E-Plane, Max (Deg.)	85	Finish	Chemical Conversion Coating
3dB Beamwidth, H-Plane, Min (Deg.)	18	Size, W (mm)	103.8
3dB Beamwidth, H-Plane, Max (Deg.)	77	Size, H (mm)	77.9
Cross Pol. Isolation, Typ (dB)	25	Size, L (mm)	127
VSWR, Typ	1.5:1	Weight, (kg)	0.4
Impedance, (Ohm)	50		
Power Handling, CW, (W)	150		
Power Handling, Peak, (W)	300		

## Additional Information

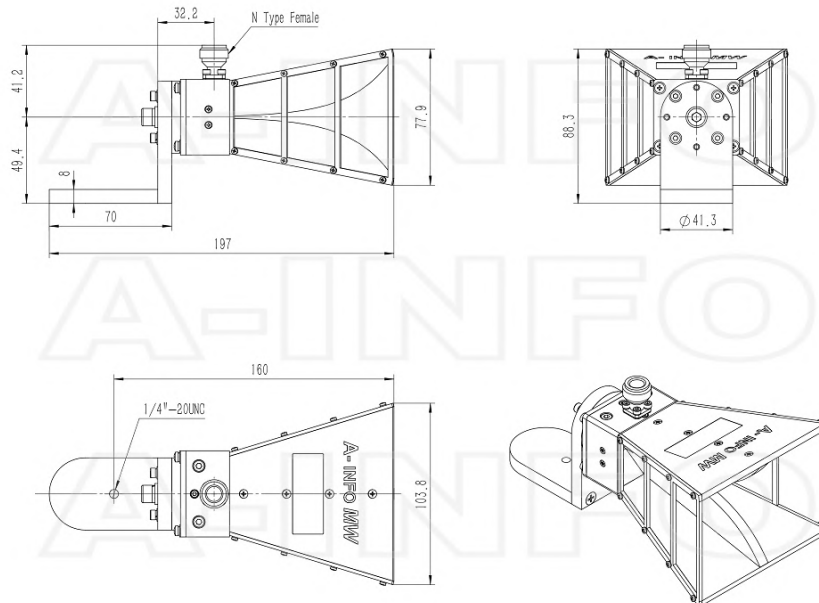
Application	General Purpose Indoor & Outdoor, Fixed	Solution for	Gain Reference Antenna Measurement Reflector Feed Far-field Measurement System Intergration
-------------	---	--------------	---

## Outline Drawing

N-Female Output (P/N: LB-20180-NF)

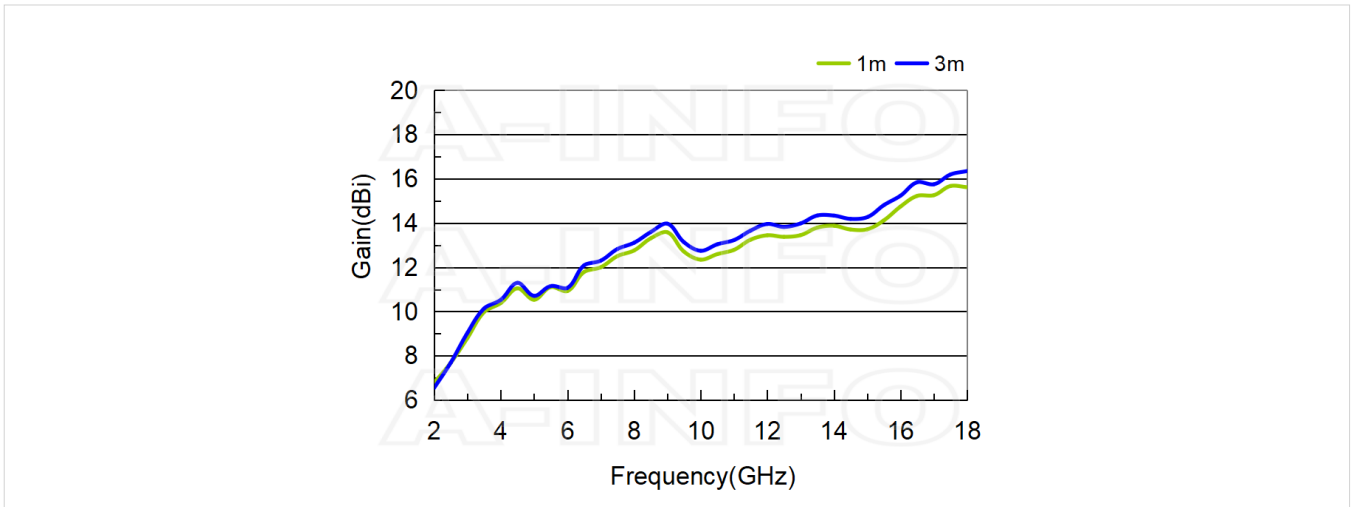


N-Female Output with L Type Mounting Bracket (Option, P/N: LB-20180-L)

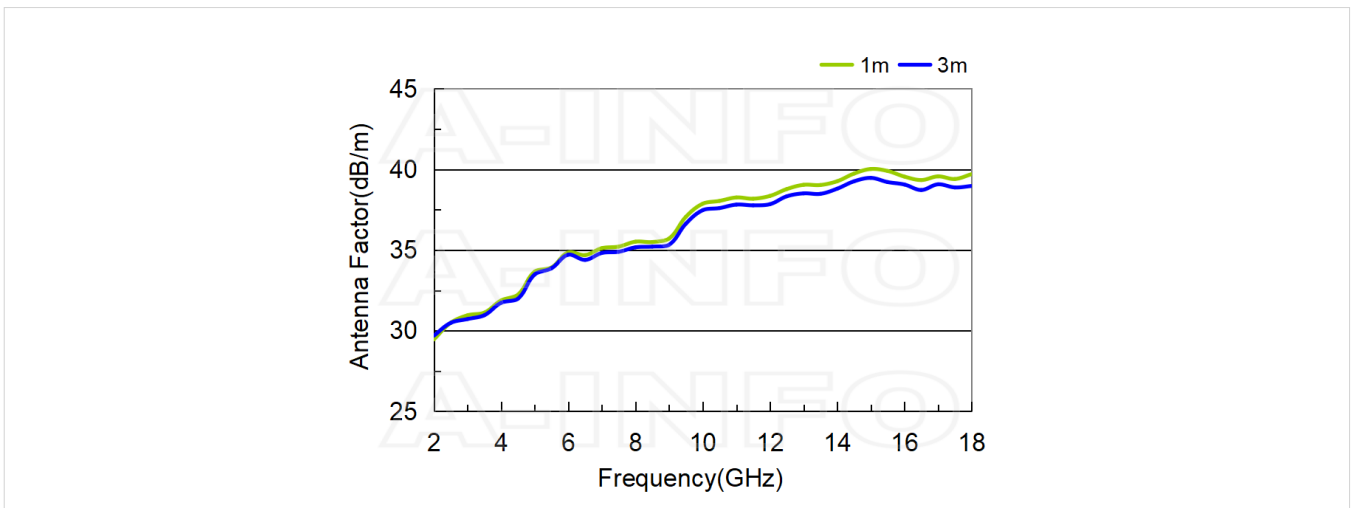


## Typical Test Results

### Gain



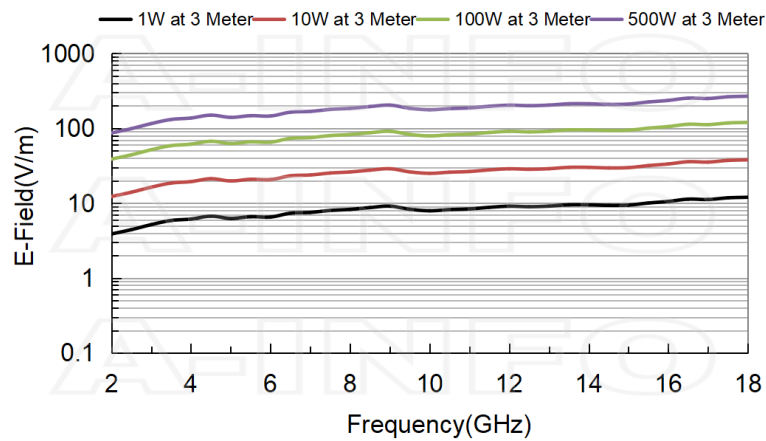
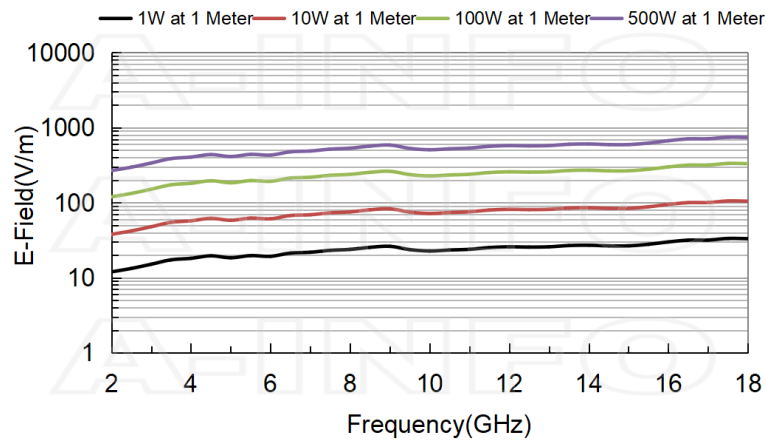
### Antenna Factor



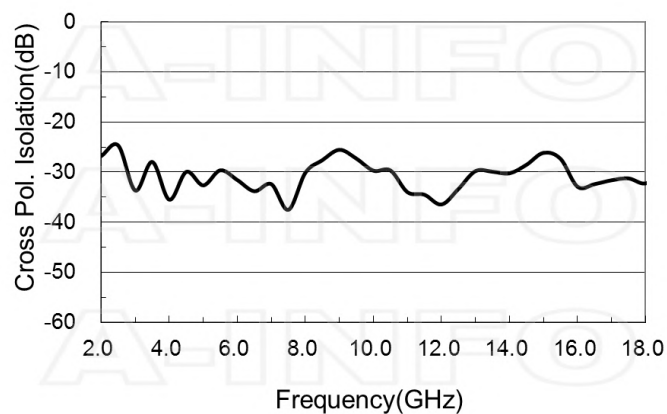
### Antenna Factor (Table)

Frequency(GHz)	1m		3m	
	Gain(dBi )	AF(dB/m)	Gain(dBi )	AF(dB/m)
2.0	6.77	29.46	6.54	29.69
3.0	8.80	30.95	9.03	30.72
4.0	10.38	31.87	10.53	31.73
5.0	10.53	33.66	10.71	33.48
6.0	10.92	34.85	11.06	34.71
7.0	12.00	35.11	12.30	34.82
8.0	12.76	35.51	13.11	35.17
9.0	13.58	35.71	13.97	35.33
10.0	12.34	37.87	12.74	37.47
12.0	13.44	38.35	13.96	37.84
14.0	13.87	39.26	14.33	38.80
16.0	14.75	39.55	15.24	39.05
18.0	15.62	39.70	16.35	38.96

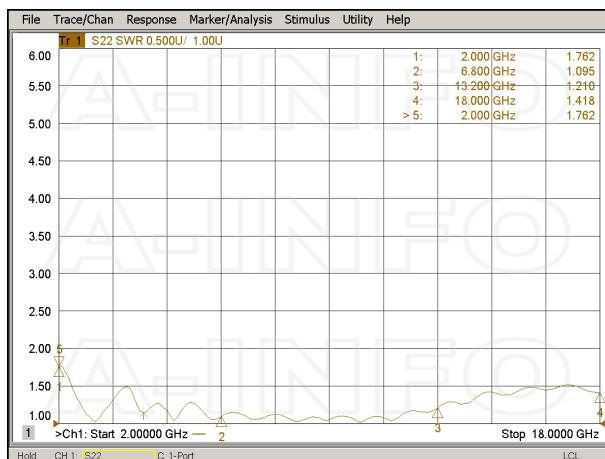
## Field Strength



## Cross Polarization Isolation

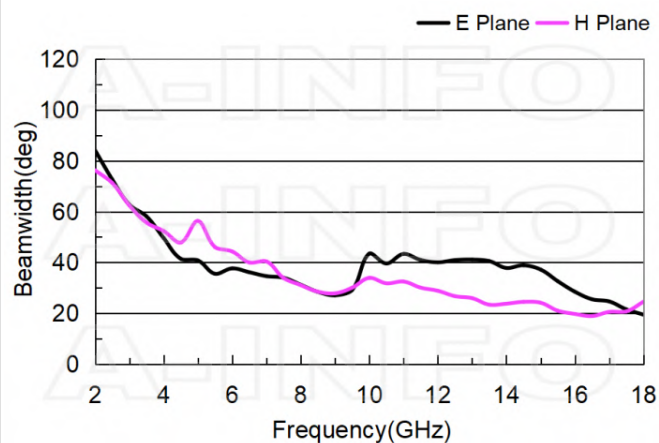


## VSWR

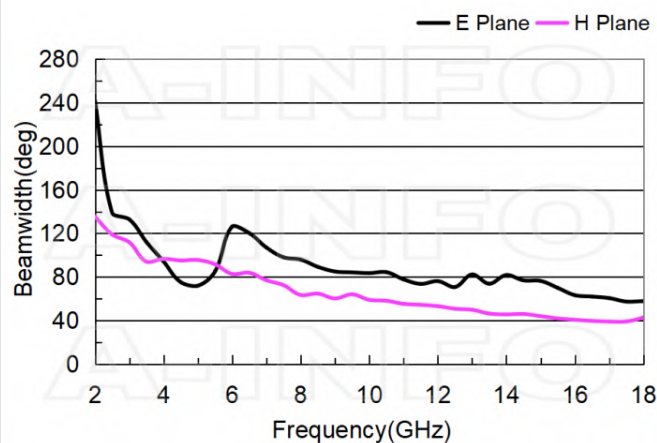


## Beamwidth

3dB Beamwidth

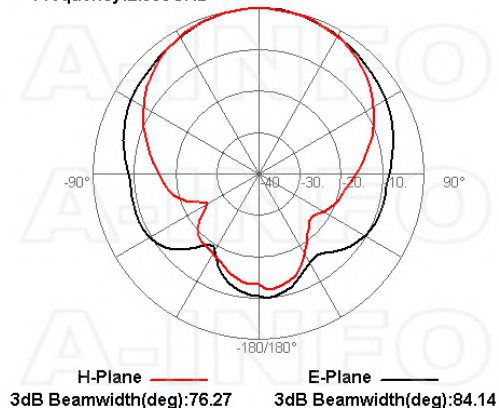


10dB Beamwidth

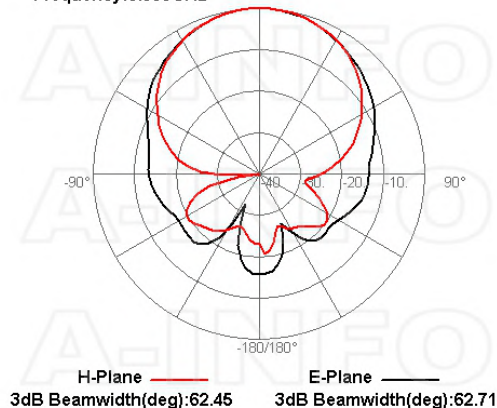


## Pattern

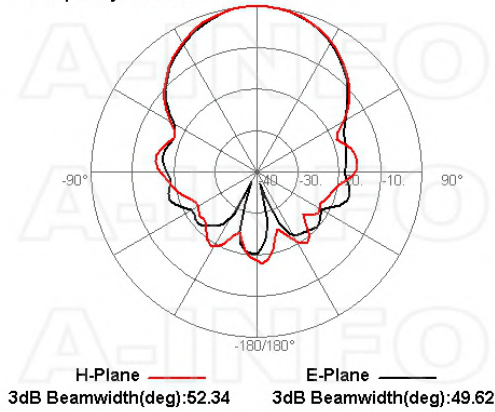
Frequency:2.000GHz



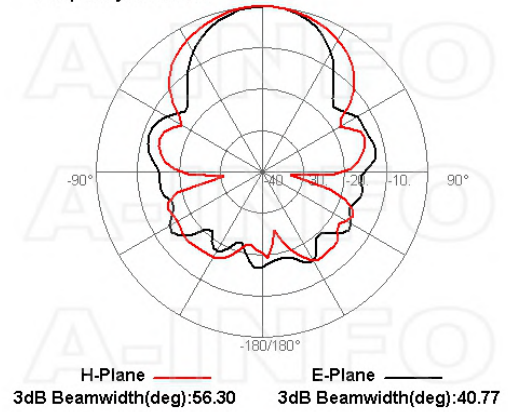
Frequency:3.000GHz



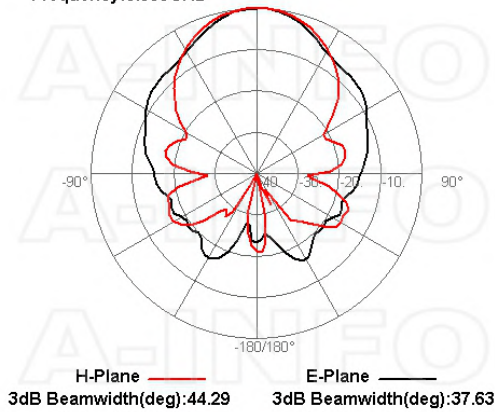
Frequency:4.000GHz



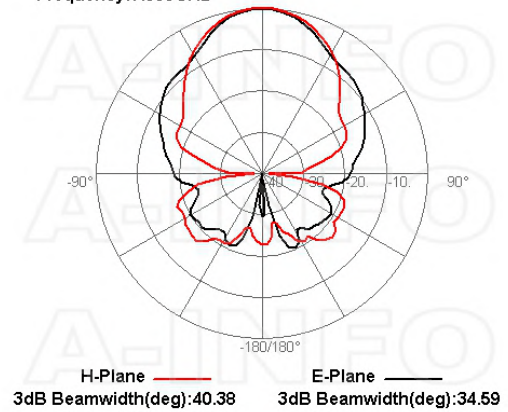
Frequency:5.000GHz



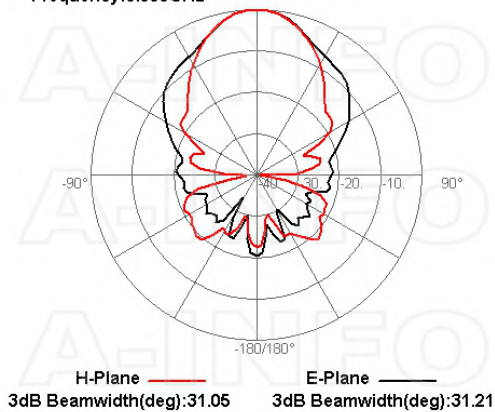
Frequency:6.000GHz



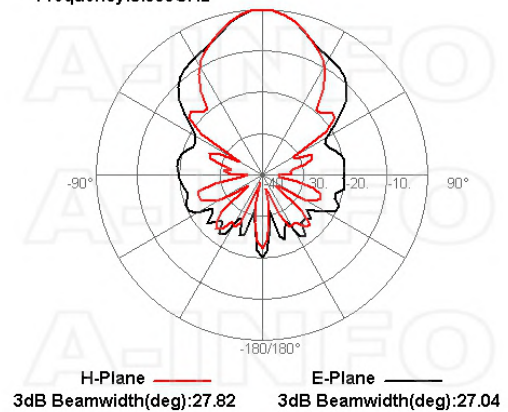
Frequency:7.000GHz



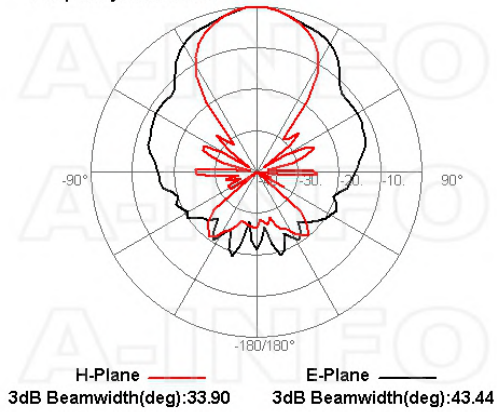
Frequency:8.000GHz



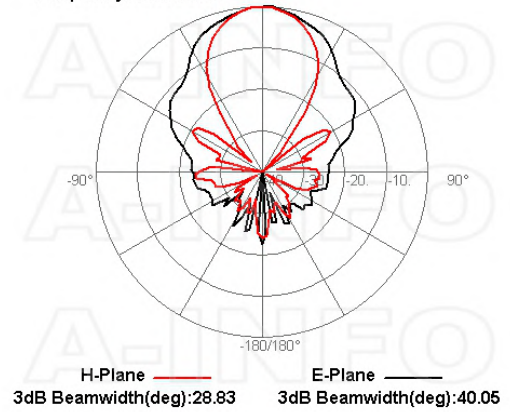
Frequency:9.000GHz



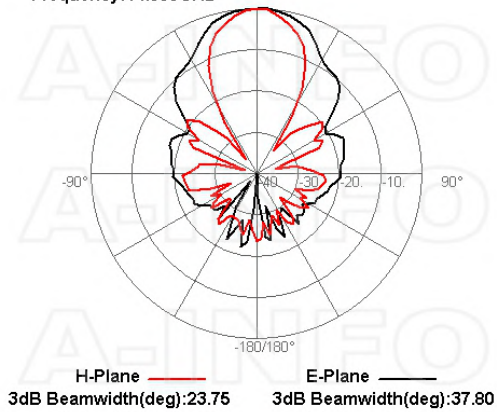
Frequency:10.000GHz



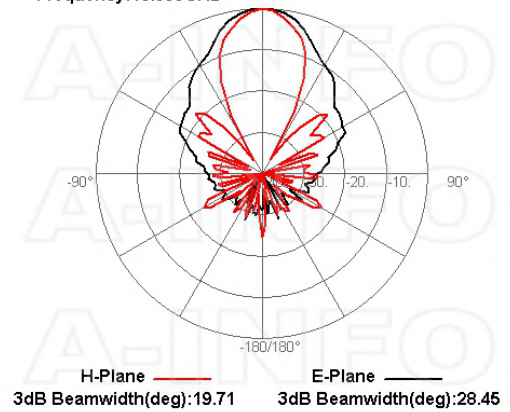
Frequency:12.000GHz



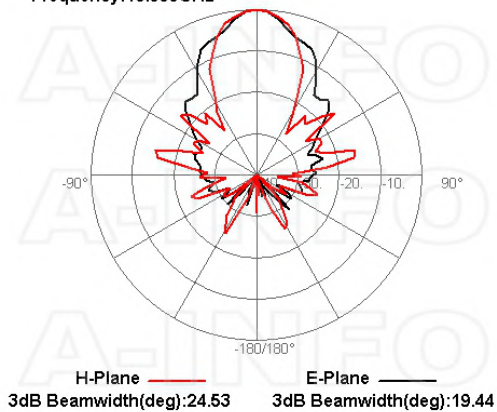
Frequency:14.000GHz



Frequency:16.000GHz



Frequency:18.000GHz



## Related Products



LB-20180-L L Type Mounting Bracket



Tripod\_15Kg Al Alloy Tripod



3033HL Wooden Tripod



3033QM Wooden Tripod Metalfree



Carrying Case\_LB-20180 Al Alloy Carrying Case



NM-NM-A050-500 Flexible Cable Assembly 500mm DC-18GHz N Male to N Male



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-2080-NF Broadband Horn Antenna 2-8GHz 12dB Gain N Type Female



LB-2080-NFSPO Broadband Horn Antenna 2-8GHz 12dB Gain N Type Female



LB-2080-NFP Broadband Horn Antenna 2-8GHz 12dB Gain N Type Female



LB-2080-SF Broadband Horn Antenna 2-8GHz 12dB Gain SMA Female



LB-2080-SFSP0 Broadband Horn Antenna 2-8GHz 12dB Gain SMA Female



LB-2080-SFP Broadband Horn Antenna 2-8GHz 12dB Gain SMA Female



LB-20180-NFSPO Broadband Horn Antenna 2-18GHz 12dB Gain N Type Female



LB-20180-NFSPS Broadband Horn Antenna 2-18GHz 12dB Gain N Type Female



LB-20180-NFP Broadband Horn Antenna 2-18GHz 12dB Gain N Type Female



LB-20180-SF Broadband Horn Antenna 2-18GHz 12dB Gain SMA Female



LB-20180-SFSPSO Broadband Horn Antenna 2-18GHz 12dB Gain SMA Female



LB-20180-SFP Broadband Horn Antenna 2-18GHz 12dB Gain SMA Female



LB-20180H-NF Broadband Horn Antenna 2-18GHz 17dB Gain N Type Female



LB-20180H-NFSPSO Broadband Horn Antenna 2-18GHz 17dB Gain N Type Female



LB-20180H-SF Broadband Horn Antenna 2-18GHz 17dB Gain SMA Female



LB-20180H-SFSPSO Broadband Horn Antenna 2-18GHz 17dB Gain SMA Female



LB-20180H-SFSPS Broadband Horn Antenna 2-18GHz 17dB Gain SMA Female



LB-20200-NF Broadband Horn Antenna 2-20GHz 12dB Gain N Type Female



LB-20200-NFSPSO Broadband Horn Antenna 2-20GHz 12dB Gain N Type Female



LB-20200-NFSPS Broadband Horn Antenna 2-20GHz 12dB Gain N Type Female



LB-20200-NFP Broadband Horn Antenna 2-20GHz 12dB Gain N Type Female



LB-20200-SF Broadband Horn Antenna 2-20GHz 12dB Gain SMA Female



LB-20200-SFSPSO Broadband Horn Antenna 2-20GHz 12dB Gain SMA Female



LB-20200-SFP Broadband Horn Antenna 2-20GHz 12dB Gain SMA Female



LB-SJ-20180-NF Broadband Dual Polarization Horn Antenna 2-18GHz 14dB Gain N Type Female



LB-SJ-20180-NFSP0 Broadband Dual Polarization Horn Antenna 2-18GHz 14dB Gain N Type Female



LB-SJ-20180-SF Broadband Dual Polarization Horn Antenna 2-18GHz 14dB Gain SMA Female



LB-SJ-20180-SFSP0 Broadband Dual Polarization Horn Antenna 2-18GHz 14dB Gain SMA Female



LB-SJ-20180-SFSPS Broadband Dual Polarization Horn Antenna 2-18GHz 14dB Gain SMA Female



LB-OSJ-20180-SF Open Boundary Quad-Ridged Dual Polarization Horn Antenna 2-18GHz 13dB Gain SMA Female

## About this Datasheet

<ul style="list-style-type: none"> <li>● <b>Product Information</b> Product Link: <a href="https://www.ainfoinc.com/lb-20180-nf-broadband-horn-antenna-2-18-ghz-12db-gain-n-type-female">https://www.ainfoinc.com/lb-20180-nf-broadband-horn-antenna-2-18-ghz-12db-gain-n-type-female</a> Data subject to change without notice. © A-INFO INC. 2024. All Rights Reserved</li> </ul>	<ul style="list-style-type: none"> <li>● <b>Contact Us</b> Address: 60 Tesla, Irvine, CA 92618, USA  Website: <a href="http://www.ainfoinc.com">www.ainfoinc.com</a>  Email: <a href="mailto:sales@ainfoinc.com">sales@ainfoinc.com</a></li> </ul>	<ul style="list-style-type: none"> <li>● <b>Phone &amp; Fax</b> Phone: +1-949-639-9688 +1-949-639-9608  Fax: +1-949-639-9670</li> </ul>
---	--	---