#### LB-90-10-C-SFSPO Datasheet



LB-90-10-C-SFSPO Standard Gain Horn Antenna 8.2-12.4GHz 10dB Gain SMA Female

Standard Gain Horn Antenna Operating From 8.2GHz to 12.4GHz With a Nominal 10dB Gain With SMA Female Connector

#### **Product Information**

LB-90-10-C-SFSPO

SKU

**Electrical Specification** 

### Description

Standard Gain Horn Antenna LB-90-10-C-SFSPO, operating from 8.2 to 12.4GHz with a nominal 10dB gain and low VSWR 1.5:1 with SMA Female connector output. The model LB-90-10-C-SFSPO has uniform gain through its frequency span, providing efficient performance characteristics and directionality. It can handle 50W continuously and 3000W 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 standard gain horn antenna is linearly polarized and ideally suited for EMI testing, direction finding, surveillance, antenna gain and pattern measurements and other applications.

Technical S	Technical Specification	
	Interface	
	Output Type	

Frequency, Min (GHz)	8.2
Frequency, Max (GHz)	12.4
Waveguide Type	Rectangular
Waveguide Size EIA WR	WR90
Gain, Typ (dBi)	10
Polarization	Linear
3dB Beamwidth, E-Plane, Typ (Deg.)	42
3dB Beamwidth, H-Plane, Typ (Deg.)	45
Cross Pol. Isolation, Typ (dB)	30
VSWR, Typ	1.5:1
Impedance, (Ohm)	50
Power Handling, CW, (W)	50
Power Handling, Peak, (W)	3000
Power Handling, Peak, (W)	3000

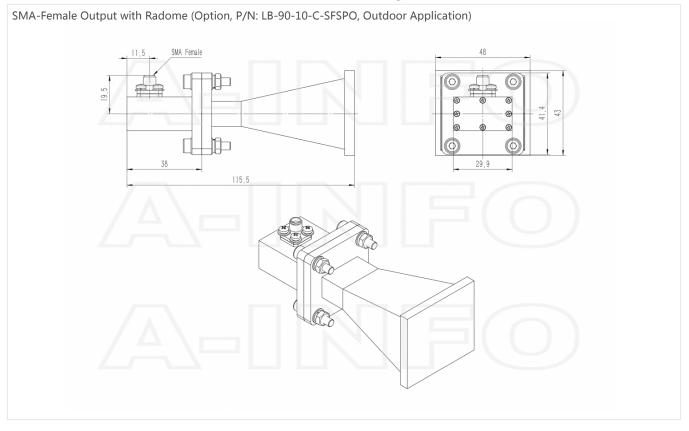
Interface		
Output Type	Coaxial	
Connector	SMA	
Connector Gender	Female	
Mechanical Specification		
Figure	С Туре	
Body Material	Al	
Finish	Chemical Conversion Coating, Gray Paint	
Size, W (mm)	48	
Size, H (mm)	43	
Size, L (mm)	115.5	
Weight, (kg)	0.1	



### Additional Information

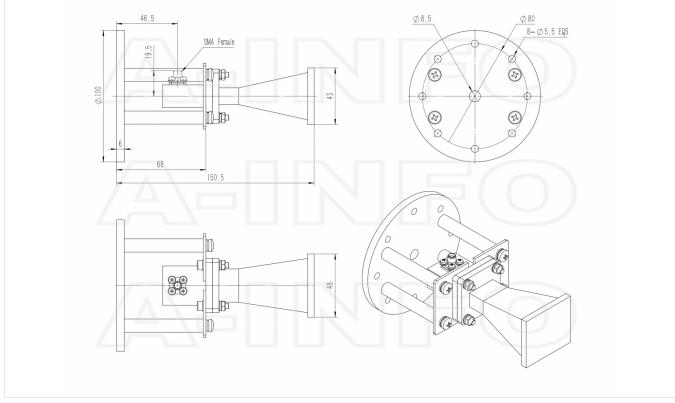
Application	Outdoor, Waterproof and Dustproof, Fixed	Solution for	Gain Reference Antenna Measurement Reflector Feed Far-field Measurement System Intergration Material Measurement
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### **Outline Drawing**

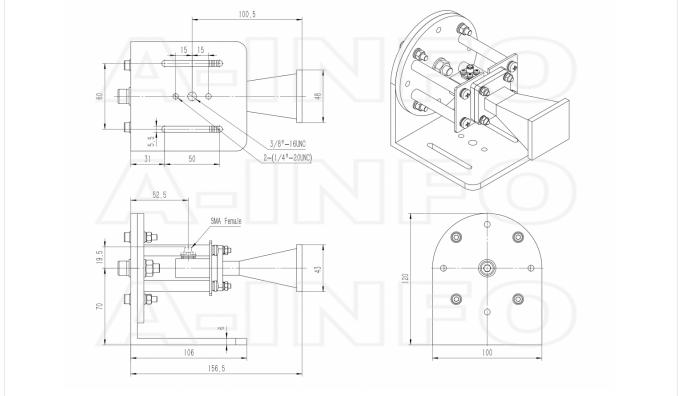


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SMA-Female Output with Round Mounting Bracket & Radome (Option, P/N: LB-90-10-C-MB & LB-90-10-C-SFSPO, Outdoor Application)

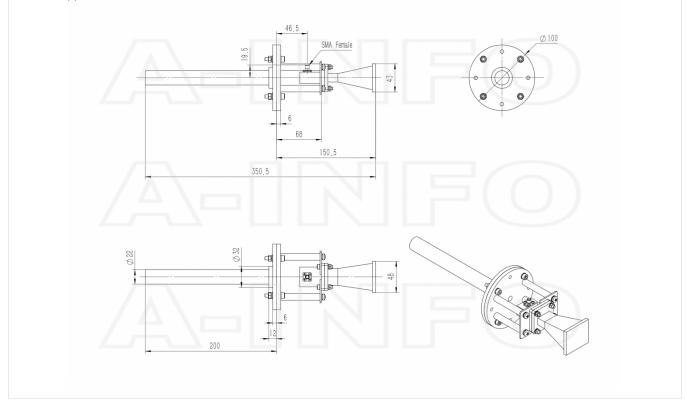


SMA-Female Output with L Type Mounting Bracket & Radome (Option, P/N: LB-90-10-C-MBL & LB-90-10-C-SFSPO, Outdoor Application)

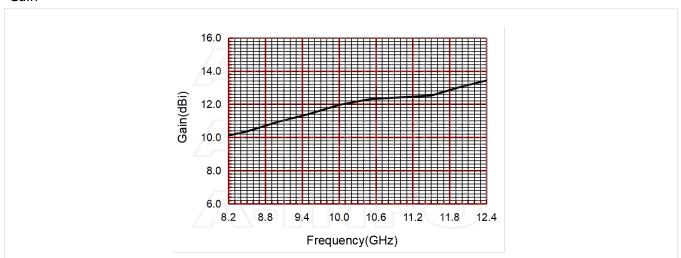




SMA-Female Output with Stinger Type Mounting Bracket & Radome (Option, P/N: LB-90-10-C-MA & LB-90-10-C-SFSPO, Outdoor Application)



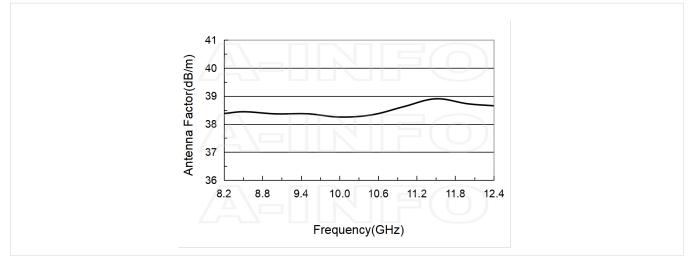
**Typical Test Results** 



Gain



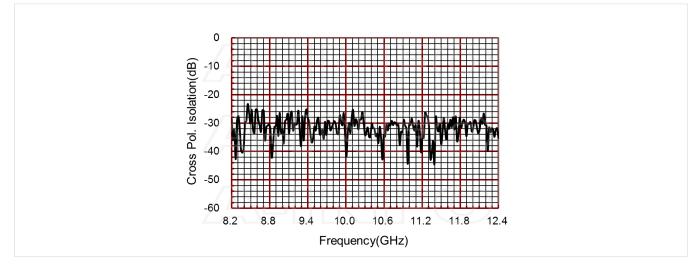
#### Antenna Factor



#### Antenna Factor (Table)

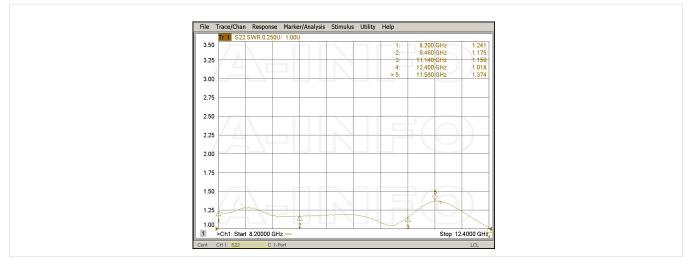
Frequency(GHz)	Gain(dBi)	Antenna Factor(dB/m)
8.2	10.11	38.38
8.5	10.36	38.44
9.0	10.93	38.37
9.5	11.40	38.37
10.0	11.96	38.25
10.5	12.30	38.33
11.0	12.41	38.62
11.5	12.52	38.90
12.0	13.07	38.72
12.4	13.42	38.65

#### **Cross Polarization Isolation**

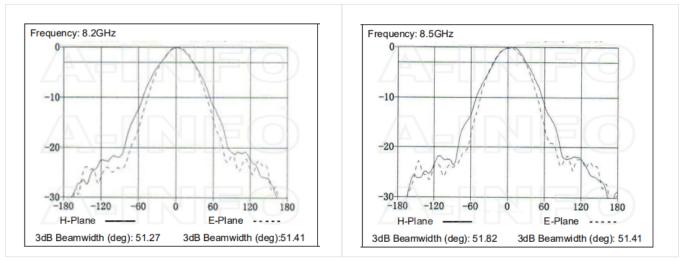


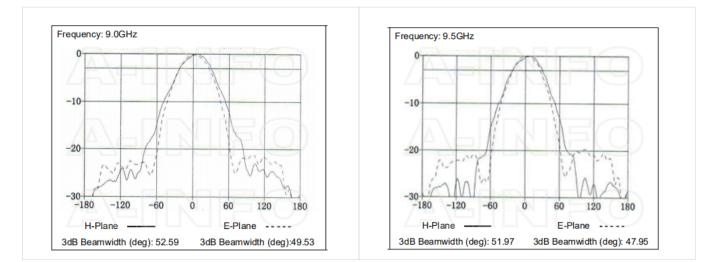
## A-INFD

#### VSWR

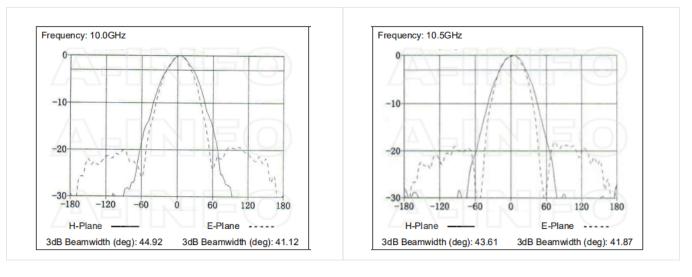


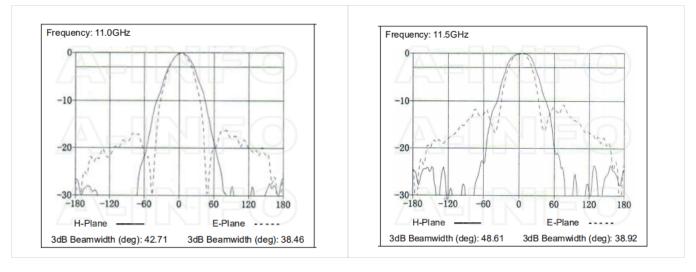
#### Pattern

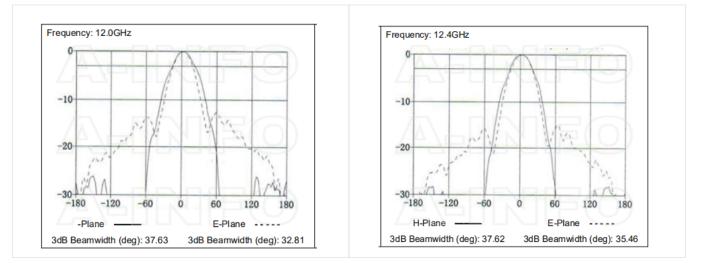




#### LB-90-10-C-SFSPO Datasheet







LB-90-10-C-SFSPO Datasheet

#### LB-90-10-C-SFSPO Datasheet

# A - I N F D

#### **Related Products**



LB-90-10-C-MB Round Type Mounting Bracket



3033HL Wooden Tripod



M4x20 Hex\_Pack WR112- WR51 Flange Assembly Pack



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



LB-90-10-C-MBL L type mounting bracket



3033QM Wooden Tripod Metalfree



M4x30 Hex\_Pack Log Periodic, DS Assembly Pack



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



LB-90-10-C-MA Stinger Type Mounting Bracket



Carrying Case\_LB-90-10-C Al Alloy Carrying Case



SM-SM-A050-500 Flexible Cable Assembly 500mm DC- 26.5GHz SMA Male to SMA Male



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



Tripod\_15Kg Al Alloy Tripod



M4x12 Hex\_Pack WR51-WR112 Assembly Pack



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



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

### A-INFO



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



SM-SM-A100-200 Flexible Cable Assembly 200mm DC- 18GHz SMA Male to SMA Male



SM-SM-A080-200 Flexible Cable Assembly 200mm 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-A080-10000 Flexible Cable Assembly 10000mm DC-26.5GHz SMA Male to SMA Male



SM-SM-A100-300 Flexible Cable Assembly 300mm DC- 18GHz SMA Male to SMA Male



SM-SM-A080-300 Flexible Cable Assembly 300mm 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-A080-20000 Flexible Cable Assembly 20000mm DC-26.5GHz SMA Male to SMA Male



SM-SM-A100-500 Flexible Cable Assembly 500mm DC- 18GHz SMA Male to SMA Male



SM-SM-A080-500 Flexible Cable Assembly 500mm 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-A100-100 Flexible Cable Assembly 100mm DC- 18GHz SMA Male to SMA Male



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

### A - I N F D

#### LB-90-10-C-SFSPO Datasheet



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

#### Similar Products



LB-90-10-A Standard Gain Horn Antenna 8.2-12.4GHz 10dB Gain Rectangular Waveguide Interface



LB-90-10-ASPO Standard Gain Horn Antenna 8.2-12.4GHz 10dB Gain Rectangular Waveguide Interface



LB-90-10-C-SF Standard Gain Horn Antenna 8.2-12.4GHz 10dB Gain SMA Female



LB-90-10-C-ESF Standard Gain Horn Antenna 8.2-12.4GHz 10dB Gain Endlaunch SMA Female



LB-90-10-C-NF Standard Gain Horn Antenna 8.2-12.4GHz 10dB Gain N Type Female



LB-90-10-C-NFSPO Standard Gain Horn Antenna 8.2-12.4GHz 10dB Gain N Type Female



LB-90-10-C-TF Standard Gain Horn Antenna 8.2-12.4GHz 10dB Gain TNC Female



LB-90-10-C-TFSPO Standard Gain Horn Antenna 8.2-12.4GHz 10dB Gain TNC Female



## **A**-INFD

#### LB-90-10-C-SFSPO Datasheet



LB-90-10-C-7 Standard Gain Horn Antenna 8.2-12.4GHz 10dB Gain 7mm



LB-90-10-C-7SPO Standard Gain Horn Antenna 8.2-12.4GHz 10dB Gain 7mm



LB-90-10-C-3.5F Standard Gain Horn Antenna 8.2-12.4GHz 10dB Gain 3.5mm Female



LB-90-10-C-3.5FSPO Standard Gain Horn Antenna 8.2-12.4GHz 10dB Gain 3.5mm Female

#### About this Datasheet

<ul> <li>Product Information Product Link: https://www.ainfoinc.com/lb-90-10-c-sfspo-standard-gain- horn-antenna-8-2-12-4-ghz-10db-gain-sma-female Data subject to change without notice.</li> <li>© A-INFO INC. 2023. All Rights Reserved</li> </ul>		• Phone & Fax Phone: +1-949-639-9688 +1-949-639-9608 Fax: +1-949-639-9670
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