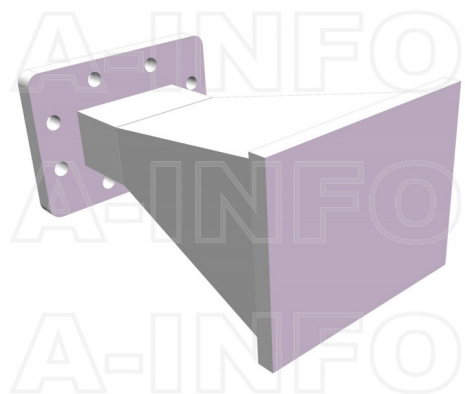




### LB-137-10-ASPO Standard Gain Horn Antenna 5.85-8.2GHz 10dB Gain Rectangular Waveguide Interface

Standard Gain Horn Antenna Operating From 5.85GHz to 8.2GHz With a Nominal 10dB Gain With Rectangular Waveguide Interface

## Product Information

|     |                |
|-----|----------------|
| SKU | LB-137-10-ASPO |
|-----|----------------|

## Description

Standard Gain Horn Antenna LB-137-10-ASPO, operating from 5.85 to 8.2GHz with a nominal 10dB gain and low VSWR 1.25:1 with FDP70 output. The model LB-137-10-ASPO has uniform gain through its frequency span, providing efficient performance characteristics and directionality. 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

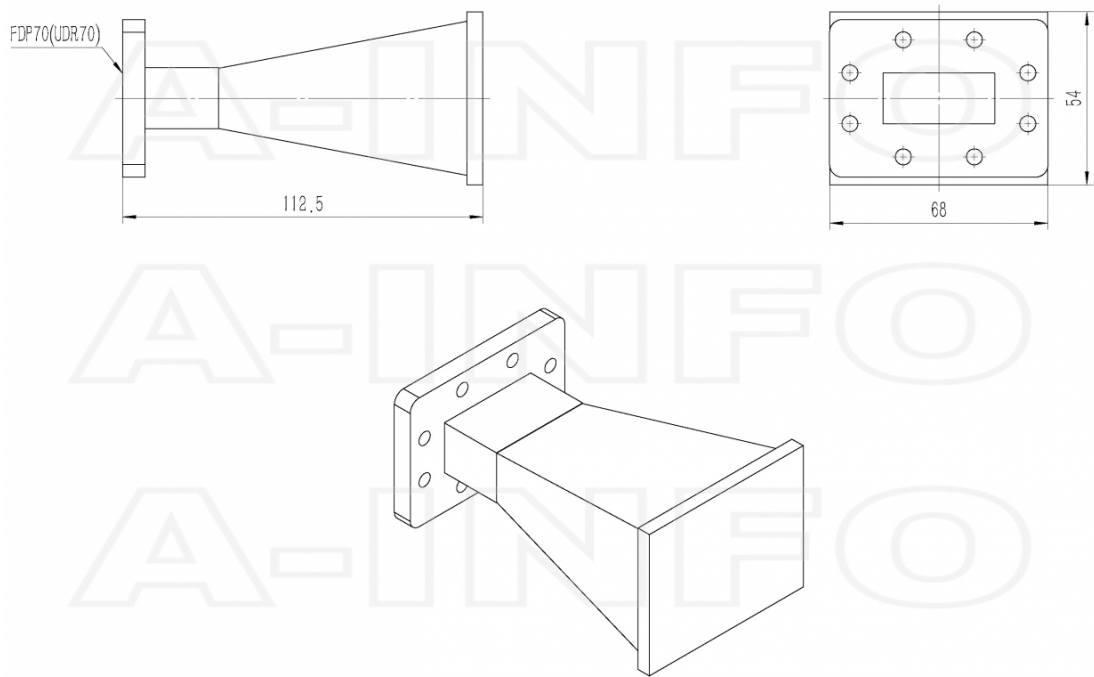
| Electrical Specification           |             | Interface                |                                         |
|------------------------------------|-------------|--------------------------|-----------------------------------------|
| Frequency, Min (GHz)               | 5.85        | Output Type              | Waveguide                               |
| Frequency, Max (GHz)               | 8.2         | Flange Style             | Rectangular                             |
| Waveguide Type                     | Rectangular | Flange Type              | Cover                                   |
| Waveguide Size EIA WR              | WR137       | Flange Designation       | FDP70(UDR70)                            |
| Gain, Typ (dBi)                    | 10          | Mechanical Specification |                                         |
| Polarization                       | Linear      | Figure                   | A Type                                  |
| 3dB Beamwidth, E-Plane, Typ (Deg.) | 42          | Body Material            | Al                                      |
| 3dB Beamwidth, H-Plane, Typ (Deg.) | 41          | Finish                   | Chemical Conversion Coating, Gray Paint |
| Cross Pol. Isolation, Typ (dB)     | 30          | Size, W (mm)             | 68.3                                    |
| VSWR, Typ                          | 1.25:1      | Size, H (mm)             | 54                                      |
|                                    |             | Size, L (mm)             | 112.5                                   |
|                                    |             | Weight, (kg)             | 0.15                                    |

Additional Information

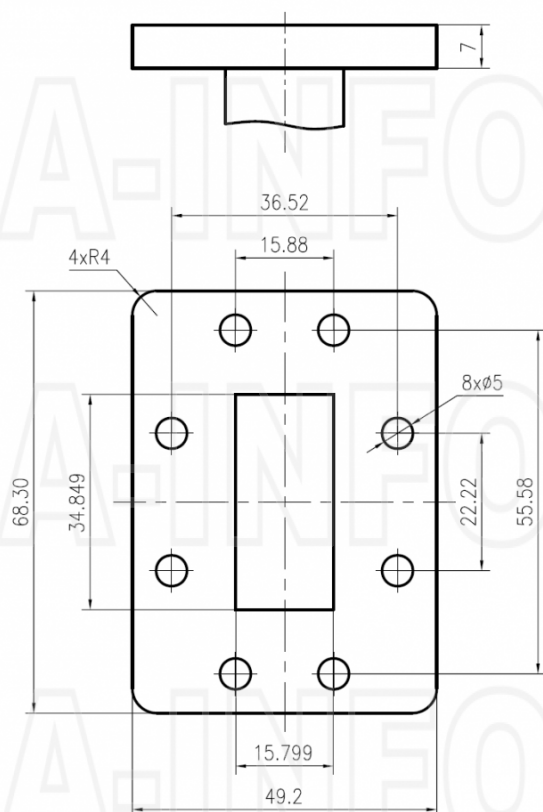
|             |                                          |              |                                                                                                                                 |
|-------------|------------------------------------------|--------------|---------------------------------------------------------------------------------------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

Outline Drawing

FDP70 Output with Radome (Option, P/N: LB-137-10-ASPO, Outdoor Application)



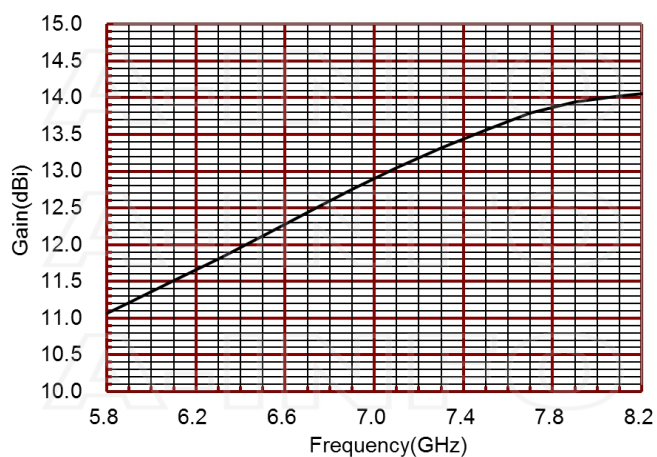
## Flange Drawing



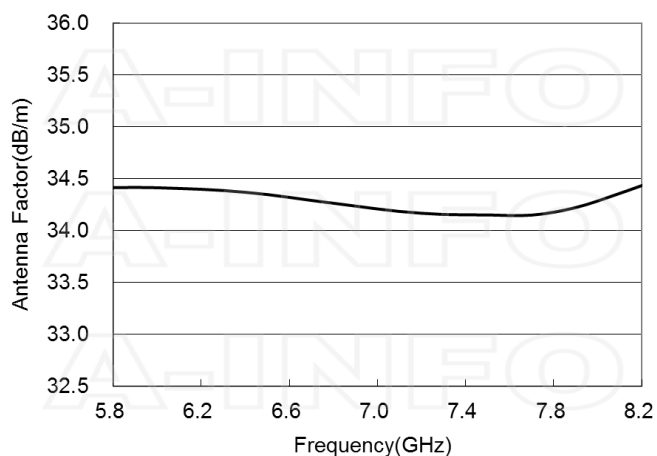
FDP70

## Typical Test Results

### Gain



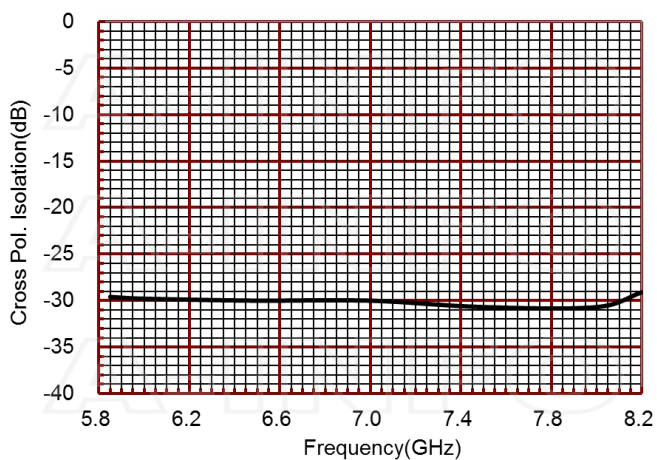
### Antenna Factor



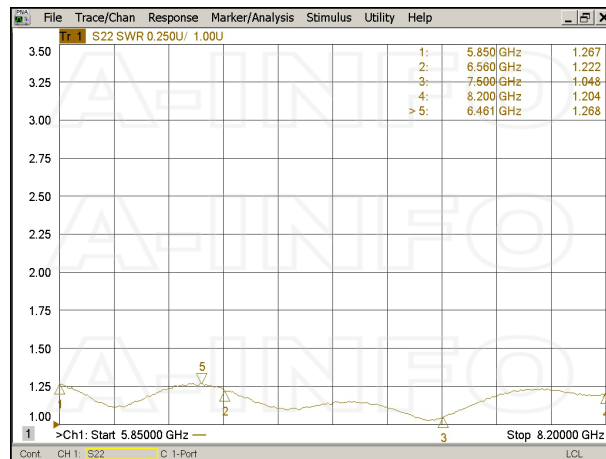
### Antenna Factor (Table)

| Frequency(GHz) | Gain(dBi) | Antenna Factor(dB/m) |
|----------------|-----------|----------------------|
| 5.7            | 10.92     | 34.41                |
| 5.9            | 11.21     | 34.42                |
| 6.1            | 11.51     | 34.41                |
| 6.3            | 11.81     | 34.39                |
| 6.5            | 12.12     | 34.35                |
| 6.7            | 12.44     | 34.29                |
| 6.9            | 12.75     | 34.24                |
| 7.1            | 13.05     | 34.19                |
| 7.3            | 13.32     | 34.16                |
| 7.5            | 13.56     | 34.15                |
| 7.7            | 13.79     | 34.15                |
| 7.9            | 13.94     | 34.22                |
| 8.1            | 14.02     | 34.36                |
| 8.3            | 14.08     | 34.51                |

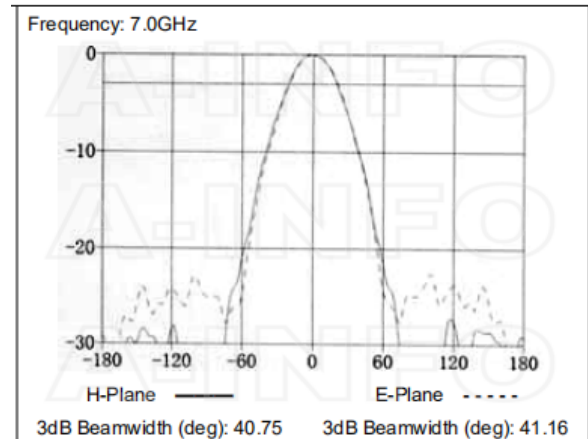
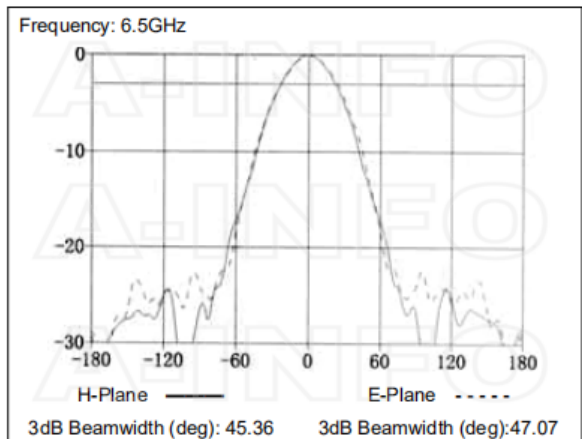
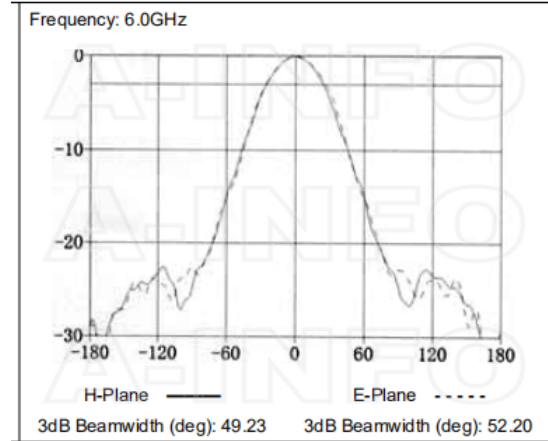
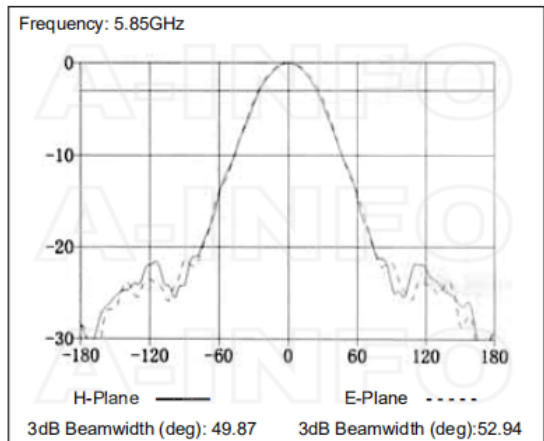
### Cross Polarization Isolation

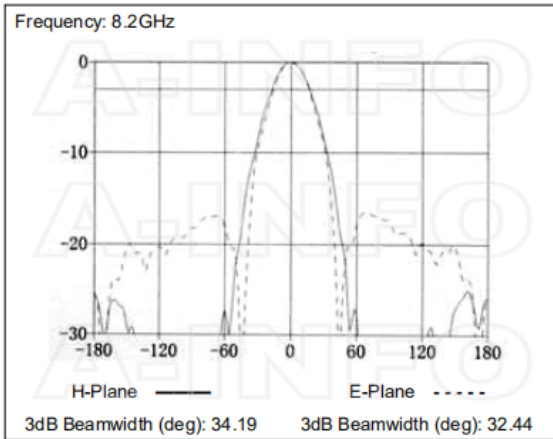
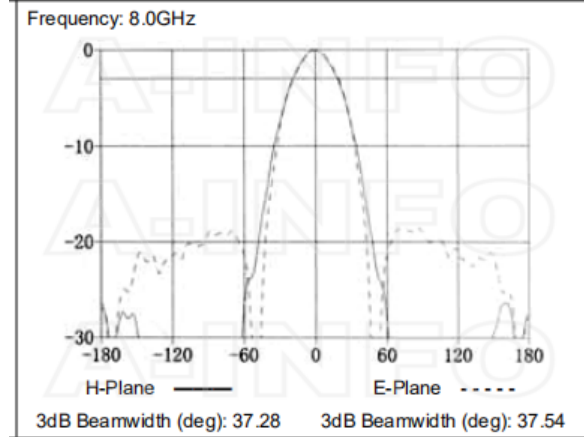
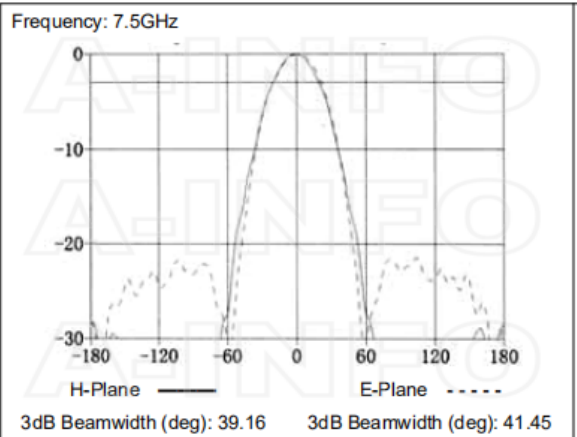


### VSWR



### Pattern





### Related Products



137WCAN Right Angle Rectangular Waveguide to Coaxial Adapter 5.85-8.2GHz  
WR137 to N Type Female



137WCANM Right Angle Rectangular Waveguide to Coaxial Adapter 5.85-8.2GHz  
WR137 to N Type Male



137WCAS Right Angle Rectangular Waveguide to Coaxial Adapter 5.85-8.2GHz  
WR137 to SMA Female



137WCASM Right Angle Rectangular Waveguide to Coaxial Adapter 5.85-8.2GHz  
WR137 to SMA Male



137WCAT Right Angle Rectangular Waveguide to Coaxial Adapter 5.85-8.2GHz WR137 to TNC Female



137WCATM Right Angle Rectangular Waveguide to Coaxial Adapter 5.85-8.2GHz WR137 to TNC Male



137WCA7 Right Angle Rectangular Waveguide to Coaxial Adapter 5.85-8.2GHz WR137 to 7mm



137WCA3.5 Right Angle Rectangular Waveguide to Coaxial Adapter 5.85-8.2GHz WR137 to 3.5mm Female



137WCA3.5M Right Angle Rectangular Waveguide to Coaxial Adapter 5.85-8.2GHz WR137 to 3.5mm Male



137WCAK Right Angle Rectangular Waveguide to Coaxial Adapter 5.85-8.2GHz WR137 to 2.92mm Female



137WCAKM Right Angle Rectangular Waveguide to Coaxial Adapter 5.85-8.2GHz WR137 to 2.92mm Male



137WCA2.4 Right Angle Rectangular Waveguide to Coaxial Adapter 5.85-8.2GHz WR137 to 2.4mm Female



137WCA2.4M Right Angle Rectangular Waveguide to Coaxial Adapter 5.85-8.2GHz WR137 to 2.4mm Male



137WECAN Endlaunch Rectangular Waveguide to Coaxial Adapter 5.85-8.2GHz WR137 to N Type Female



137WECANM Endlaunch Rectangular Waveguide to Coaxial Adapter 5.85-8.2GHz WR137 to N Type Male



137WECAS Endlaunch Rectangular Waveguide to Coaxial Adapter 5.85-8.2GHz WR137 to SMA Female



137WECAK Endlaunch Rectangular Waveguide to Coaxial Adapter 5.85-8.2GHz WR137 to 2.92mm Female



M5x25 Hex\_Pack WR137 Flange Assembly Pack

### Similar Products



LB-137-10-A Standard Gain Horn Antenna 5.85-8.2GHz 10dB Gain Rectangular Waveguide Interface



LB-137-10-C-NF Standard Gain Horn Antenna 5.85-8.2GHz 10dB Gain N Type Female



LB-137-10-C-NFSPO Standard Gain Horn Antenna 5.85-8.2GHz 10dB Gain N Type Female



LB-137-10-C-SF Standard Gain Horn Antenna 5.85-8.2GHz 10dB Gain SMA Female



LB-137-10-C-SFSPO Standard Gain Horn Antenna 5.85-8.2GHz 10dB Gain SMA Female



LB-137-10-C-TF Standard Gain Horn Antenna 5.85-8.2GHz 10dB Gain TNC Female



LB-137-10-C-TFSPO Standard Gain Horn Antenna 5.85-8.2GHz 10dB Gain TNC Female



LB-137-10-C-7 Standard Gain Horn Antenna 5.85-8.2GHz 10dB Gain 7mm



LB-137-10-C-7SPO Standard Gain Horn Antenna 5.85-8.2GHz 10dB Gain 7mm



LB-137-10-C-3.5F Standard Gain Horn Antenna 5.85-8.2GHz 10dB Gain 3.5mm Female



LB-137-10-C-3.5FSPO Standard Gain Horn Antenna 5.85-8.2GHz 10dB Gain 3.5mm Female

### About this Datasheet

|                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                 |                                                                                                                           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| <p>● <b>Product Information</b><br/> Product Link:<br/> <a href="https://www.ainfoinc.com/lb-137-10-aspo-standard-gain-horn-antenna-5-85-8-2-ghz-10db-gain-fdp70">https://www.ainfoinc.com/lb-137-10-aspo-standard-gain-horn-antenna-5-85-8-2-ghz-10db-gain-fdp70</a><br/> Data subject to change without notice.<br/> © A-INFO INC. 2023. All Rights Reserved</p> | <p>● <b>Contact Us</b><br/> Address:dd<br/> 60 Tesla, Irvine, CA 92618, USA<br/><br/> Website:<br/> <a href="http://www.ainfoinc.com">www.ainfoinc.com</a><br/><br/> Email:<br/> <a href="mailto:sales@ainfoinc.com">sales@ainfoinc.com</a></p> | <p>● <b>Phone &amp; Fax</b><br/> Phone:<br/> +1-949-639-9688<br/> +1-949-639-9608<br/><br/> Fax:<br/> +1-949-639-9670</p> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|