

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

Broadband Horn Antenna Operating From 1GHz to 18GHz With a Nominal 11dB Gain With N Type Female Connector

## Product Information

SKU	LB-10180-NF
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## Description

Broadband horn antenna LB-10180-NF, operating from 1 to 18GHz with a nominal 11dB gain and low VSWR 1.5:1 with N Type Female output connector. The model LB-10180-NF 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 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

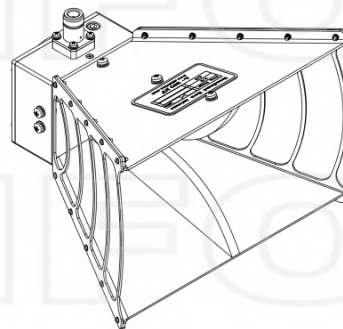
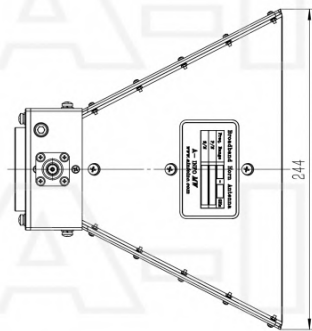
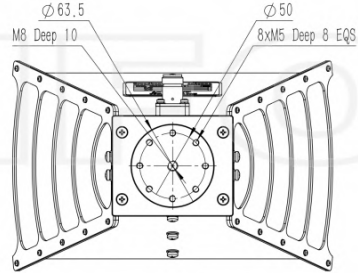
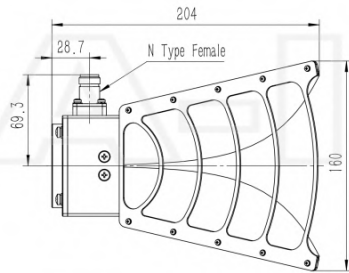
Electrical Specification		Interface	
Frequency, Min (GHz)	1	Output Type	Coaxial
Frequency, Max (GHz)	18	Connector	N Type
Gain, Typ (dBi)	11	Connector Gender	Female
Polarization	Linear	Mechanical Specification	
3dB Beamwidth, E-Plane, Min (Deg.)	11	Body Material	Al
3dB Beamwidth, E-Plane, Max (Deg.)	100	Finish	Chemical Conversion Coating and Sand Blasting
3dB Beamwidth, H-Plane, Min (Deg.)	10	Size, W (mm)	244
3dB Beamwidth, H-Plane, Max (Deg.)	85	Size, H (mm)	160
Cross Pol. Isolation, Typ (dB)	25	Size, L (mm)	204
VSWR, Typ	1.5:1	Weight, (kg)	1.45
Impedance, (Ohm)	50		
Power Handling, CW, (W)	300		
Power Handling, Peak, (W)	500		

## Additional Information

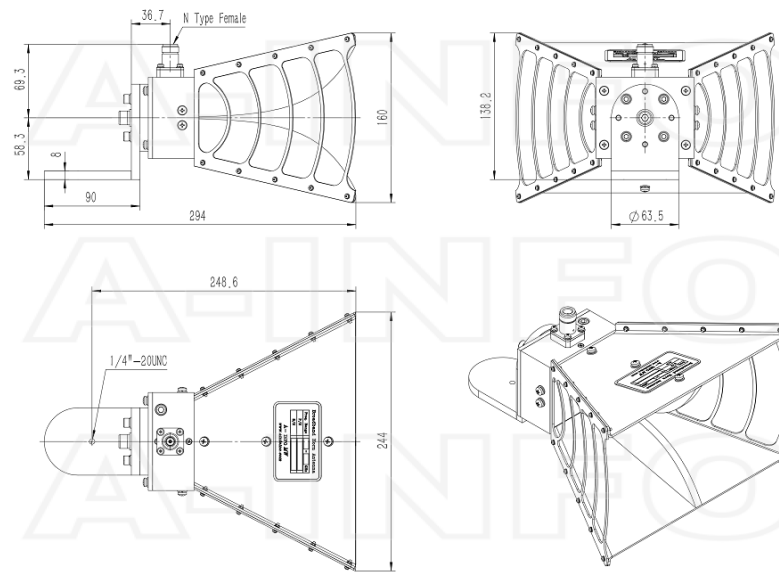
Application	General Purpose Indoor & Outdoor, Fixed	Solution for	Gain Reference Antenna Measurement Reflector Feed Far-field Measurement System Intergration
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## Outline Drawing

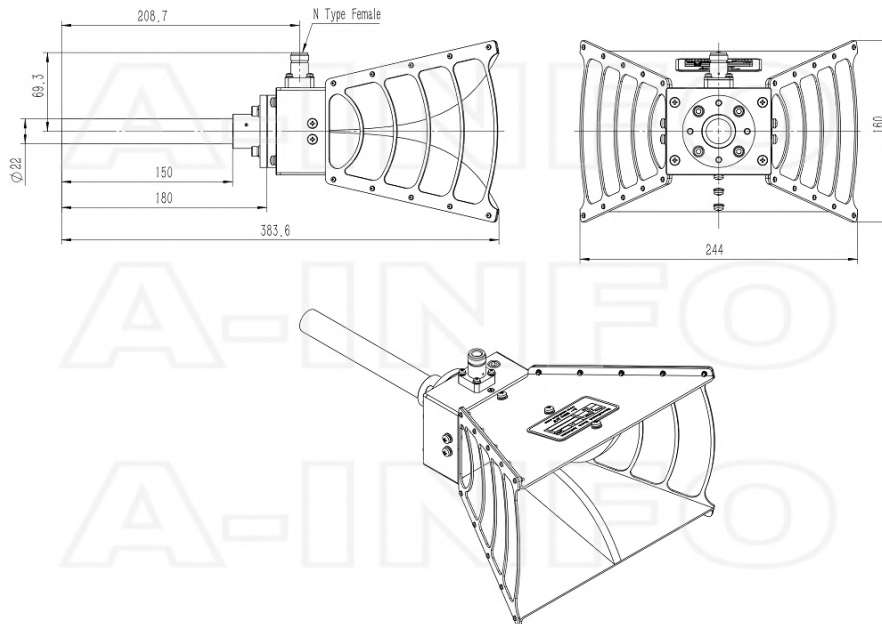
N-Female Output (P/N: LB-10180-NF)



N-Female Output with L Type Mounting Bracket (Option, P/N: LB-10180-L)



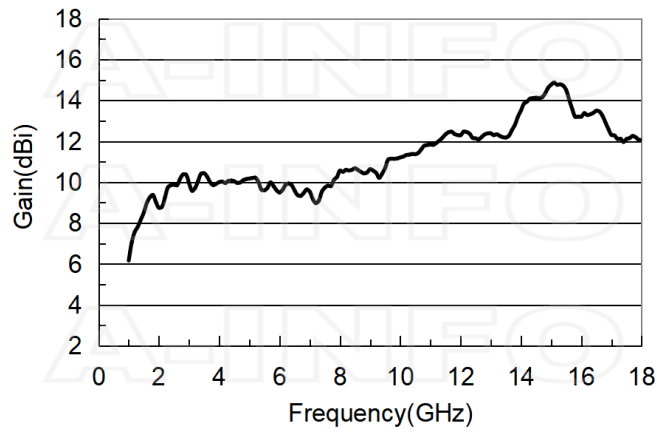
N-Female Output with Stinger Type Mounting Bracket (Option, P/N: LB-10180-MA)



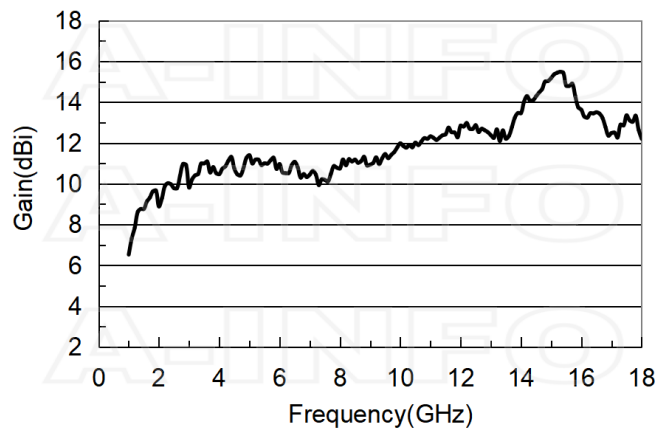
## Typical Test Results

### Gain

1m

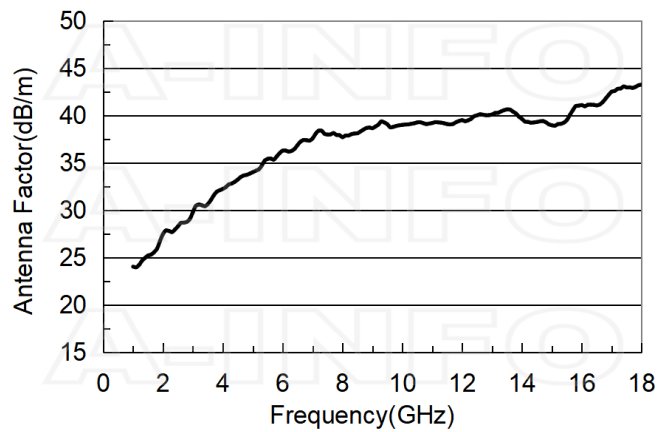


3m

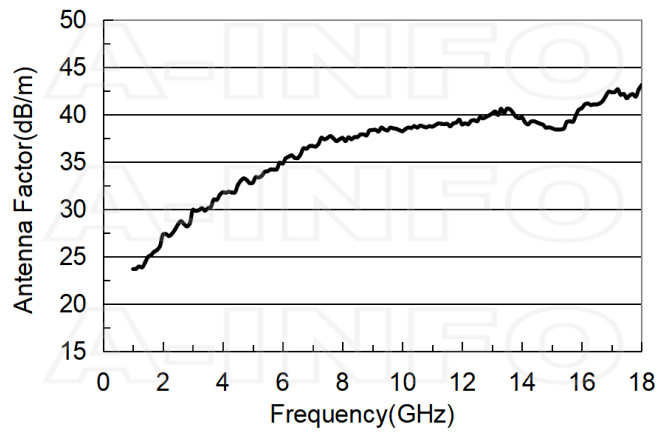


### Antenna Factor

1m



3m



### Antenna Factor (Table)

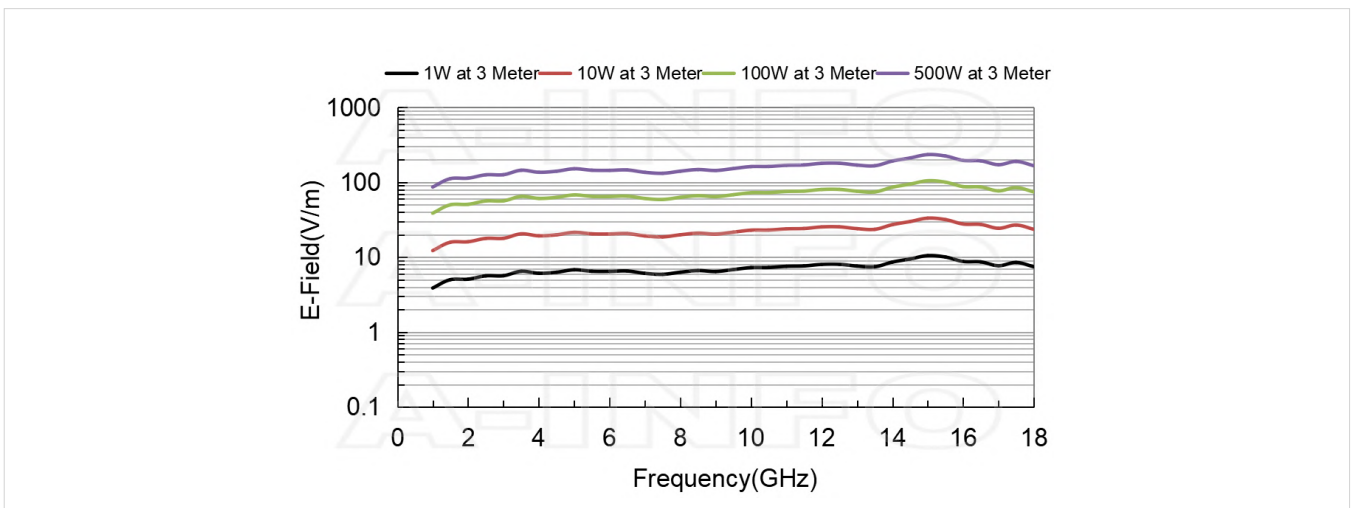
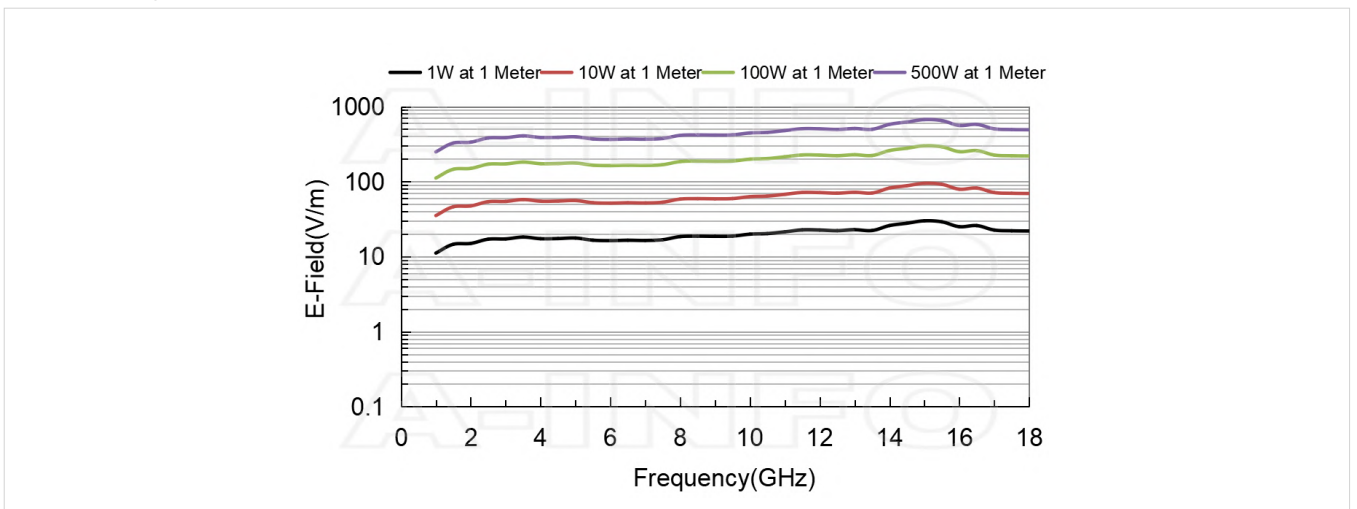
1m

Frequency(GHz)	Gain(dBi )	Antenna Factor(dB/m)
1.0	6.17	24.04
2.0	8.75	27.48
3.0	9.95	29.81
4.0	10.00	32.25
5.0	10.18	34.01
6.0	9.49	36.28
7.0	9.53	37.58
8.0	10.56	37.71
9.0	10.64	38.66
10.0	11.21	39.00
12.0	12.30	39.49
14.0	13.51	39.63
16.0	13.20	41.09
18.0	12.06	43.25

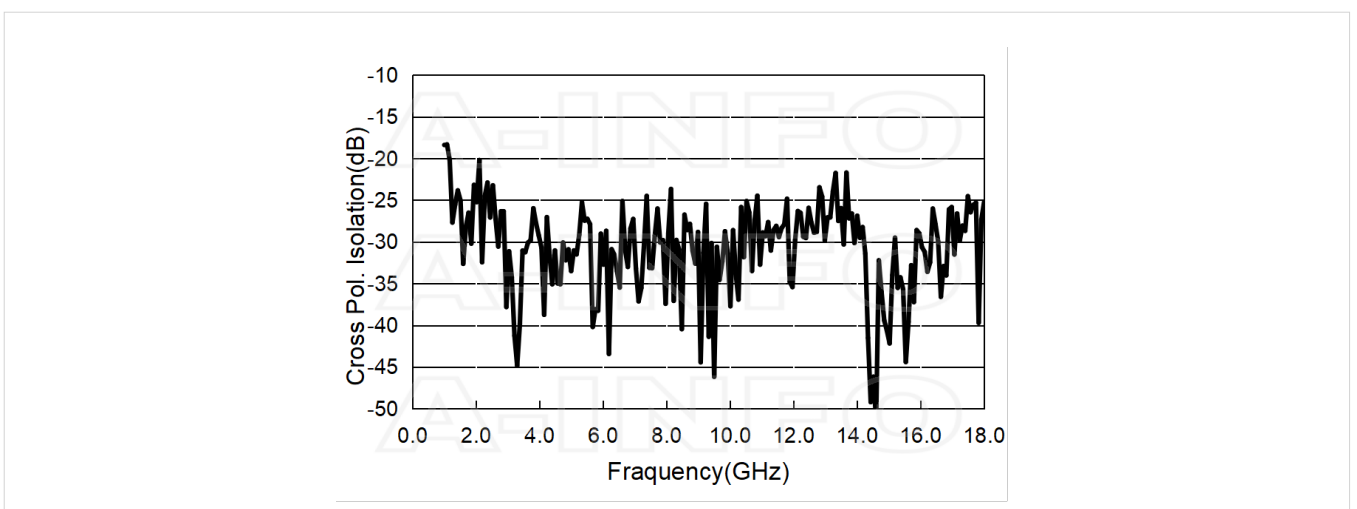
3m

Frequency(GHz)	Gain(dBi)	Antenna Factor(dB/m)
1.0	6.53	23.68
2.0	8.89	27.34
3.0	9.82	29.94
4.0	10.47	31.78
5.0	11.40	32.79
6.0	10.96	34.81
7.0	10.45	36.66
8.0	10.75	37.52
9.0	10.94	38.36
10.0	11.98	38.23
12.0	12.85	38.94
14.0	13.46	39.67
16.0	13.63	40.67
18.0	12.20	43.11

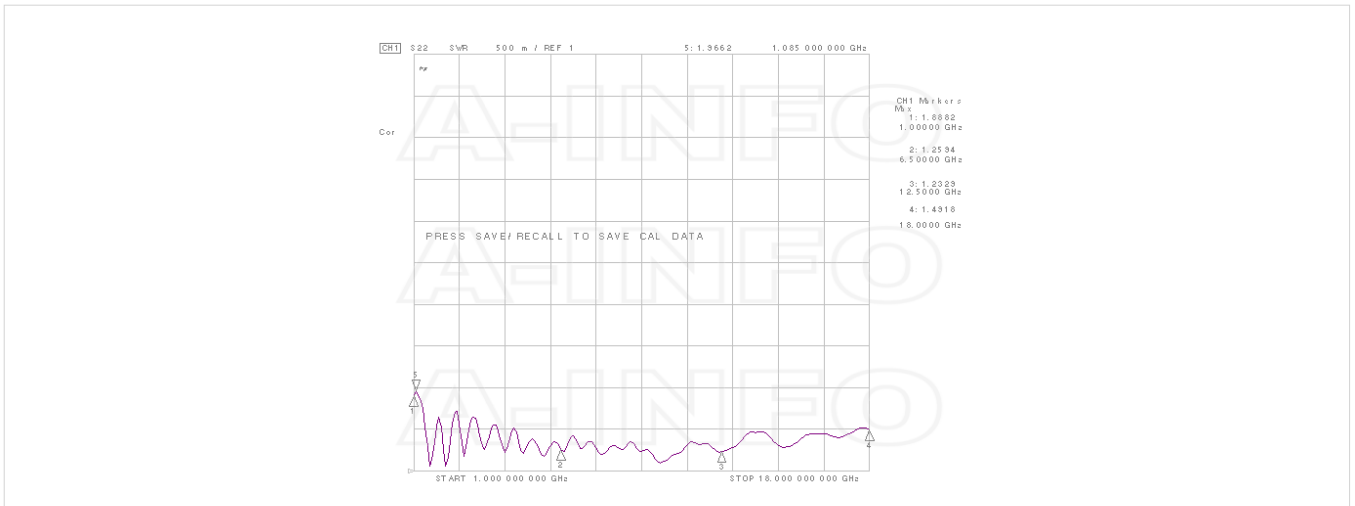
## Field Strength



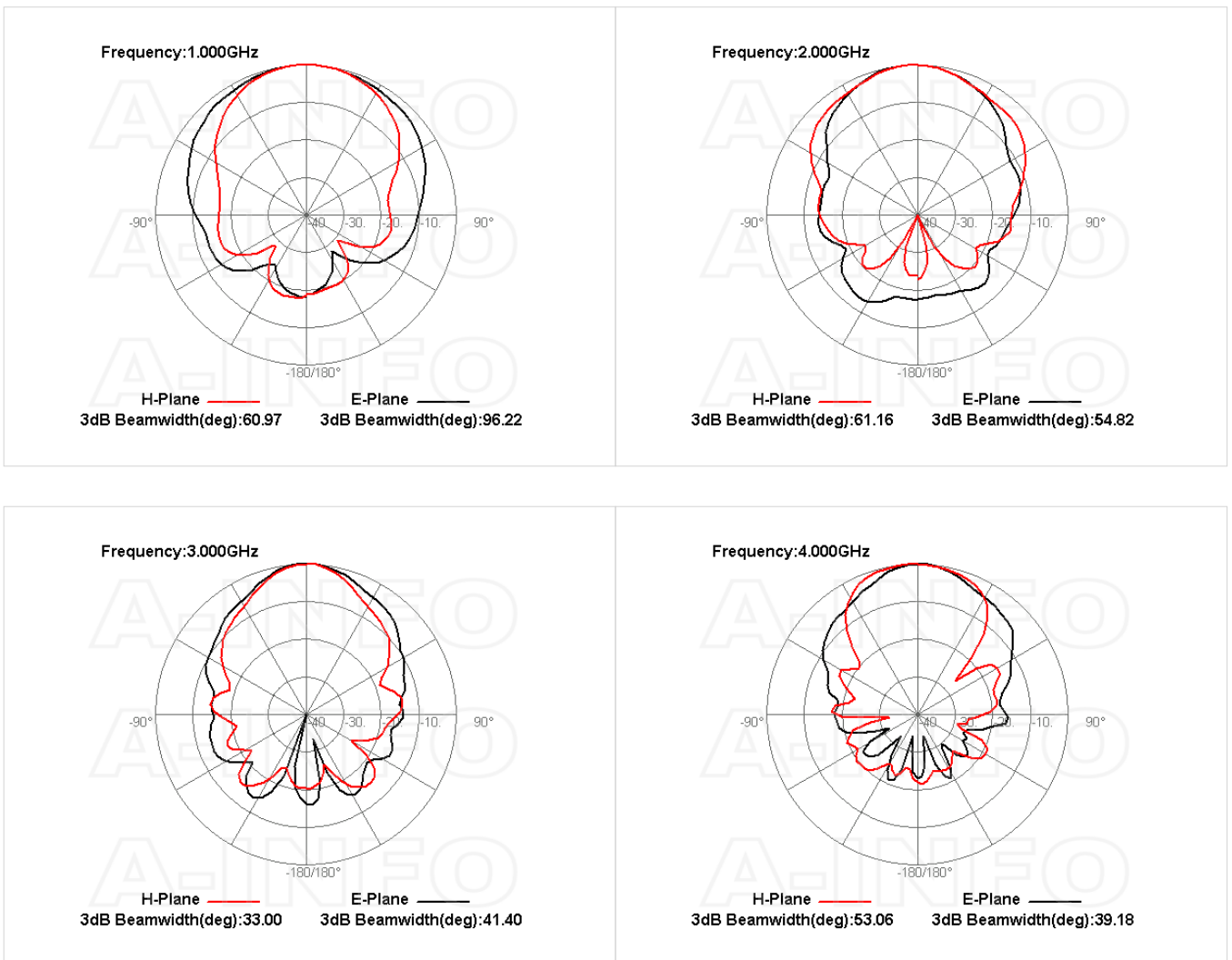
## Cross Polarization Isolation



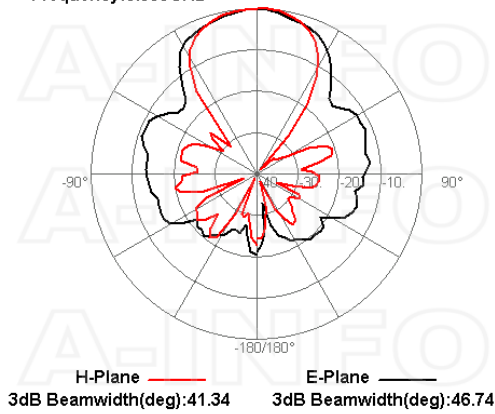
## VSWR



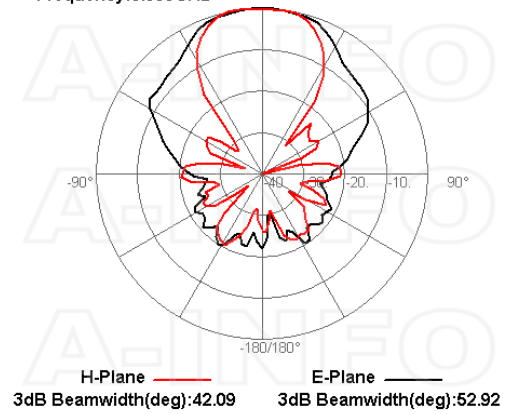
## Pattern



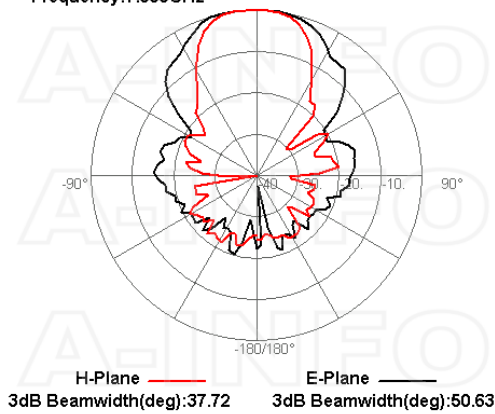
Frequency:5.000GHz



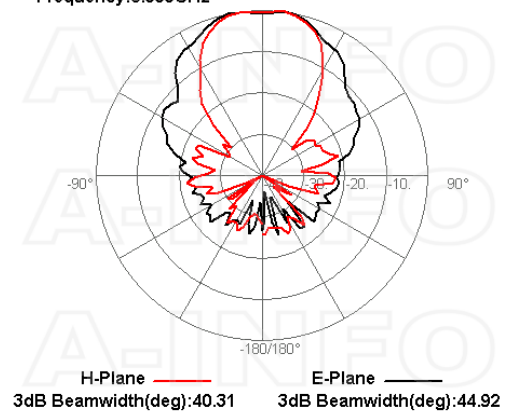
Frequency:6.000GHz



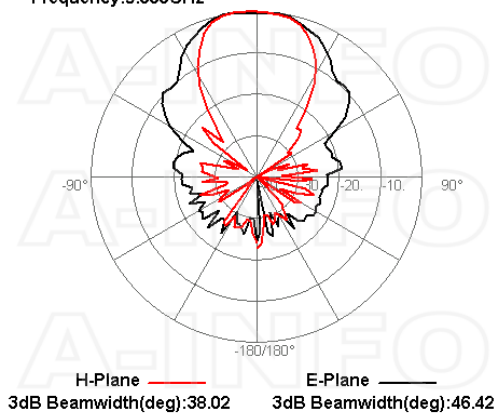
Frequency:7.000GHz



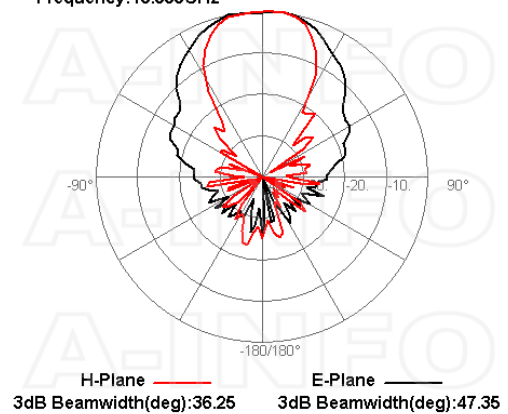
Frequency:8.000GHz

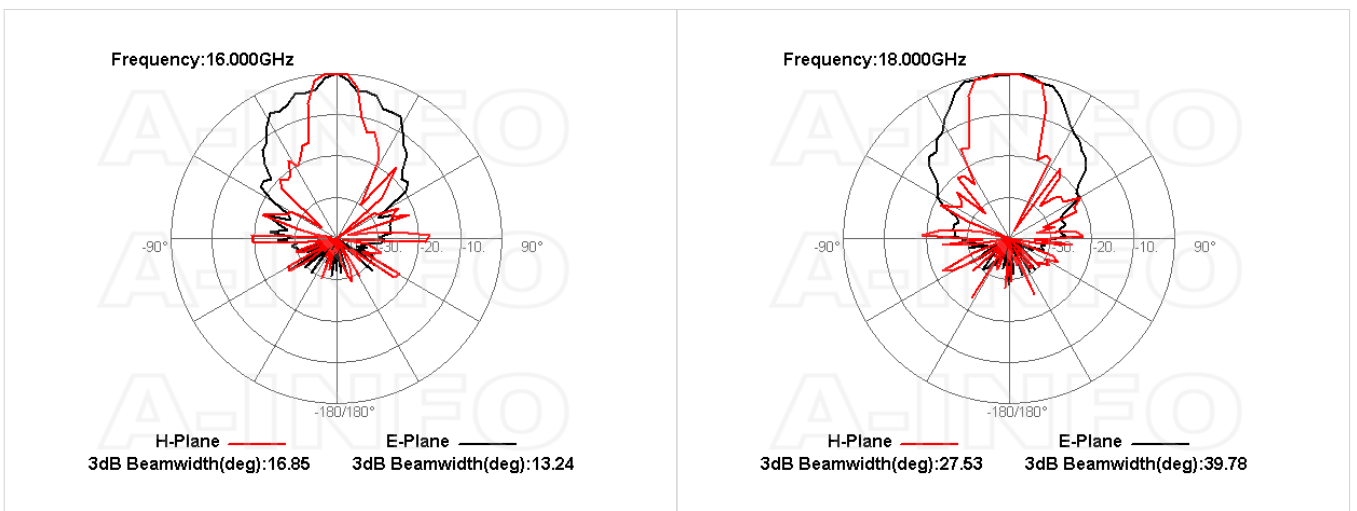
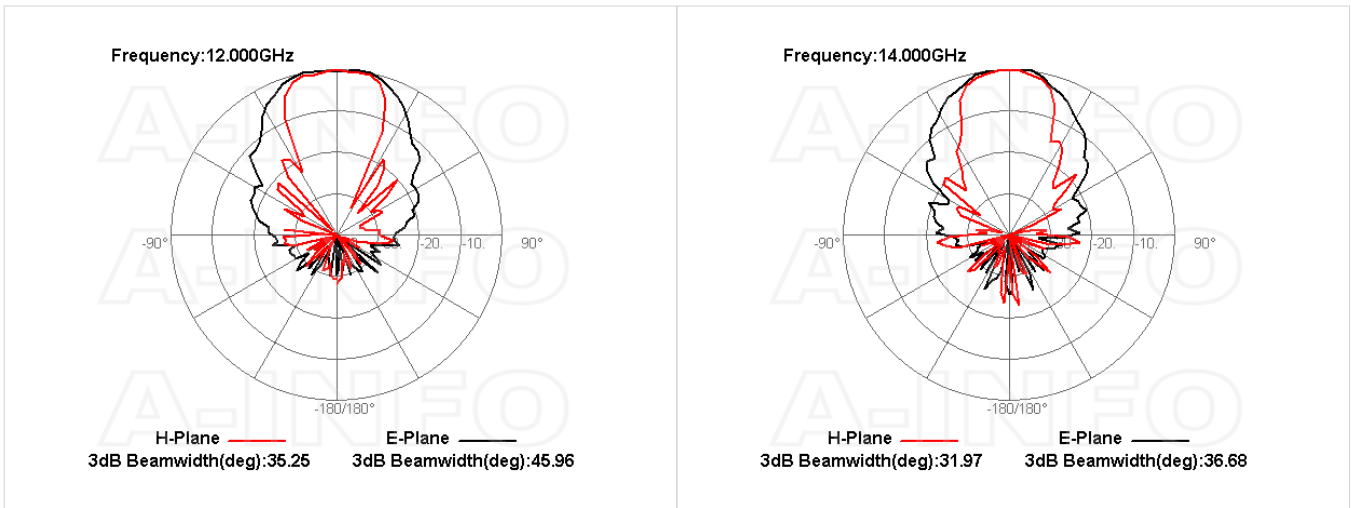


Frequency:9.000GHz



Frequency:10.000GHz





## 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-10180 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

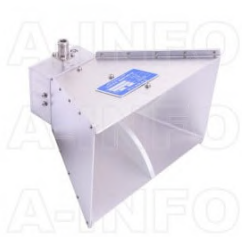


NM-NM-A100-10000 Flexible Cable Assembly 10000mm DC-18GHz N Male to N Male



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

## Similar Products



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



LB-10180-SFSP0 Broadband Horn Antenna 1-18GHz 11dB 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-7180-NF Broadband Horn Antenna 0.7-18.0 GHz 12dB Gain N Type Female



LB-7180-NFSPO Broadband Horn Antenna 0.7-18GHz 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-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

<ul style="list-style-type: none"> <li>● <b>Product Information</b> Product Link: <a href="https://www.ainfoinc.com/lb-10180-nf-broadband-horn-antenna-1-18-ghz-11db-gain-n-type-female">https://www.ainfoinc.com/lb-10180-nf-broadband-horn-antenna-1-18-ghz-11db-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>
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