



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

Open Boundary Quad-Ridged Dual Polarization Horn Antenna Operating From 1GHz to 18GHz With a Nominal 10dB Gain With N Type Female Connector

Product Information

SKU	LB-OSJ-10180-NF	Patents	US D997139 (USA)
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Description

Open Boundary Quad-Ridged Dual Polarization Horn Antenna LB-OSJ-10180-NF, operating from 1 to 18GHz with a nominal 10dB gain and low VSWR 2.0:1 with N Type Female output connector. The model LB-OSJ-10180-NF has uniform gain through its frequency span, providing efficient performance characteristics and directionality. It can handle 50W continuously and 100W peak power. Constructed of lightweight corrosion-resistant aluminum, the antenna will provide years of trouble-free indoor and outdoor service. This horn antenna has dual linear polarization and ideally suited for EMI testing, direction finding, surveillance, antenna gain and pattern measurements and other applications.

Technical Specification

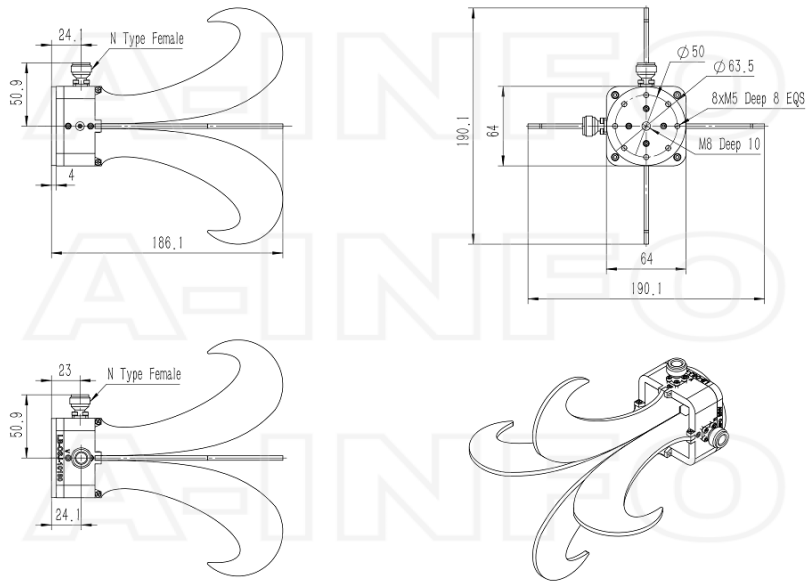
Electrical Specification		Interface	
Frequency, Min (GHz)	1	Output Type	Coaxial
Frequency, Max (GHz)	18	Connector	N Type
Gain, Typ (dBi)	10	Connector Gender	Female
Polarization	Dual Linear	Mechanical Specification	
3dB Beamwidth, E-Plane, Min (Deg.)	21	Body Material	Al
3dB Beamwidth, E-Plane, Max (Deg.)	115	Finish	Chemical Conversion Coating and Nickel Plated
3dB Beamwidth, H-Plane, Min (Deg.)	19	Size, W (mm)	190.1
3dB Beamwidth, H-Plane, Max (Deg.)	215	Size, H (mm)	190.1
Cross Pol. Isolation, Min (dB)	20	Size, L (mm)	186.1
Cross Pol. Isolation, Typ (dB)	30	Weight, (kg)	0.56
Port to Port Isolation, Min (dB)	20		
Port to Port Isolation, Typ (dB)	35		
VSWR, Typ	2.0:1		
Impedance, (Ohm)	50		
Power Handling, CW, (W)	50		
Power Handling, Peak, (W)	100		

Additional Information

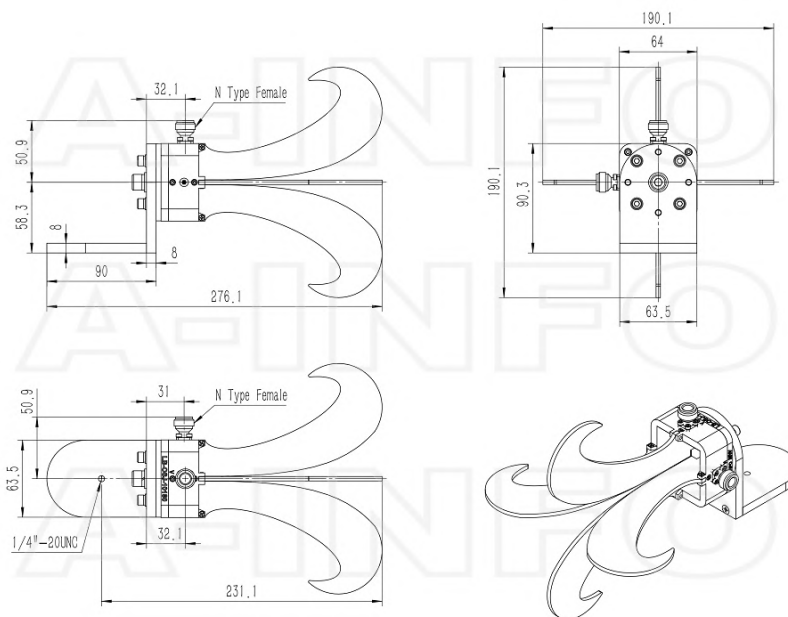
Application	General Purpose Indoor & Outdoor, Fixed	Solution for	Antenna Measurement Reflector Feed Far-field Measurement Planar Near-Field Measurement Cylindrical Near-Field Measurement Spherical Near-Field Measurement CATR System Intergration
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Outline Drawing

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

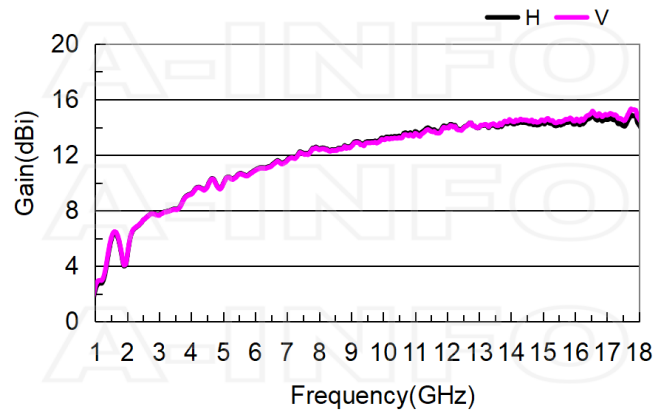


N-Female Output with L Type Mounting Bracket (Option, P/N: LB-10180-L)

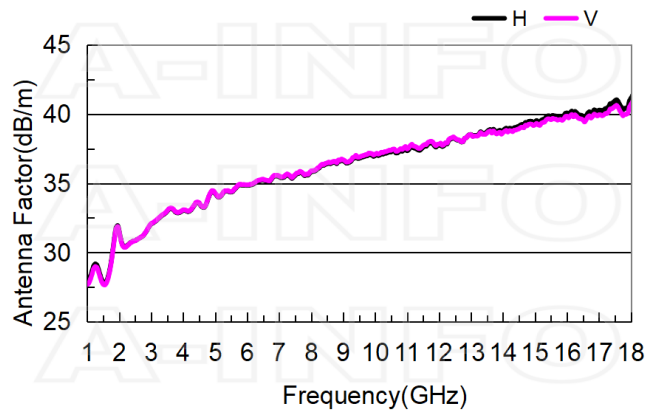


Typical Test Results

Gain



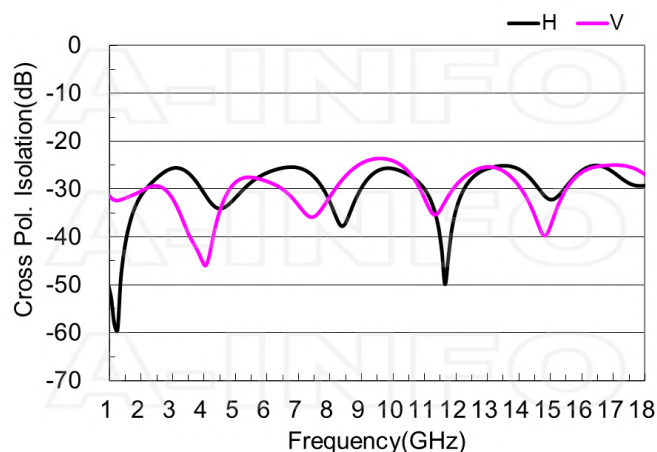
Antenna Factor



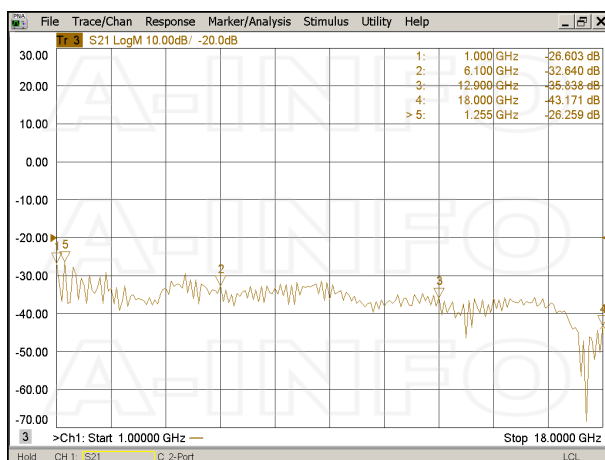
Antenna Factor (Table)

Frequency(GHz)	Vertical		Horizontal	
	Gain(dBi)	AF(dB/m)	Gain(dBi)	AF(dB/m)
1.0	2.51	27.70	2.27	27.94
2.0	4.77	31.46	4.71	31.52
3.0	7.65	32.10	7.68	32.08
4.0	9.16	33.09	9.20	33.05
5.0	9.90	34.29	9.93	34.26
6.0	10.88	34.90	10.92	34.85
7.0	11.59	35.53	11.64	35.47
8.0	12.38	35.89	12.44	35.83
9.0	12.60	36.70	12.67	36.63
10.0	13.11	37.10	13.21	37.00
12.0	13.96	37.83	14.06	37.73
14.0	14.47	38.66	14.32	38.81
16.0	14.45	39.84	14.22	40.07
18.0	14.62	40.69	14.17	41.14

Cross Polarization Isolation

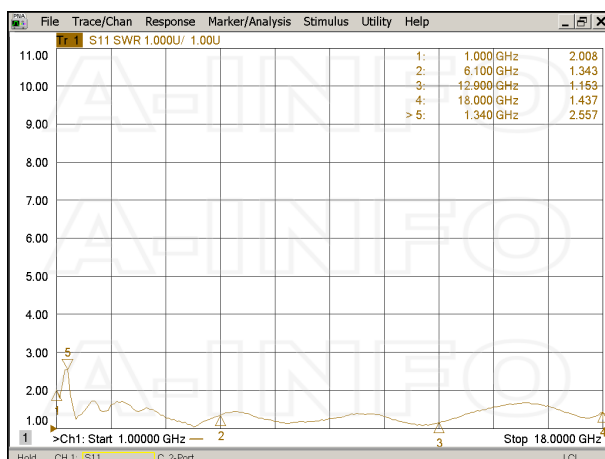


Port to Port Isolation

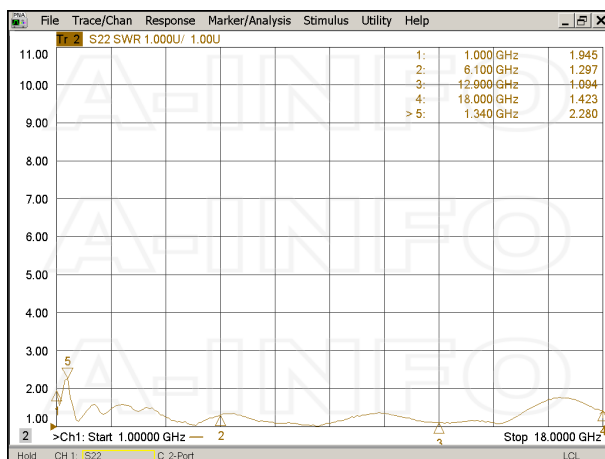


VSWR

Port-H

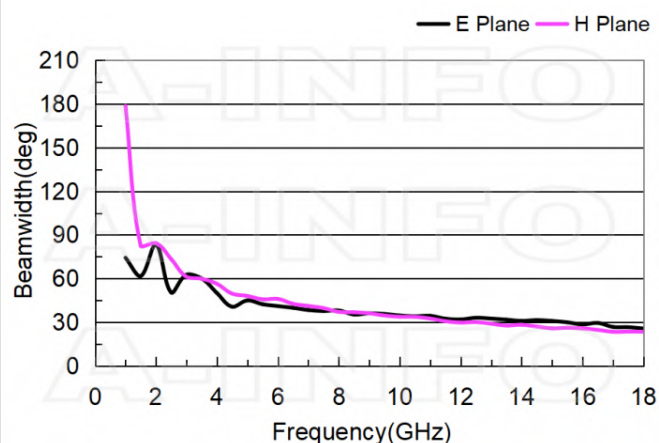


Port-V

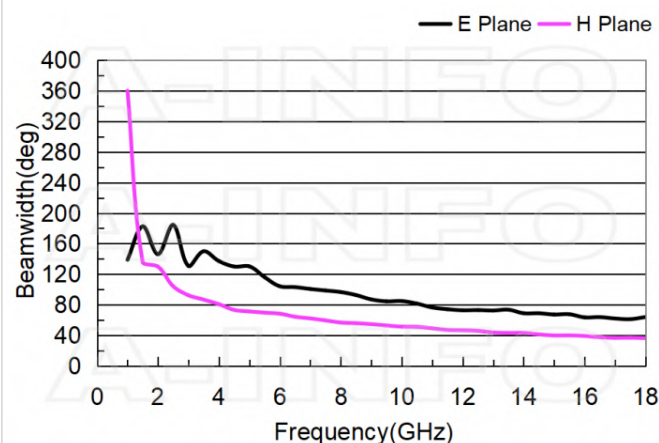


Beamwidth

3dB Beamwidth



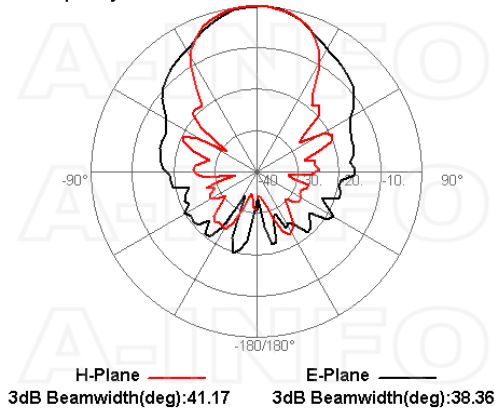
10dB Beamwidth



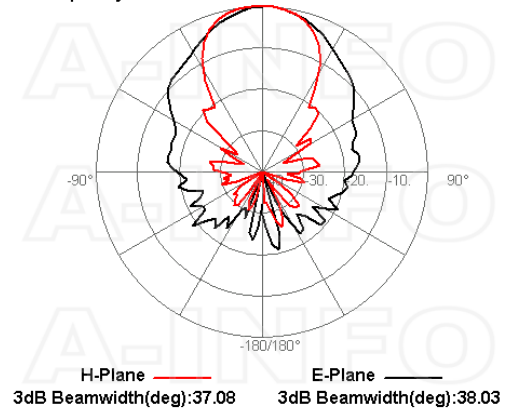
Pattern 1



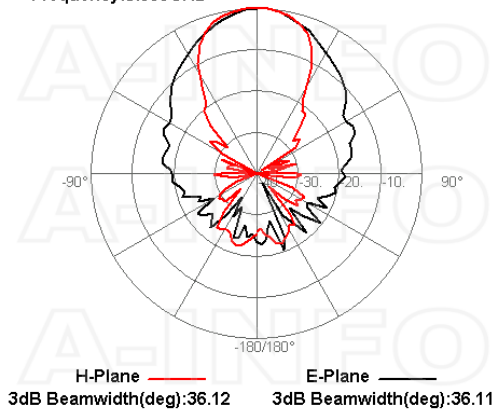
Frequency:7.000GHz



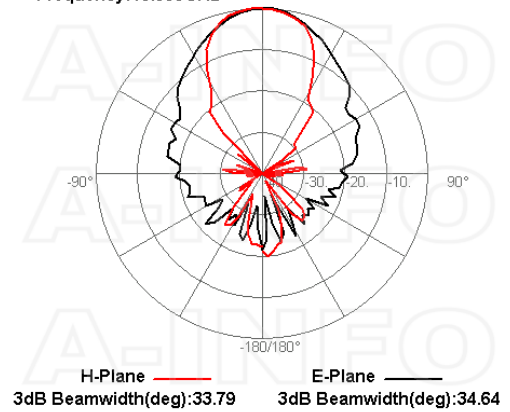
Frequency:8.000GHz



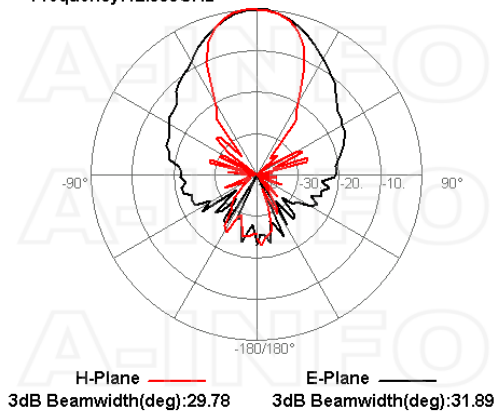
Frequency:9.000GHz



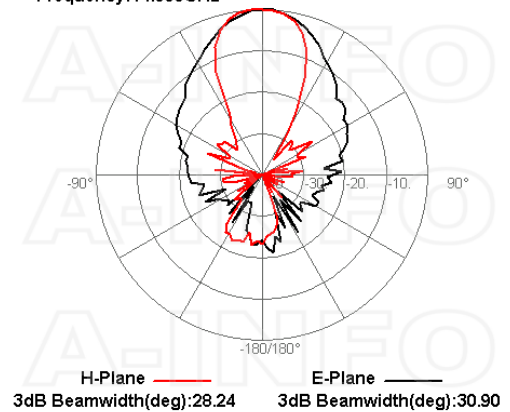
Frequency:10.000GHz

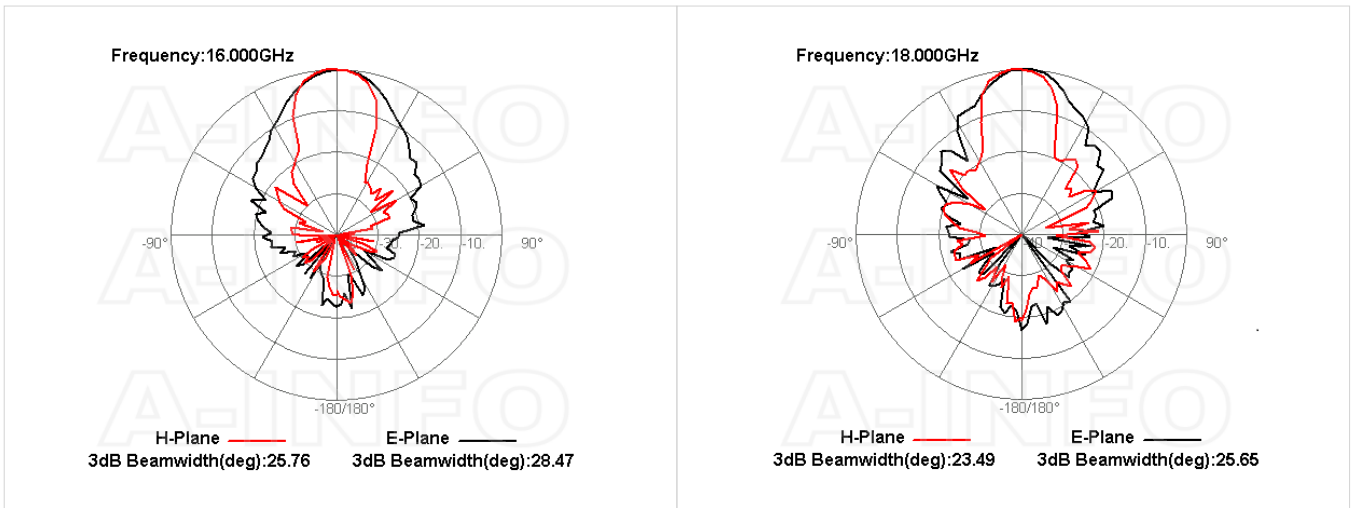


Frequency:12.000GHz



Frequency:14.000GHz





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-OSJ-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-A100-1000 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

About this Datasheet

<p>● Product Information Product Link: https://www.ainfoinc.com/lb-osj-10180-nf-open-boundary-quad-ridged-dual-polarization-horn-antenna-1-18-ghz-10db-gain-n-type-female Data subject to change without notice. © A-INFO INC. 2024. All Rights Reserved</p>	<p>● Contact Us Address: 60 Tesla, Irvine, CA 92618, USA Website: www.ainfoinc.com Email: sales@ainfoinc.com</p>	<p>● Phone & Fax Phone: +1-949-639-9688 +1-949-639-9608 Fax: +1-949-639-9670</p>
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