



LB-SJ-10100-SF Broadband Dual Polarization Horn Antenna 1-10GHz
10dB Gain SMA Female

Broadband Dual Polarization Horn Antenna Operating From 1GHz to
10GHz With a Nominal 10dB Gain With SMA Female Connector

Product Information

SKU	LB-SJ-10100-SF
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Description

Broadband Dual Polarization Horn Antenna LB-SJ-10100-SF, operating from 1 to 10GHz with a nominal 10dB gain and low VSWR 1.5:1 with SMA Female output connector. The model LB-SJ-10100-SF 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

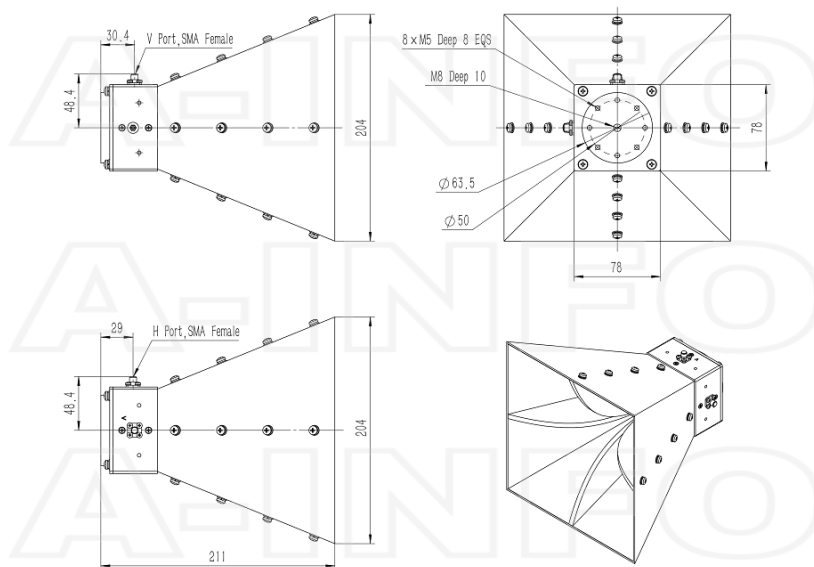
Electrical Specification		Interface	
Frequency, Min (GHz)	1	Output Type	Coaxial
Frequency, Max (GHz)	10	Connector	SMA
Gain, Typ (dBi)	10	Connector Gender	Female
Polarization	Dual Linear	Mechanical Specification	
3dB Beamwidth, E-Plane, Min (Deg.)	19	Body Material	Al
3dB Beamwidth, E-Plane, Max (Deg.)	69	Finish	Chemical Conversion Coating, Gray Paint
3dB Beamwidth, H-Plane, Min (Deg.)	22	Size, W (mm)	204
3dB Beamwidth, H-Plane, Max (Deg.)	72	Size, H (mm)	204
Cross Pol. Isolation, Min (dB)	18	Size, L (mm)	211
Cross Pol. Isolation, Typ (dB)	30	Weight, (kg)	1.7
Port to Port Isolation, Min (dB)	20		
Port to Port Isolation, Typ (dB)	30		
VSWR, Typ	1.5:1		
Impedance, (Ohm)	50		
Power Handling, CW, (W)	50		
Power Handling, Peak, (W)	100		

Additional Information

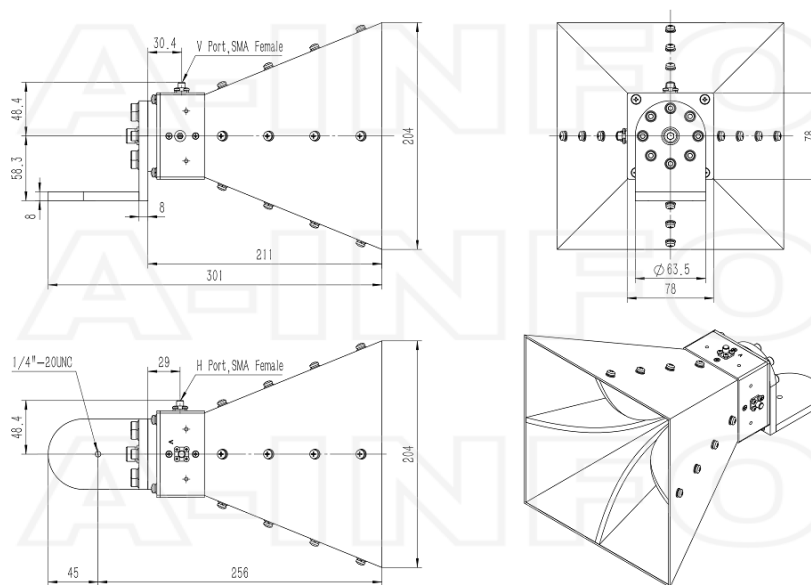
Application	General Purpose Indoor & Outdoor, Fixed	Solution for	Antenna Measurement Reflector Feed Far-field Measurement Planar Near-Field Measurement Cylindrical Near-Field Measurement Spherical Near-Field Measurement CATR System Intergration
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Outline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

SMA-Female Output (P/N: LB-SJ-10100-SF)

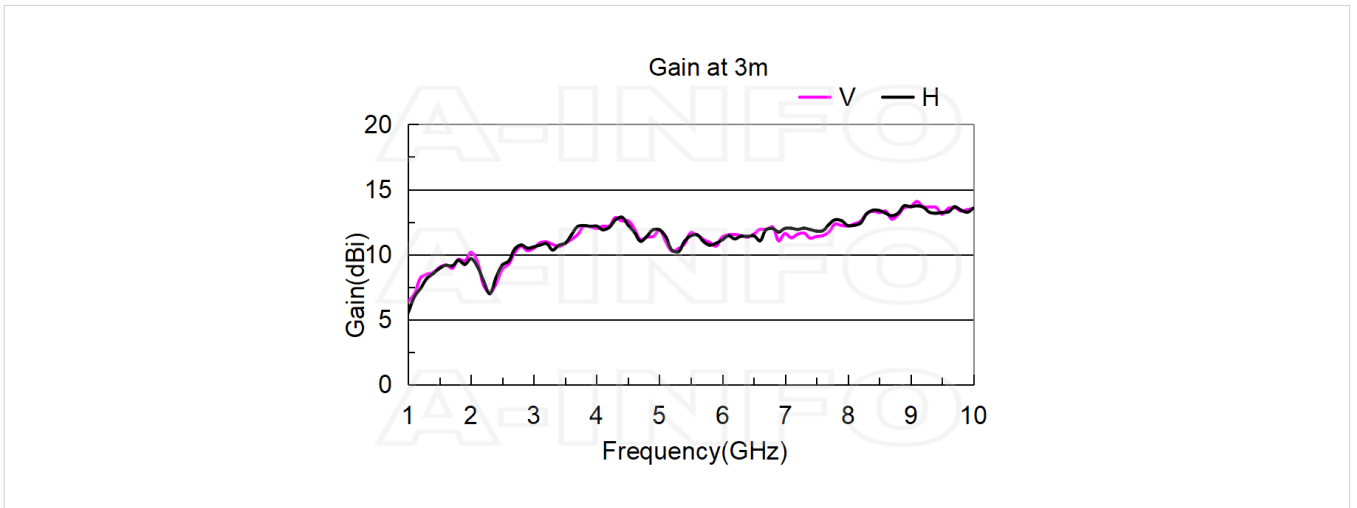
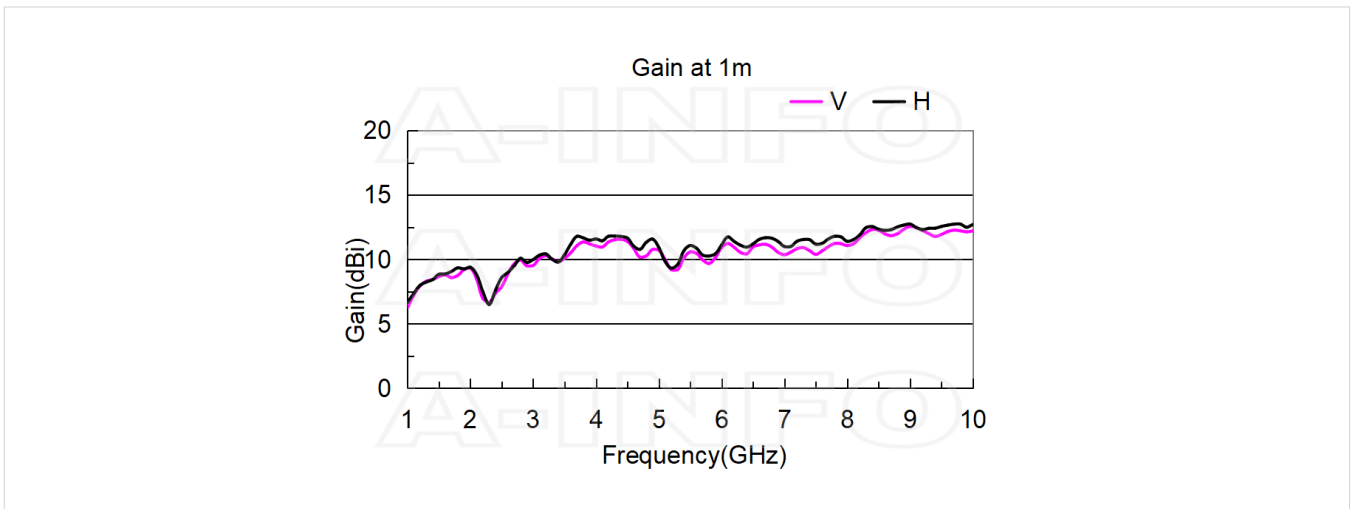


SMA-Female Output with L Type Mounting Bracket (Option, P/N: LB-10180-L)

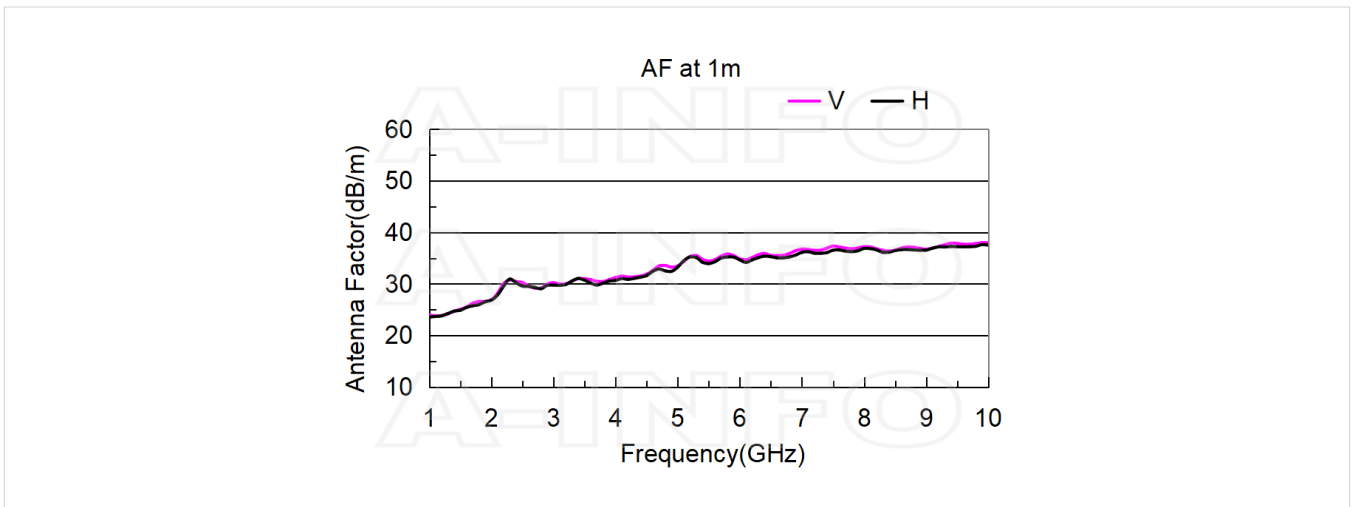


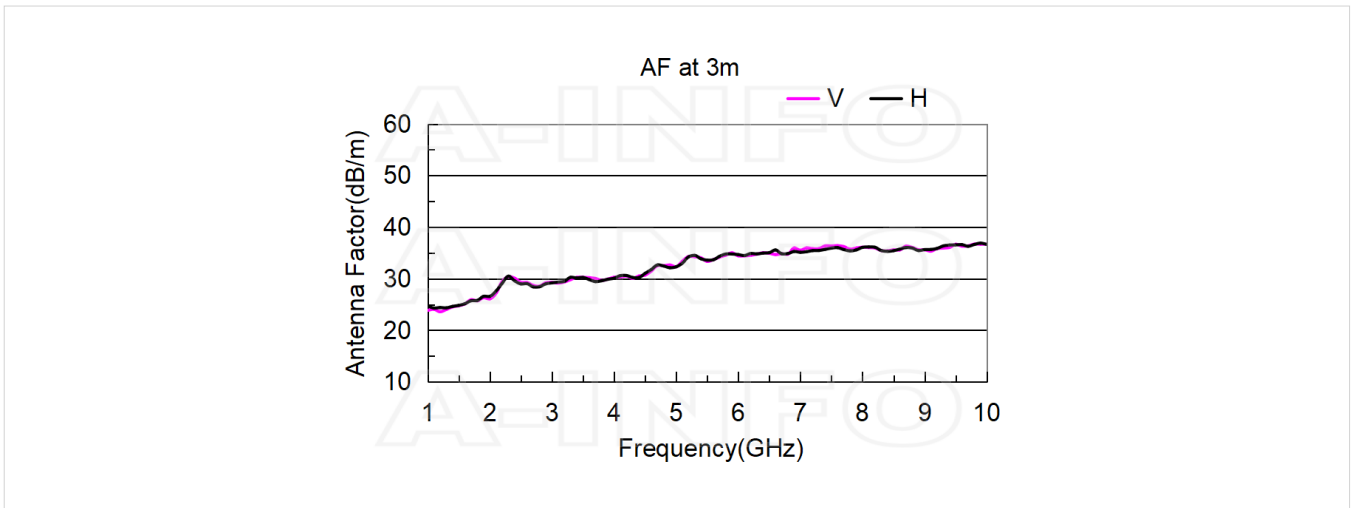
Typical Test Results

Gain



Antenna Factor





Antenna Factor (Table)

1m

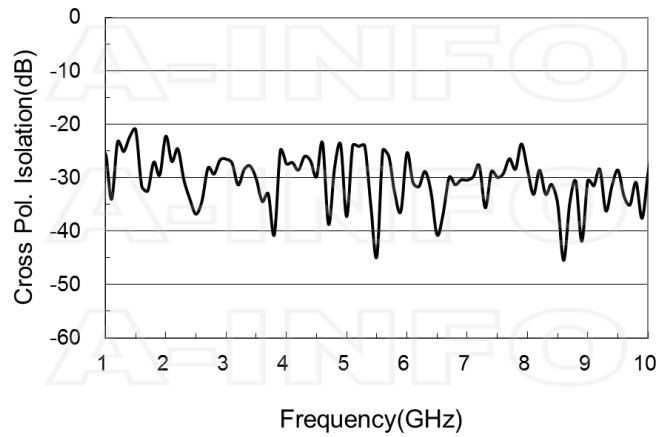
Frequency(GHz)	Horizontal		Vertical	
	Gain(dBi)	AF(dB/m)	Gain(dBi)	AF(dB/m)
1.0	6.65	23.56	6.26	23.95
2.0	9.39	26.84	9.32	26.91
3.0	9.98	29.77	9.53	30.23
4.0	11.58	30.67	11.03	31.22
5.0	10.93	33.26	10.71	33.48
6.0	11.12	34.65	10.91	34.87
7.0	11.00	36.11	10.36	36.75
8.0	11.40	36.87	11.07	37.20
9.0	12.74	36.56	12.55	36.74
10.0	12.71	37.50	12.20	38.01

3m

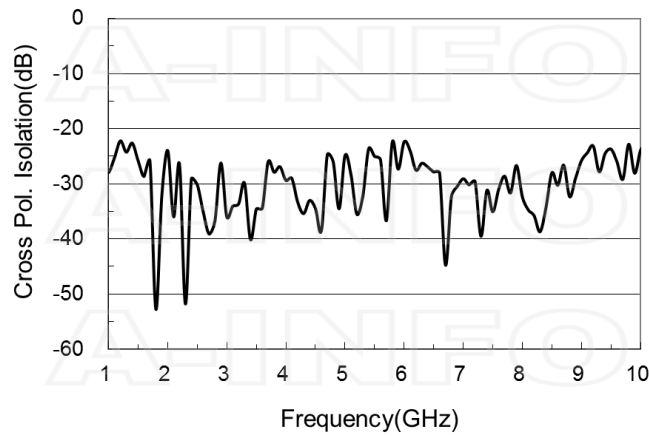
Frequency(GHz)	Horizontal		Vertical	
	Gain(dBi)	AF(dB/m)	Gain(dBi)	AF(dB/m)
1.0	5.51	24.70	6.37	23.84
2.0	9.67	26.56	10.16	26.07
3.0	10.58	29.18	10.48	29.27
4.0	12.17	30.08	12.00	30.25
5.0	11.89	32.30	11.89	32.30
6.0	11.11	34.66	11.34	34.43
7.0	12.00	35.11	11.60	35.51
8.0	12.21	36.06	12.19	36.09
9.0	13.67	35.63	13.70	35.59
10.0	13.56	36.65	13.54	36.67

Cross Polarization Isolation

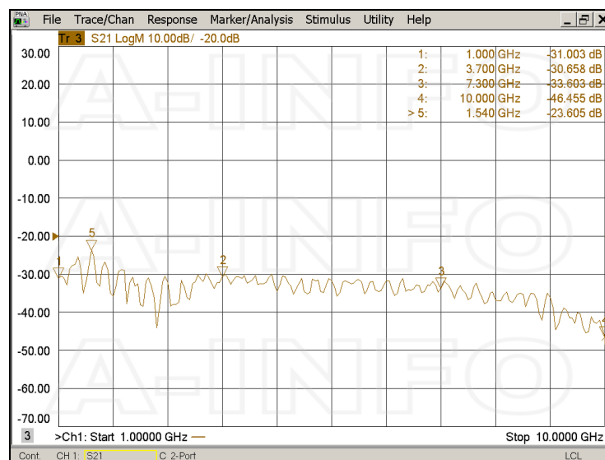
Port-H



Port-V

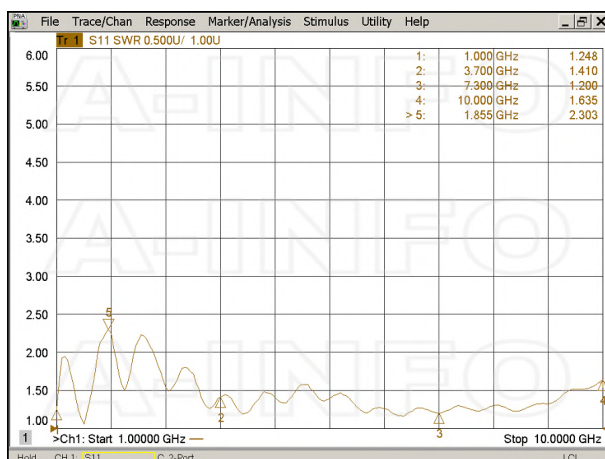


Port to Port Isolation

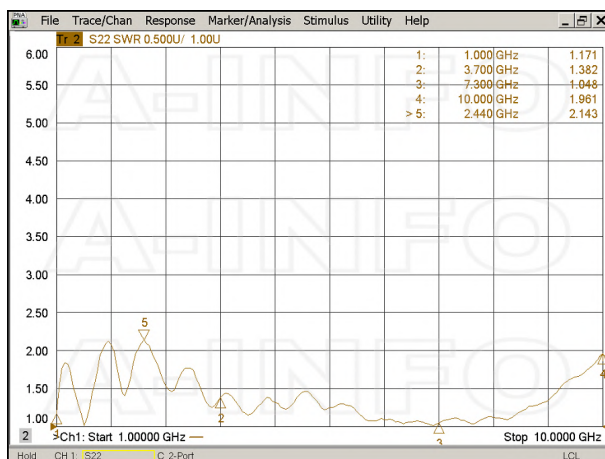


VSWR

Port-H

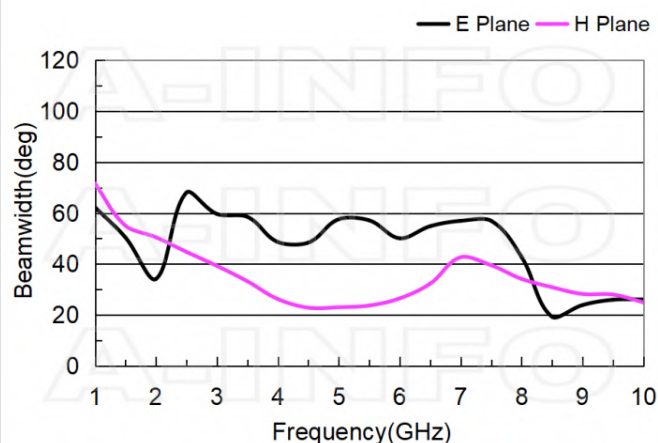


Port-V

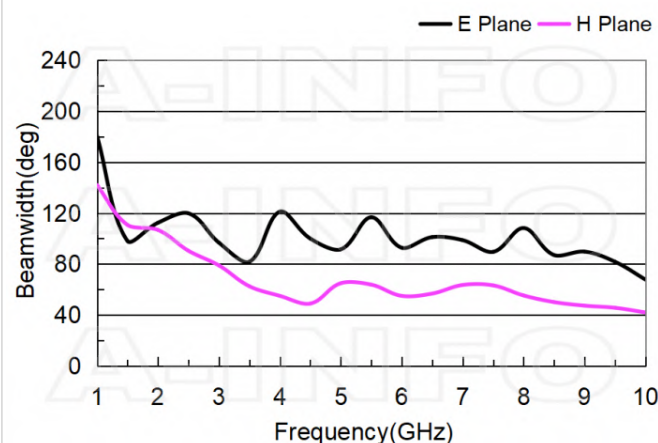


Beamwidth

3dB Beamwidth

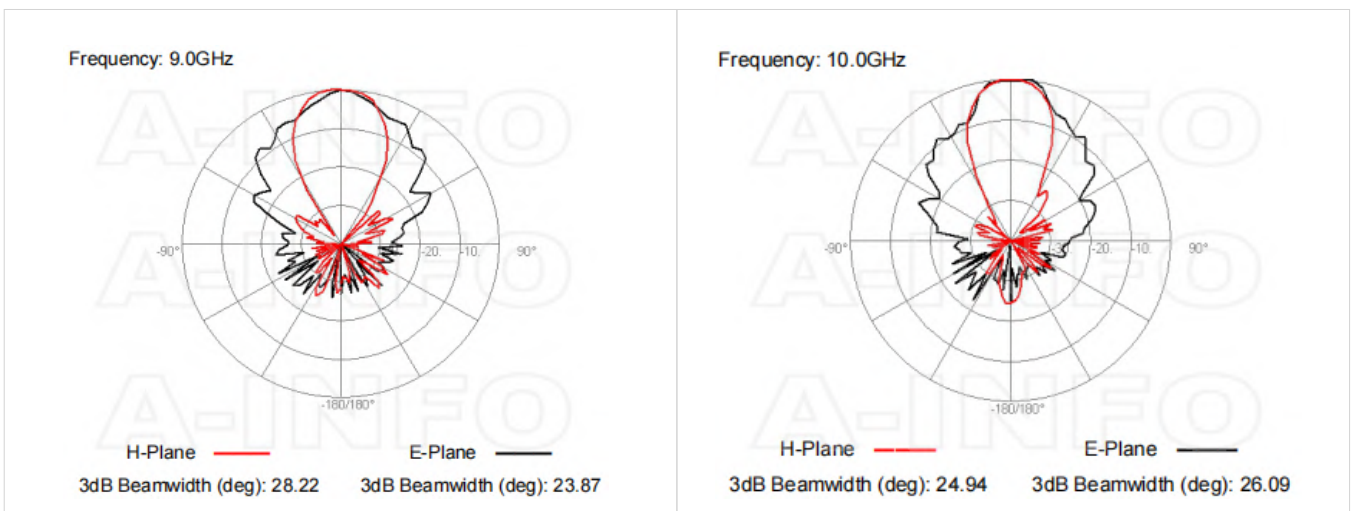
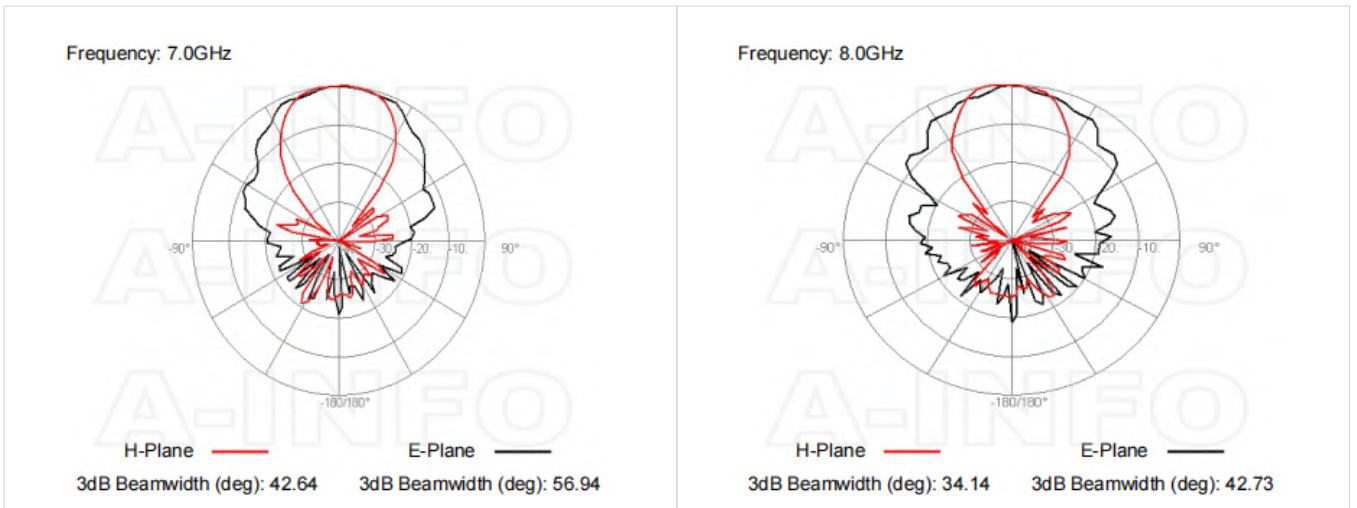


10dB Beamwidth



Pattern 2





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-SJ-10100 AI
Alloy Carrying Case



SM-SM-A050-1000 Flexible
Cable Assembly 1000mm DC-
26.5GHz SMA Male to SMA Male



SM-SM-A050-1500 Flexible
Cable Assembly 1500mm DC-
26.5GHz SMA Male to SMA Male



SM-SM-A050-2000 Flexible
Cable Assembly 2000mm DC-
26.5GHz SMA Male to SMA Male



SM-SM-A050-3000 Flexible
Cable Assembly 3000mm DC-
26.5GHz SMA Male to SMA Male



SM-SM-A050-5000 Flexible
Cable Assembly 5000mm DC-
26.5GHz SMA Male to SMA Male



SM-SM-A050-10000 Flexible
Cable Assembly 10000mm DC-
26.5GHz SMA Male to SMA Male



SM-SM-A080-1000 Flexible
Cable Assembly 1000mm DC-
26.5GHz SMA Male to SMA Male



SM-SM-A080-1500 Flexible
Cable Assembly 1500mm DC-
26.5GHz SMA Male to SMA Male



SM-SM-A080-2000 Flexible
Cable Assembly 2000mm DC-
26.5GHz SMA Male to SMA Male



SM-SM-A080-3000 Flexible
Cable Assembly 3000mm DC-
26.5GHz SMA Male to SMA Male



SM-SM-A080-5000 Flexible
Cable Assembly 5000mm DC-
26.5GHz SMA Male to SMA Male



SM-SM-A080-10000 Flexible
Cable Assembly 10000mm DC-
26.5GHz SMA Male to SMA Male



SM-SM-A080-20000 Flexible
Cable Assembly 20000mm DC-
26.5GHz SMA Male to SMA Male



SM-SM-A100-1000 Flexible
Cable Assembly 1000mm
DC-18GHz SMA Male to SMA
Male



SM-SM-A100-1500 Flexible Cable Assembly 1500mm DC-18GHz SMA Male to SMA Male



SM-SM-A100-2000 Flexible Cable Assembly 2000mm DC-18GHz SMA Male to SMA Male



SM-SM-A100-3000 Flexible Cable Assembly 3000mm DC-18GHz SMA Male to SMA Male



SM-SM-A100-5000 Flexible Cable Assembly 5000mm DC-18GHz SMA Male to SMA Male



SM-SM-A100-10000 Flexible Cable Assembly 10000mm DC-18GHz SMA Male to SMA Male

About this Datasheet

<ul style="list-style-type: none"> ● Product Information Product Link: https://www.ainfoinc.com/lb-sj-10100-sf-broadband-dual-polarization-horn-antenna-1-10-ghz-10db-gain-sma-female Data subject to change without notice. © A-INFO INC. 2024. All Rights Reserved 	<ul style="list-style-type: none"> ● Contact Us Address: 60 Tesla, Irvine, CA 92618, USA Website: www.ainfoinc.com Email: sales@ainfoinc.com 	<ul style="list-style-type: none"> ● Phone & Fax Phone: +1-949-639-9688 +1-949-639-9608 Fax: +1-949-639-9670
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