## LB-510-10-C-SFSPO Datasheet





LB-510-10-C-SFSPO Standard Gain Horn Antenna 1.45-2.2GHz 10dB Gain SMA Female

Standard Gain Horn Antenna Operating From 1.45GHz to 2.2GHz With a Nominal 10dB Gain With SMA Female Connector

# **Product Information**

SKU

LB-510-10-C-SFSPO

# Description

Standard Gain Horn Antenna LB-510-10-C-SFSPO, operating from 1.45 to 2.2GHz with a nominal 10dB gain and low VSWR 1.25:1 with SMA Female connector output. The model LB-510-10-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 Specification**

<b>Electrical Specification</b>	
Frequency, Min (GHz)	1.45
Frequency, Max (GHz)	2.2
Waveguide Type	Rectangular
Waveguide Size EIA WR	WR510
Gain, Typ (dBi)	10
Polarization	Linear
3dB Beamwidth, E-Plane, Typ (Deg.)	45
3dB Beamwidth, H-Plane, Typ (Deg.)	43
Cross Pol. Isolation, Typ (dB)	35
VSWR, Typ	1.25:1
Impedance, (Ohm)	50
Power Handling, CW, (W)	50
Power Handling, Peak, (W)	3000

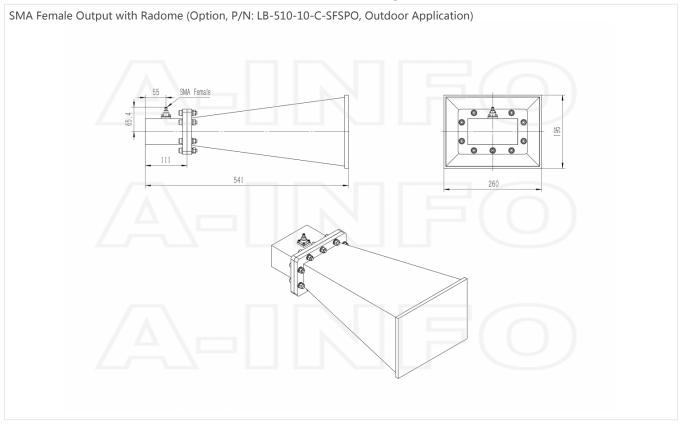
Interface				
Output Type	Coaxial			
Connector	SMA			
Connector Gender	Female			
Mechanical Specification				
Figure	С Туре			
Body Material	Al			
Finish	Chemical Conversion Coating, Gray Paint			
Size, W (mm)	260			
Size, H (mm)	195			
Size, L (mm)	541			
Weight, (kg)	3.1			



# Additional Information

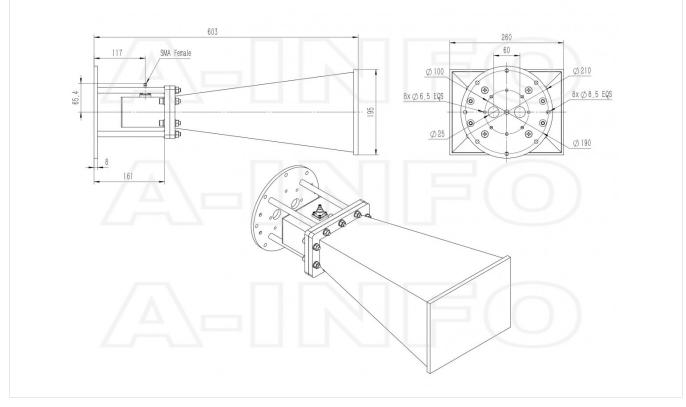
Application Outdoor, Waterproof and Dustproof, Fixed	Solution for	Gain Reference Antenna Measurement Reflector Feed Far-field Measurement System Intergration Material Measurement
--	--------------	---

# **Outline Drawing**

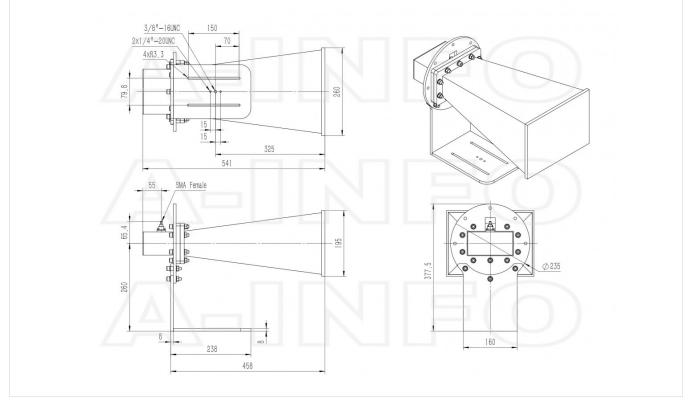


# A-INFO

SMA Female Output with Round Mounting Bracket & Radome (Option, P/N: LB-510-10-C-MB & LB-510-10-C-SFSPO, Outdoor Application)

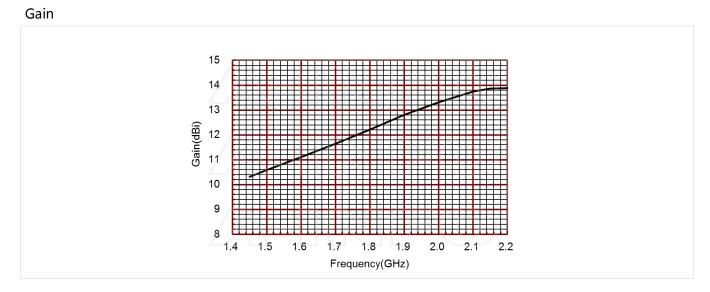


SMA Female Output with L Type Mounting Bracket & Radome (Option, P/N: LB-510-10-C-L & LB-510-10-C-SFSPO, Outdoor Application)

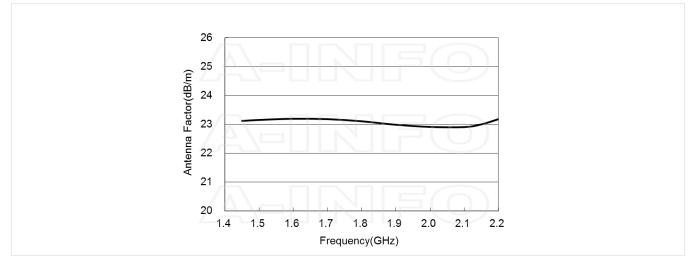


# A - I N F D

Typical Test Results



#### Antenna Factor

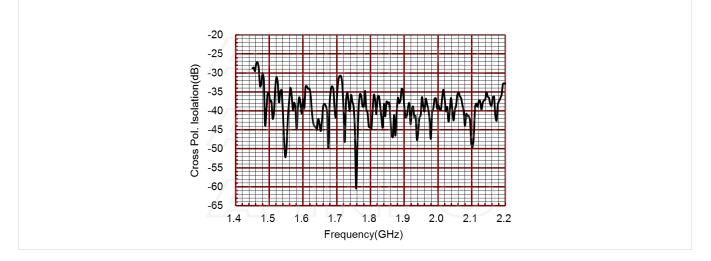


## Antenna Factor (Table)

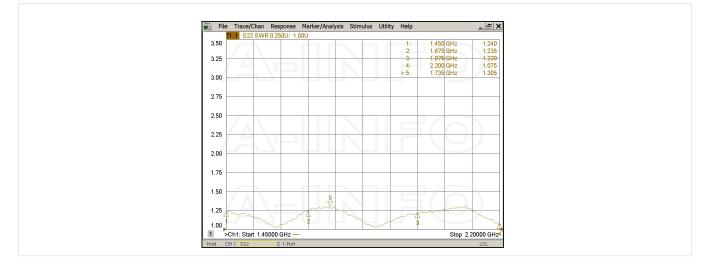
Frequency(GHz)	Gain(dBi)	Antenna
		Factor(dB/m)
1.45	10.32	23.12
1.50	10.58	23.15
1.60	11.10	23.19
1.70	11.64	23.18
1.80	12.21	23.11
1.90	12.80	22.99
2.00	13.32	22.91
2.10	13.75	22.90
2.15	13.86	23.00
2.20	13.88	23.18



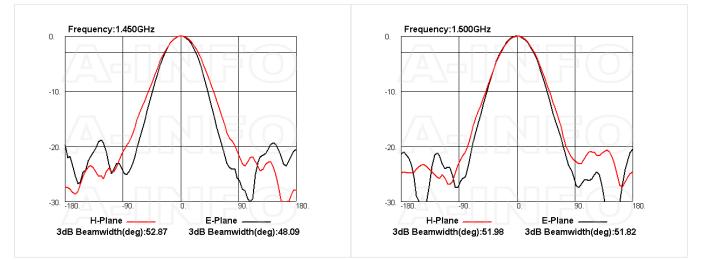
#### **Cross Polarization Isolation**



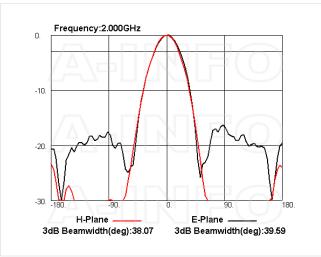
#### VSWR

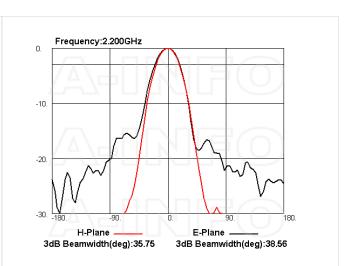


#### Pattern



### LB-510-10-C-SFSPO Datasheet





#### **Related Products**



LB-510-10-C-MB Round Type Mounting Bracket



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



LB-510-10-C-L L type mounting bracket



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



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



Carrying Case\_LB-510-10-C Al Alloy Carrying Case



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



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



M8x40 Hex\_Pack WR510-WR650 Flange Assembly Pack



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



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

LB-510-10-C-SFSPO Datasheet

# A-INFO

### LB-510-10-C-SFSPO Datasheet



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



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-A100-1500 Flexible Cable Assembly 1500mm DC- 18GHz 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-A100-2000 Flexible Cable Assembly 2000mm DC- 18GHz 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-A100-3000 Flexible Cable Assembly 3000mm DC- 18GHz SMA Male to SMA Male

LB-510-10-C-SFSPO Datasheet

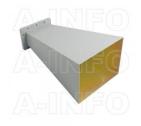


SM-SM-A100-5000 Flexible Cable Assembly 5000mm DC- 18GHz SMA Male to SMA Male



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

### Similar Products



LB-510-10-A Standard Gain Horn Antenna 1.45-2.2GHz 10dB Gain Rectangular Waveguide Interface



LB-510-10-ASPO Standard Gain Horn Antenna 1.45-2.2GHz 10dB Gain Rectangular Waveguide Interface



LB-510-10-C-NF Standard Gain Horn Antenna 1.45-2.2GHz 10dB Gain N Type Female



LB-510-10-C-NFSPO Standard Gain Horn Antenna 1.45-2.2GHz 10dB Gain N Type Female



LB-510-10-C-SF Standard Gain Horn Antenna 1.45-2.2GHz 10dB Gain SMA Female



LB-510-10-C-7/16F Standard Gain Horn Antenna 1.45-2.2GHz 10dB Gain 7/16(DIN) Female



LB-510-10-C-7/16FSPO Standard Gain Horn Antenna 1.45-2.2GHz 10dB Gain 7/16(DIN) Female

• Product Information Product Link: https://www.ainfoinc.com/lb-510-10-c-sfspo-standard-gain- horn-antenna-1-45-2-2-ghz-10db-gain-sma-female Data subject to change without notice. © A-INFO INC. 2023. All Rights Reserved	60 Tesla, Irvine, CA 92618, USA Website: www.ainfoinc.com	• Phone & Fax Phone: +1-949-639-9688 +1-949-639-9608 Fax: +1-949-639-9670
	Email: sales@ainfoinc.com	

About this Datasheet