

**LB-112-10-C-SF Standard Gain Horn Antenna 7.05-10GHz 10dB Gain SMA Female**

Standard Gain Horn Antenna Operating From 7.05GHz to 10GHz With a Nominal 10dB Gain With SMA Female Connector

## Product Information

|     |                |
|-----|----------------|
| SKU | LB-112-10-C-SF |
|-----|----------------|

## Description

Standard Gain Horn Antenna LB-112-10-C-SF, operating from 7.05 to 10GHz with a nominal 10dB gain and low VSWR 1.25:1 with SMA Female connector output. The model LB-112-10-C-SF 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 antenna will provide years of trouble-free indoor and outdoor service. 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

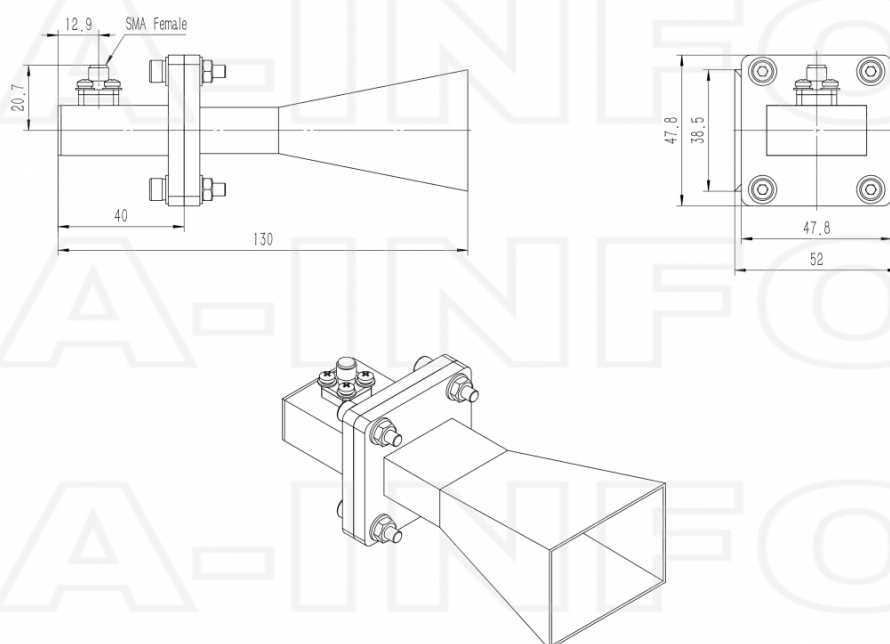
| Electrical Specification           |             | Interface                |                                         |
|------------------------------------|-------------|--------------------------|-----------------------------------------|
| Frequency, Min (GHz)               | 7.05        | Output Type              | Coaxial                                 |
| Frequency, Max (GHz)               | 10          | Connector                | SMA                                     |
| Waveguide Type                     | Rectangular | Connector Gender         | Female                                  |
| Waveguide Size EIA WR              | WR112       | Mechanical Specification |                                         |
| Gain, Typ (dBi)                    | 10          | Figure                   | C Type                                  |
| Polarization                       | Linear      | Body Material            | Al                                      |
| 3dB Beamwidth, E-Plane, Typ (Deg.) | 41          | Finish                   | Chemical Conversion Coating, Gray Paint |
| 3dB Beamwidth, H-Plane, Typ (Deg.) | 40          | Size, W (mm)             | 52                                      |
| Cross Pol. Isolation, Typ (dB)     | 30          | Size, H (mm)             | 47.8                                    |
| VSWR, Typ                          | 1.25:1      | Size, L (mm)             | 130                                     |
| Impedance, (Ohm)                   | 50          | Weight, (kg)             | 0.135                                   |
| Power Handling, CW, (W)            | 50          |                          |                                         |
| Power Handling, Peak, (W)          | 3000        |                          |                                         |

## Additional Information

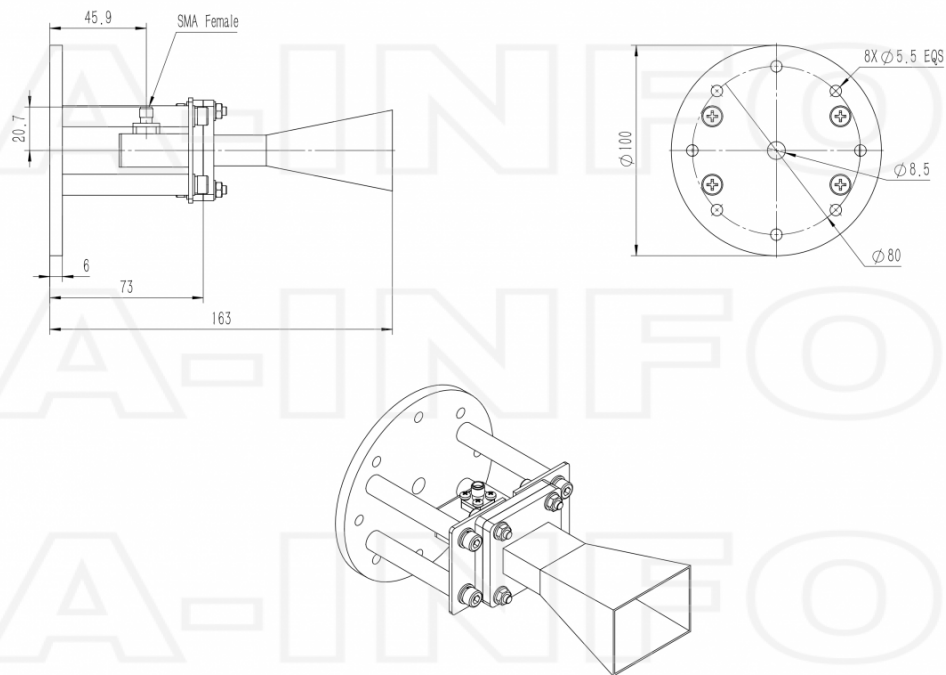
|             |                                         |              |                                                                                                                                 |
|-------------|-----------------------------------------|--------------|---------------------------------------------------------------------------------------------------------------------------------|
| Application | General Purpose Indoor & Outdoor, Fixed | Solution for | Gain Reference<br>Antenna Measurement<br>Reflector Feed<br>Far-field Measurement<br>System Intergration<br>Material Measurement |
|-------------|-----------------------------------------|--------------|---------------------------------------------------------------------------------------------------------------------------------|

## Outline Drawing

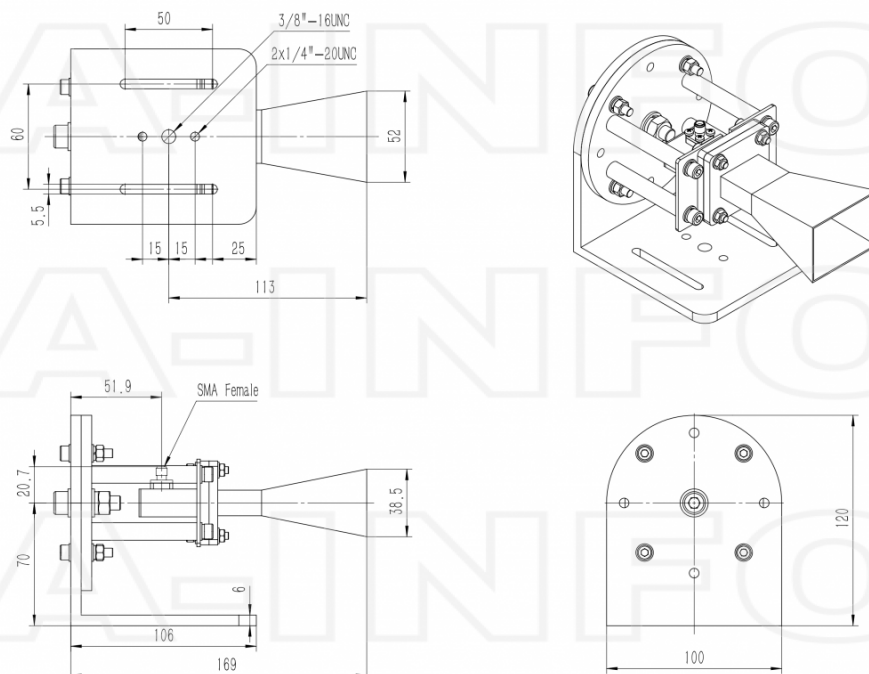
SMA Female Output (P/N: LB-112-10-C-SF)



### SMA Female Output with Round Mounting Bracket (Option, P/N: LB-112-10-C-MB)

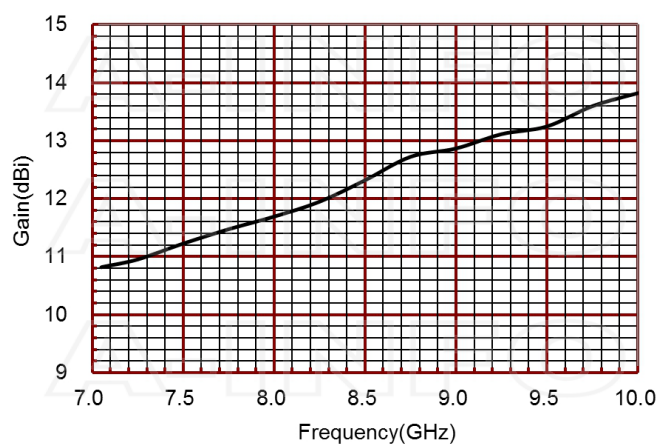


### SMA Female Output with L Type Mounting Bracket (Option, P/N: LB-112-10-C-MBL)

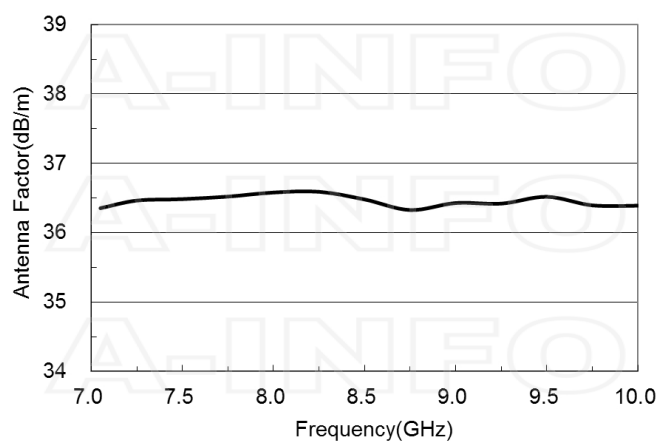


## Typical Test Results

### Gain



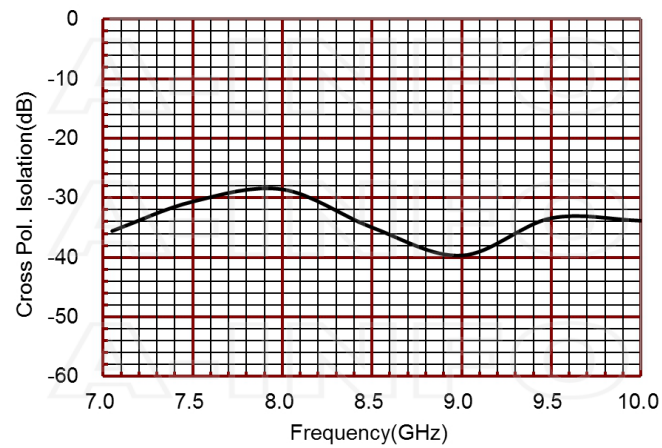
### Antenna Factor



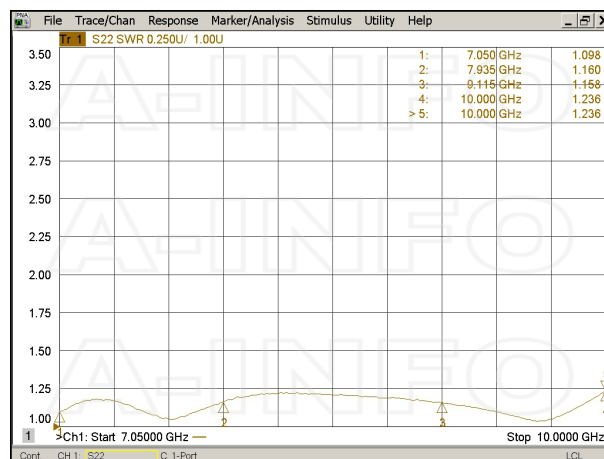
### Antenna Factor (Table)

| Frequency (GHz) | Gain (dBi) | Antenna Factor (dB/m) |
|-----------------|------------|-----------------------|
| 7.05            | 10.82      | 36.35                 |
| 7.25            | 10.95      | 36.46                 |
| 7.50            | 11.23      | 36.48                 |
| 7.75            | 11.47      | 36.52                 |
| 8.00            | 11.69      | 36.58                 |
| 8.25            | 11.95      | 36.59                 |
| 8.50            | 12.32      | 36.48                 |
| 8.75            | 12.72      | 36.33                 |
| 9.00            | 12.87      | 36.43                 |
| 9.25            | 13.11      | 36.42                 |
| 9.50            | 13.25      | 36.52                 |
| 9.75            | 13.60      | 36.39                 |
| 10.00           | 13.82      | 36.39                 |

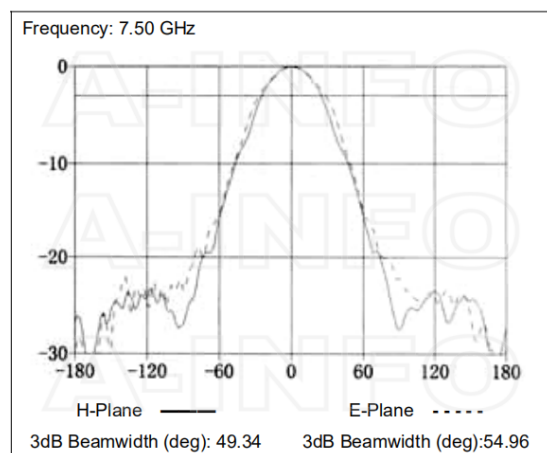
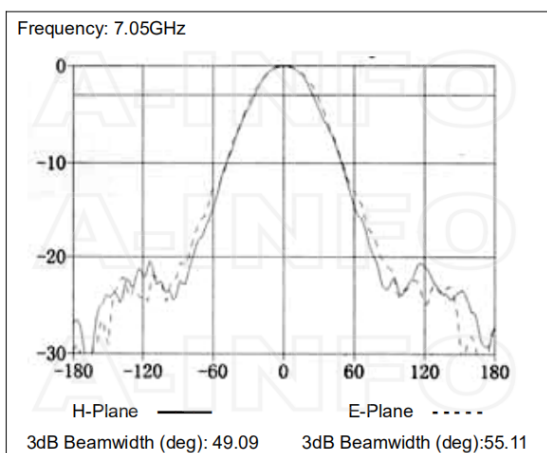
### Cross Polarization Isolation



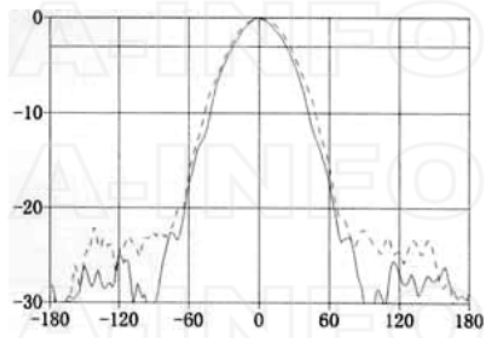
### VSWR



### Pattern

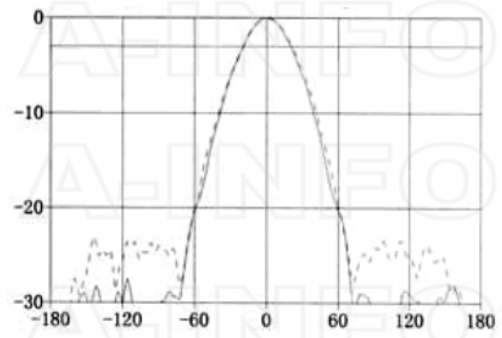


Frequency: 8.00 GHz



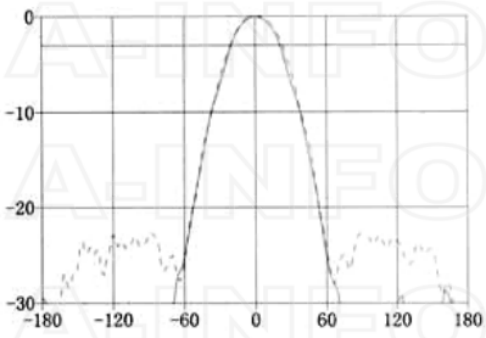
3dB Beamwidth (deg): 45.51      3dB Beamwidth (deg): 50.97

Frequency: 8.50 GHz



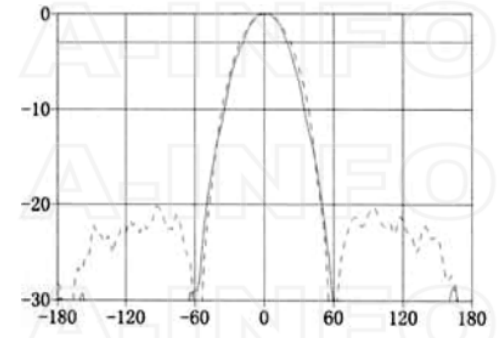
3dB Beamwidth (deg): 39.64      3dB Beamwidth (deg): 40.52

Frequency: 9.00 GHz



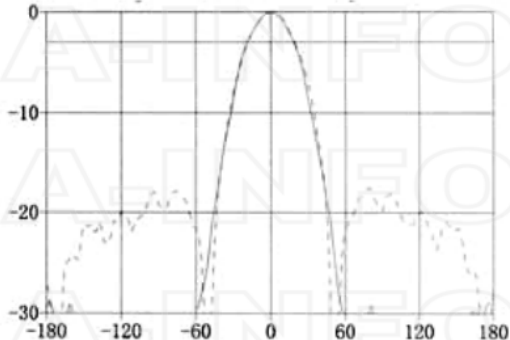
3dB Beamwidth (deg): 40.90      3dB Beamwidth (deg): 43.40

Frequency: 9.50GHz



3dB Beamwidth (deg): 37.85      3dB Beamwidth (deg): 43.32

Frequency: 10.00GHz



3dB Beamwidth (deg): 37.11      3dB Beamwidth (deg): 37.05

### Related Products



LB-112-10-C-MB Round Type Mounting Bracket



LB-112-10-C-MBL L type mounting bracket



Tripod\_15Kg Al Alloy Tripod



3033HL Wooden Tripod



3033QM Wooden Tripod Metalfree



M4x12 Hex\_Pack WR51-WR112 Assembly Pack



M4x20 Hex\_Pack WR112- WR51 Flange Assembly Pack



M4x30 Hex\_Pack Log Periodic, DS Assembly Pack



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



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



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



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



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



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



SM-SM-A100-500 Flexible Cable  
Assembly 500mm DC- 18GHz  
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

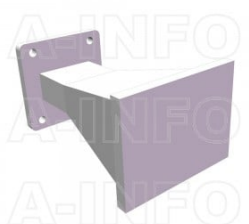


SM-SM-A100-10000 Flexible  
Cable Assembly 10000mm DC-  
18GHz SMA Male to SMA Male

### Similar Products



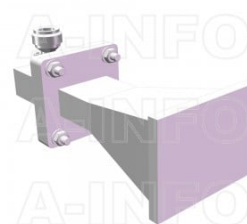
LB-112-10-A Standard Gain Horn  
Antenna 7.05-10GHz 10dB Gain  
Rectangular Waveguide Interface



LB-112-10-ASPO Standard Gain  
Horn Antenna 7.05-10GHz 10dB  
Gain Rectangular Waveguide  
Interface



LB-112-10-C-NF Standard Gain  
Horn Antenna 7.05-10GHz 10dB  
Gain N Type Female



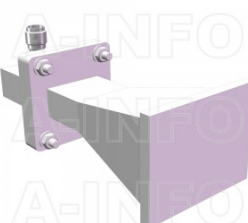
LB-112-10-C-NFSPO Standard  
Gain Horn Antenna 7.05-10GHz  
10dB Gain N Type Female



LB-112-10-C-SFSPO Standard  
Gain Horn Antenna 7.05-10GHz  
10dB Gain SMA Female



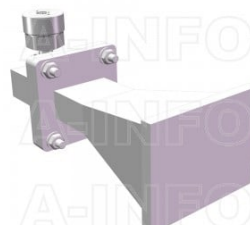
LB-112-10-C-TF Standard Gain  
Horn Antenna 7.05-10GHz 10dB  
Gain TNC Female



LB-112-10-C-TFSPO Standard  
Gain Horn Antenna 7.05-10GHz  
10dB Gain TNC Female



LB-112-10-C-7 Standard Gain  
Horn Antenna 7.05-10GHz 10dB  
Gain 7mm



LB-112-10-C-7SPO Standard Gain  
Horn Antenna 7.05-10GHz 10dB  
Gain 7mm Female



LB-112-10-C-3.5F Standard Gain  
Horn Antenna 7.05-10GHz 10dB  
Gain 3.5mm Female



LB-112-10-C-3.5FSPO Standard  
Gain Horn Antenna 7.05-10GHz  
10dB Gain 3.5mm Female

About this Datasheet

|                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                |                                                                                                                                                         |
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| <ul style="list-style-type: none"><li>● Product Information</li></ul> <p>Product Link:<br/><a href="https://www.ainfoinc.com/lb-112-10-c-sf-standard-gain-horn-antenna-7-05-10-ghz-10db-gain-sma-female">https://www.ainfoinc.com/lb-112-10-c-sf-standard-gain-horn-antenna-7-05-10-ghz-10db-gain-sma-female</a><br/>Data subject to change without notice.<br/>© A-INFO INC. 2023. All Rights Reserved</p> | <ul style="list-style-type: none"><li>● Contact Us</li></ul> <p>Address:dd<br/>60 Tesla, Irvine, CA 92618,<br/>USA</p> <p>Website:<br/><a href="http://www.ainfoinc.com">www.ainfoinc.com</a></p> <p>Email:<br/><a href="mailto:sales@ainfoinc.com">sales@ainfoinc.com</a></p> | <ul style="list-style-type: none"><li>● Phone &amp; Fax</li></ul> <p>Phone:<br/>+1-949-639-9688<br/>+1-949-639-9608</p> <p>Fax:<br/>+1-949-639-9670</p> |
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