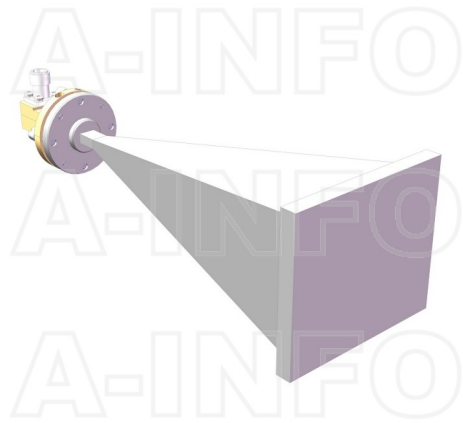


LB-19-25-C-1.85FSPO Standard Gain Horn Antenna 40-60GHz 25dB Gain 1.85mm Female



Standard Gain Horn Antenna Operating From 40GHz to 60GHz With a Nominal 25dB Gain With 1.85mm Female Connector

### Product Information

|     |                     |
|-----|---------------------|
| SKU | LB-19-25-C-1.85FSPO |
|-----|---------------------|

### Description

Standard Gain Horn Antenna LB-19-25-C-1.85FSPO, operating from 40 to 60GHz with a nominal 25dB gain and low VSWR 1.3:1 with 1.85mm Female connector output. The model LB-19-25-C-1.85FSPO has uniform gain through its frequency span, providing efficient performance characteristics and directionality. It can handle 5W continuously and 10W 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

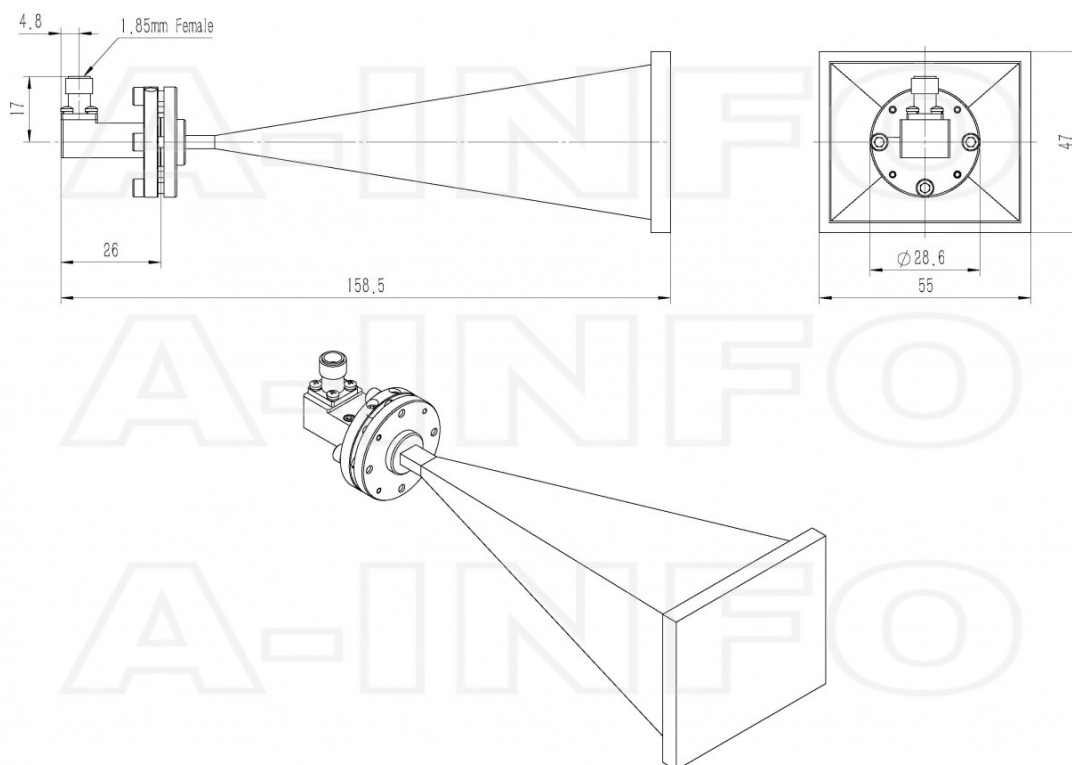
| Electrical Specification           |             | Interface                |                                           |
|------------------------------------|-------------|--------------------------|-------------------------------------------|
| Frequency, Min (GHz)               | 40          | Output Type              | Coaxial                                   |
| Frequency, Max (GHz)               | 60          | Connector                | 1.85mm(V)                                 |
| Waveguide Type                     | Rectangular | Connector Gender         | Female                                    |
| Waveguide Size EIA WR              | WR19        | Mechanical Specification |                                           |
| Gain, Typ (dBi)                    | 25          | Figure                   | C Type                                    |
| Polarization                       | Linear      | Body Material            | Cu                                        |
| 3dB Beamwidth, E-Plane, Typ (Deg.) | 9           | Finish                   | Gold Plated and Silver Plated, Gray Paint |
| 3dB Beamwidth, H-Plane, Typ (Deg.) | 11          | Size, W (mm)             | 55                                        |
| Cross Pol. Isolation, Typ (dB)     | 45          | Size, H (mm)             | 47                                        |
| VSWR, Typ                          | 1.3:1       | Size, L (mm)             | 158.5                                     |
| Impedance, (Ohm)                   | 50          | Weight, (kg)             | 0.2                                       |
| Power Handling, CW, (W)            | 5           |                          |                                           |
| Power Handling, Peak, (W)          | 10          |                          |                                           |

### Additional Information

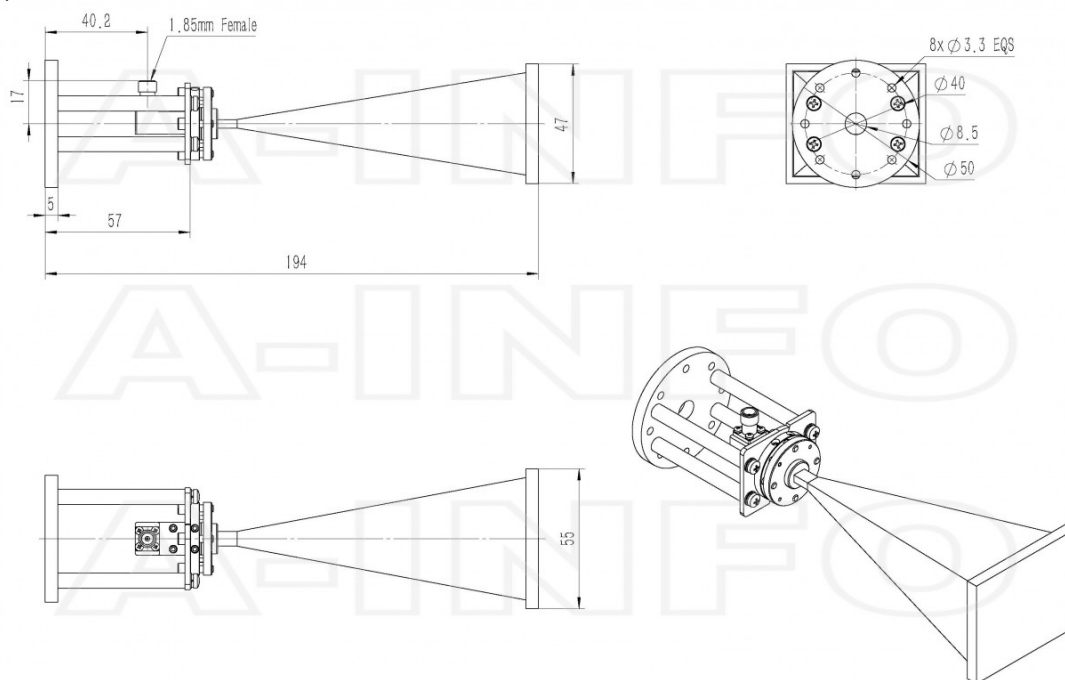
|             |                                          |              |                                                                                                                                 |
|-------------|------------------------------------------|--------------|---------------------------------------------------------------------------------------------------------------------------------|
| 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

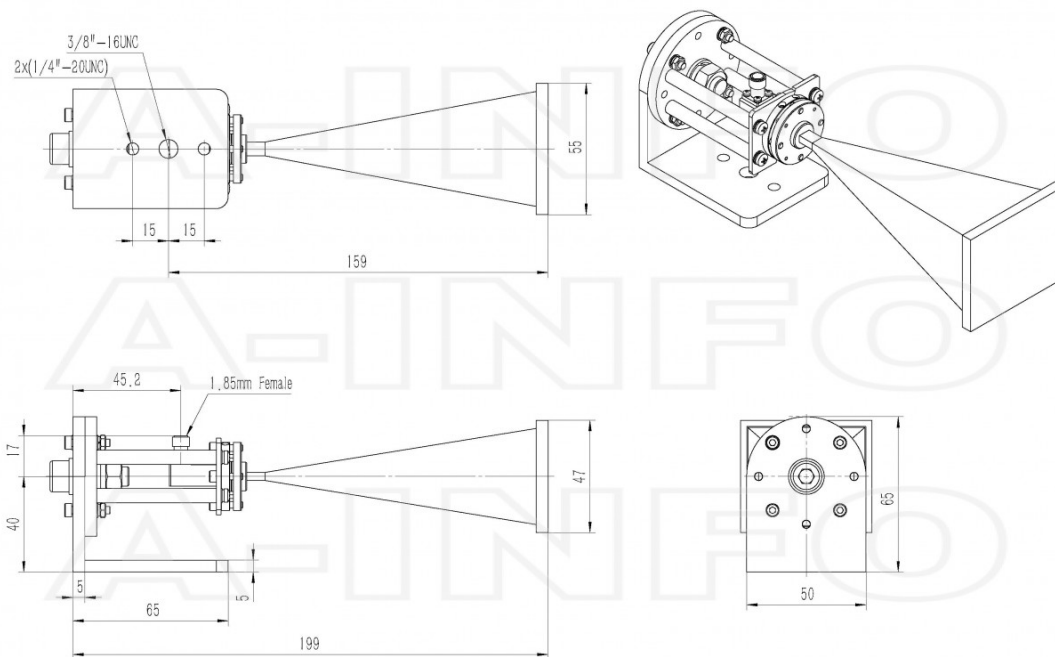
1.85mm-Female Output with Radome (Option, P/N: LB-19-25-C-1.85FSPO, Outdoor Application)



1.85mm-Female Output with Round Mounting Bracket & Radome (Option, P/N: LB-19-10-C-MB & LB-19-25-C-1.85FSPO, Outdoor Application)

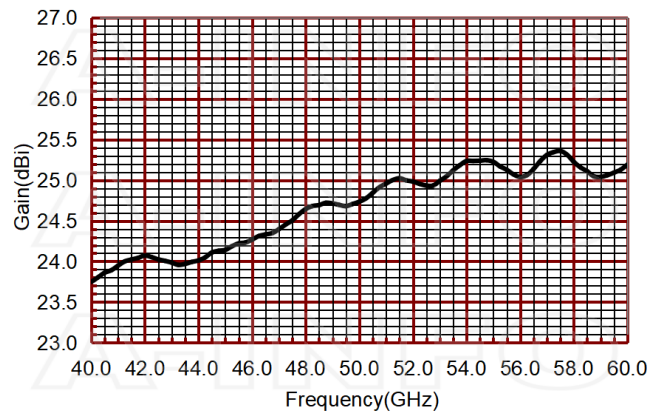


1.85mm-Female Output with L Type Mounting Bracket & Radome (Option, P/N: LB-19-10-C-MBL & LB-19-25-C-1.85FSPO, Outdoor Application)

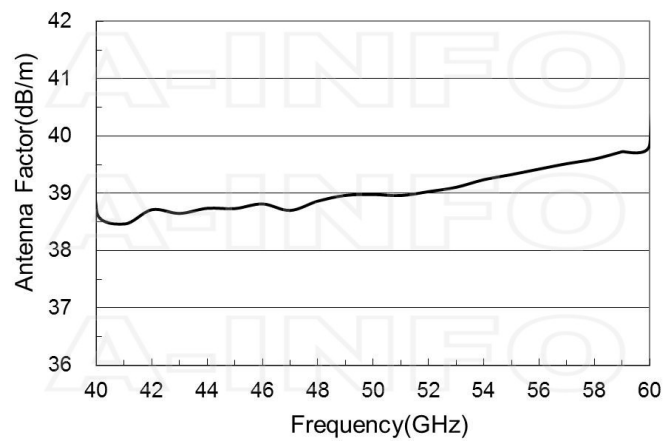


## Typical Test Results

### Gain



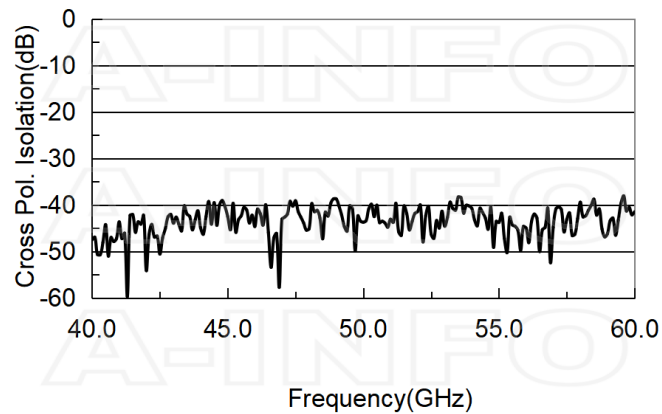
### Antenna Factor



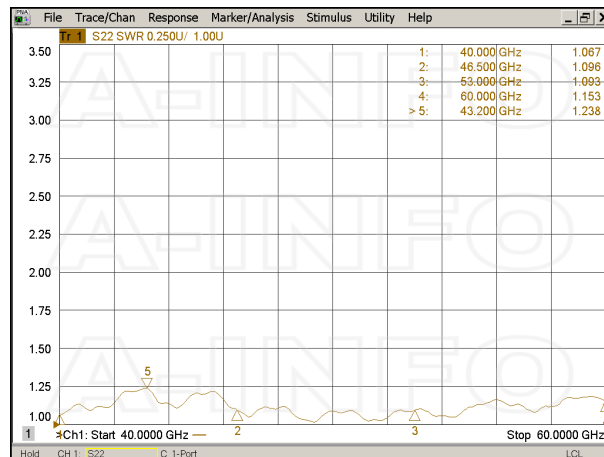
## Antenna Factor (Table)

| Frequency(GHz) | Gain(dBi) | Antenna Factor(dB/m) |
|----------------|-----------|----------------------|
| 40.00          | 23.75     | 38.50                |
| 41.00          | 23.95     | 38.52                |
| 42.00          | 24.07     | 38.60                |
| 43.00          | 23.99     | 38.89                |
| 44.00          | 24.01     | 39.07                |
| 45.00          | 24.14     | 39.13                |
| 46.00          | 24.27     | 39.20                |
| 47.00          | 24.40     | 39.26                |
| 48.00          | 24.64     | 39.19                |
| 49.00          | 24.71     | 39.30                |
| 50.00          | 24.73     | 39.46                |
| 51.00          | 24.96     | 39.40                |
| 52.00          | 24.98     | 39.55                |
| 53.00          | 24.99     | 39.70                |
| 54.00          | 25.23     | 39.62                |
| 55.00          | 25.22     | 39.79                |
| 56.00          | 25.04     | 40.14                |
| 57.00          | 25.31     | 40.02                |
| 58.00          | 25.22     | 40.25                |
| 59.00          | 25.04     | 40.59                |
| 60.00          | 25.19     | 40.58                |

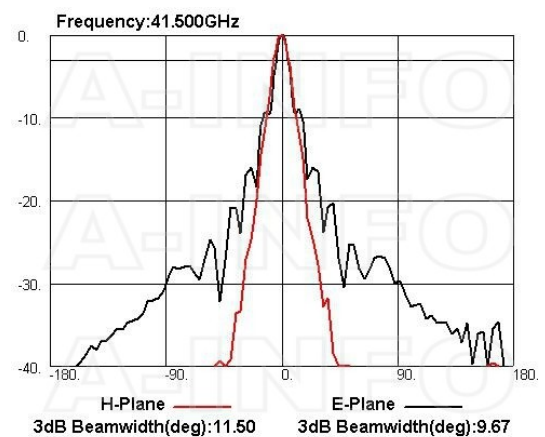
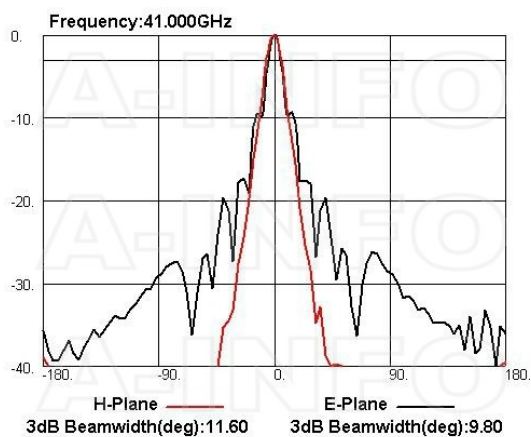
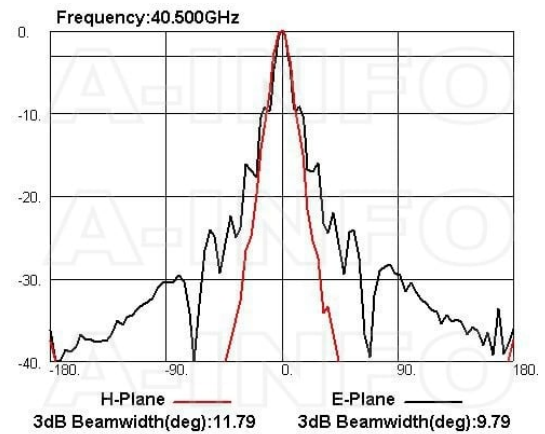
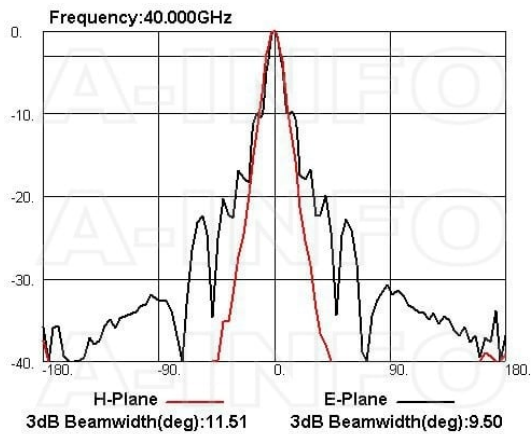
## Cross Polarization Isolation

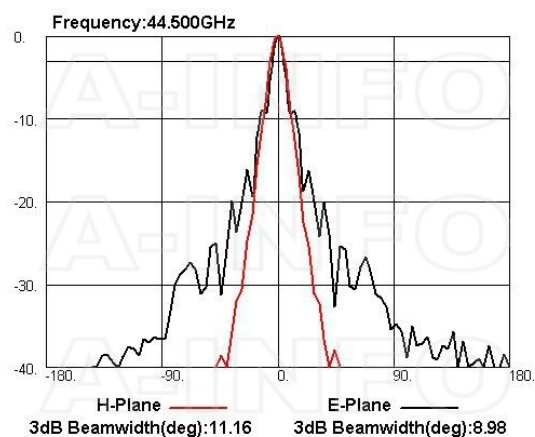
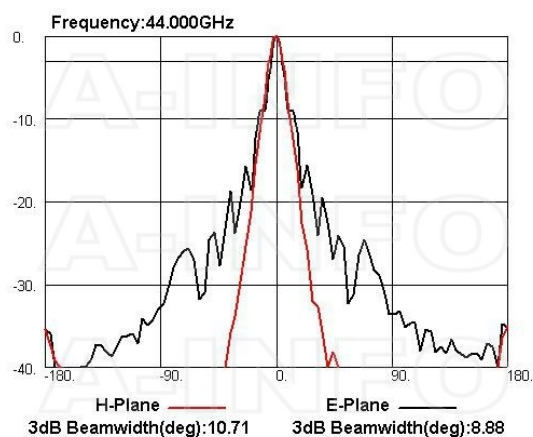
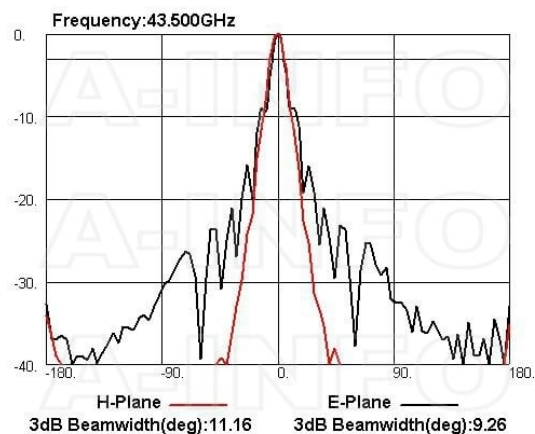
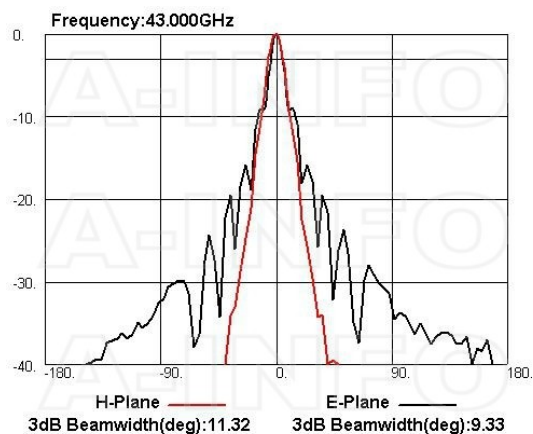
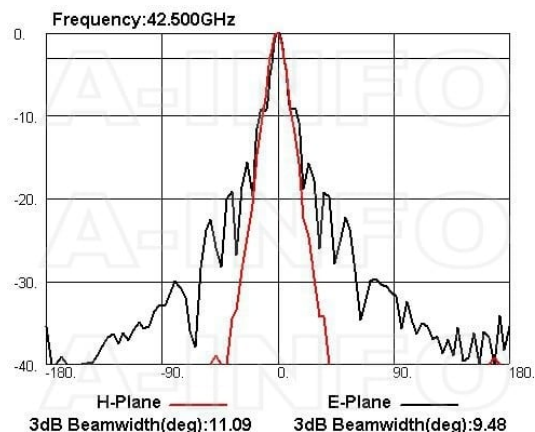
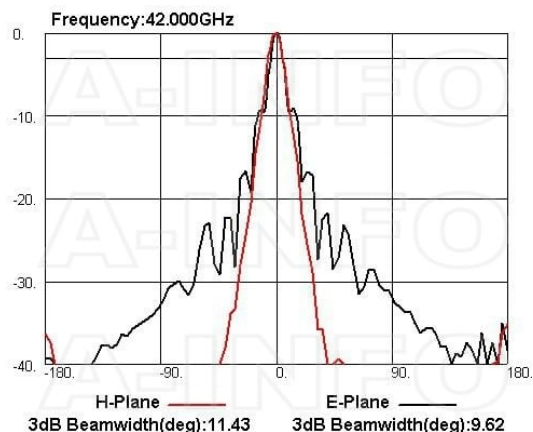


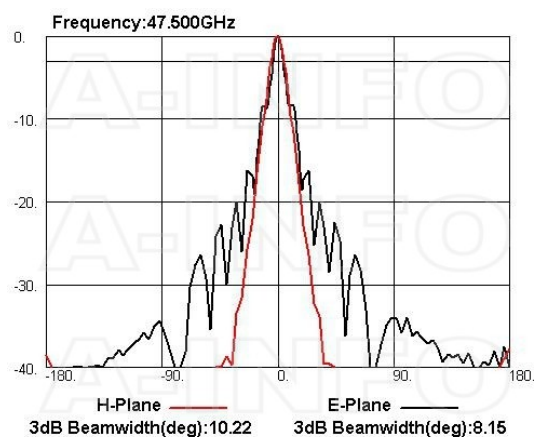
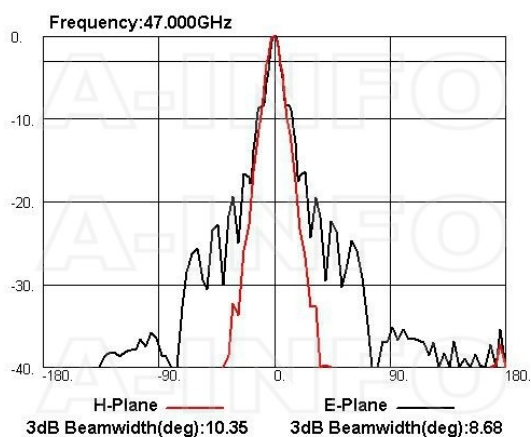
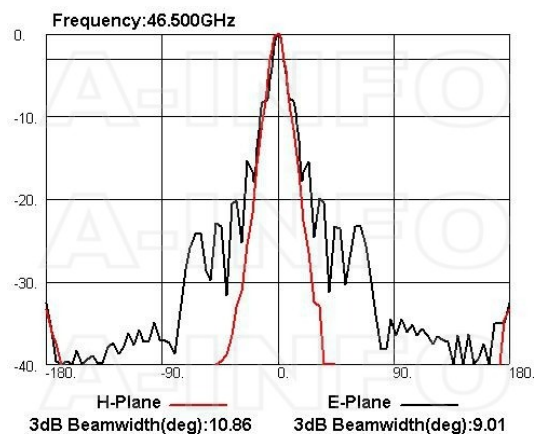
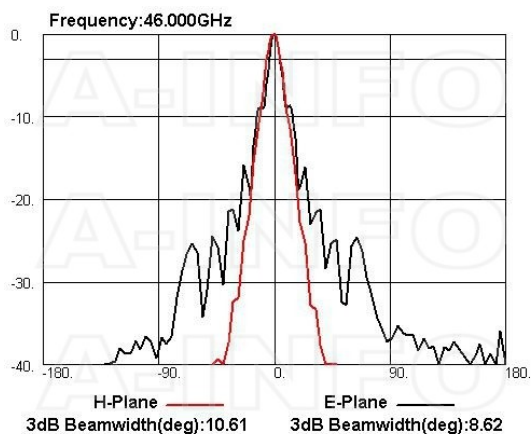
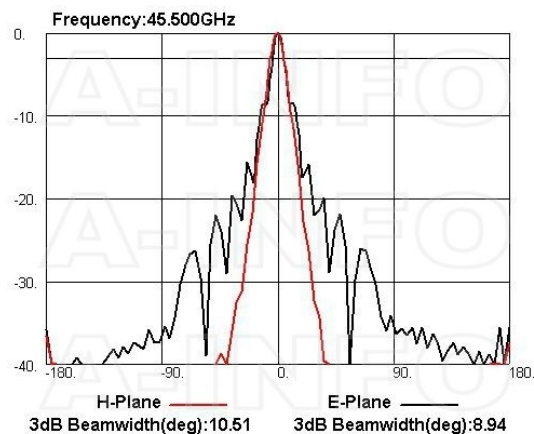
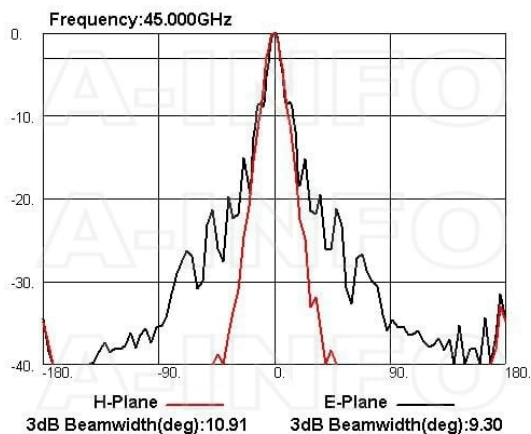
### VSWR

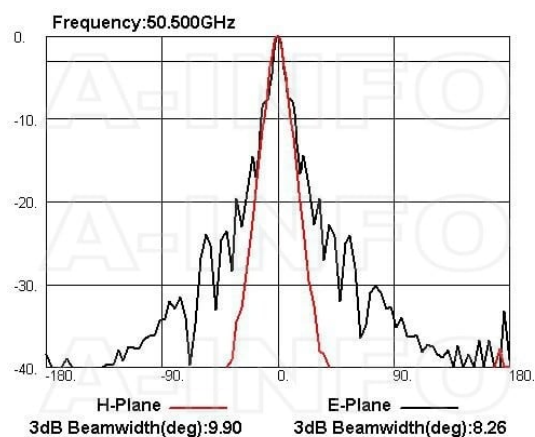
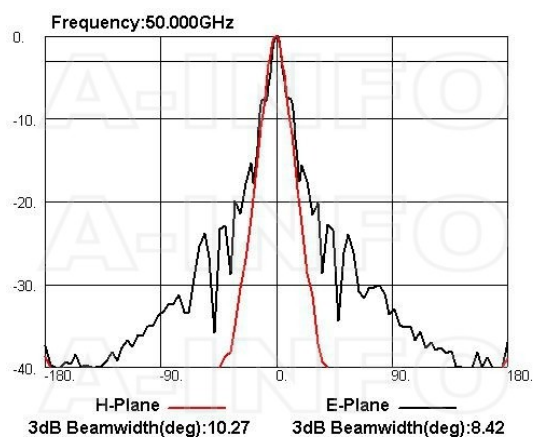
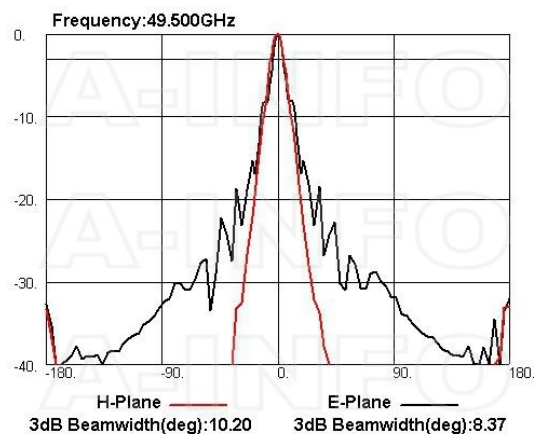
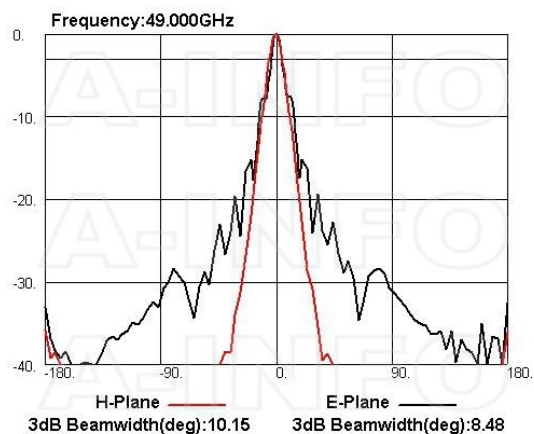
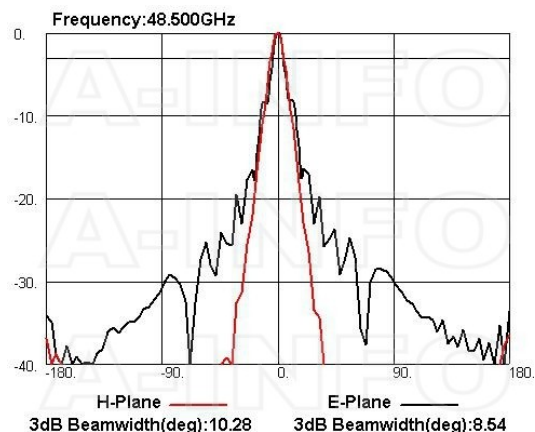
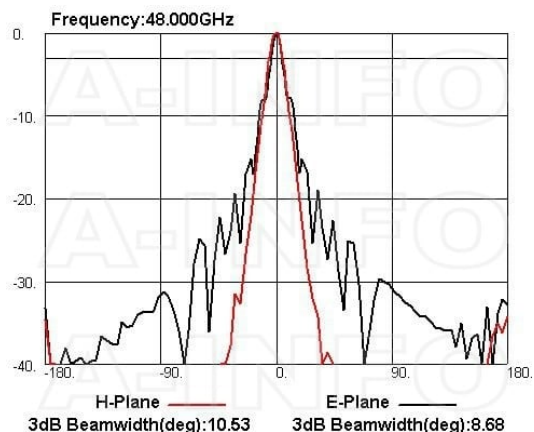


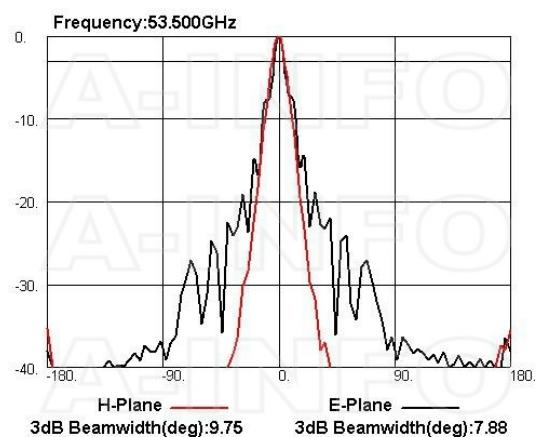
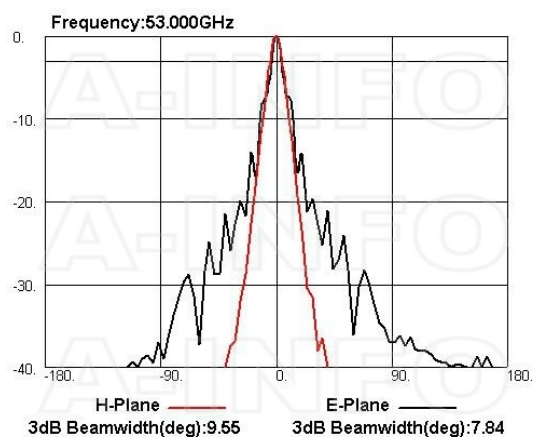
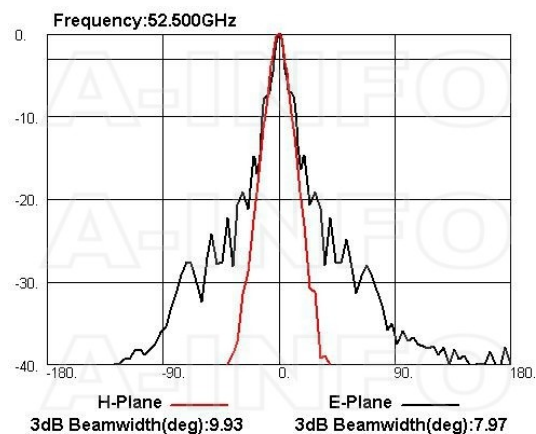
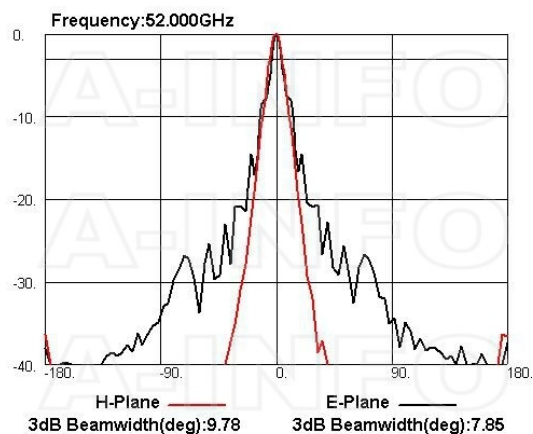
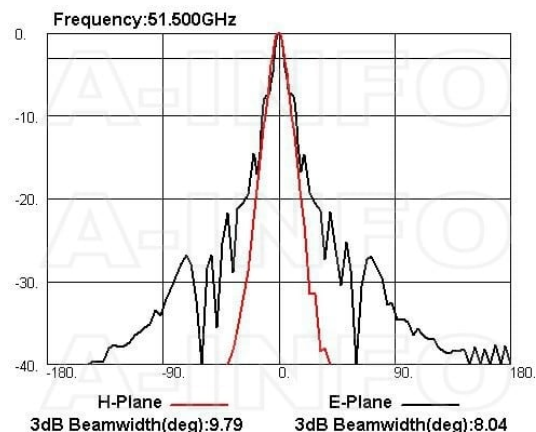
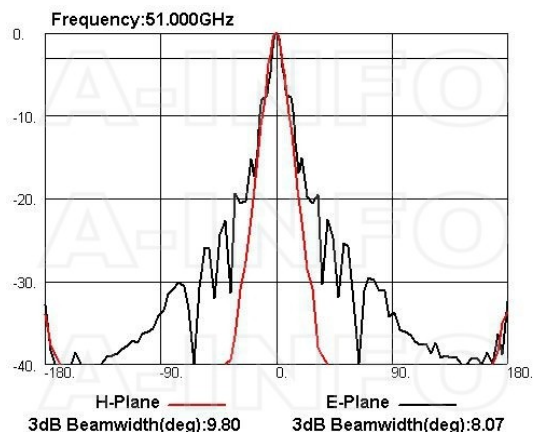
### Pattern

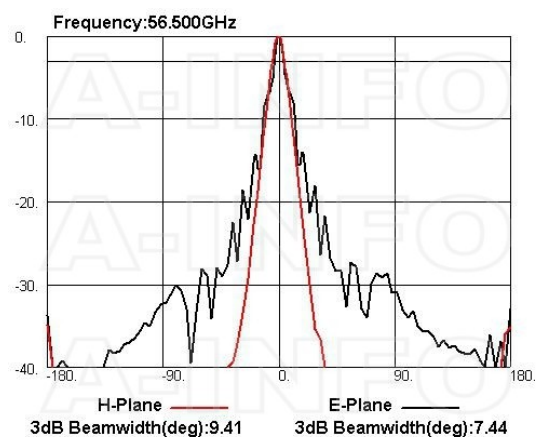
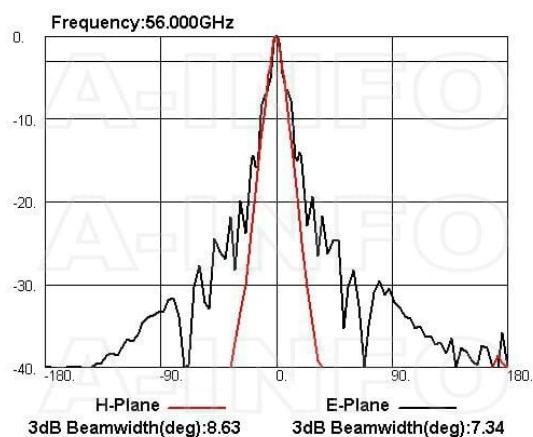
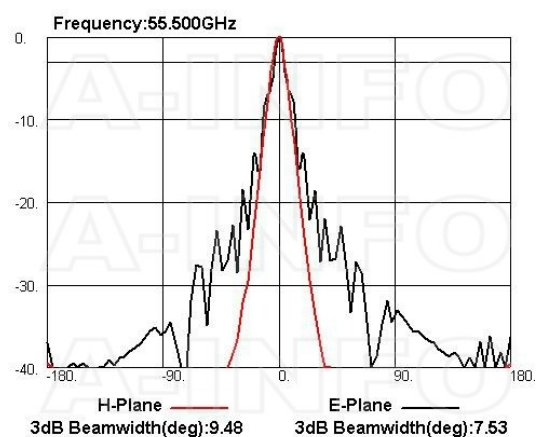
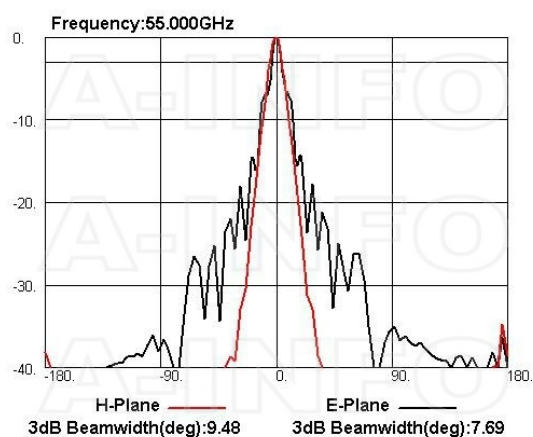
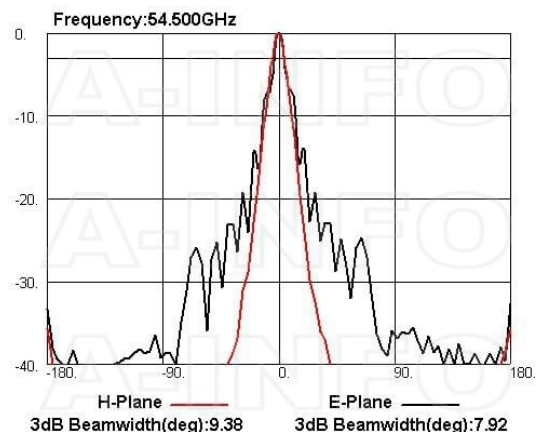
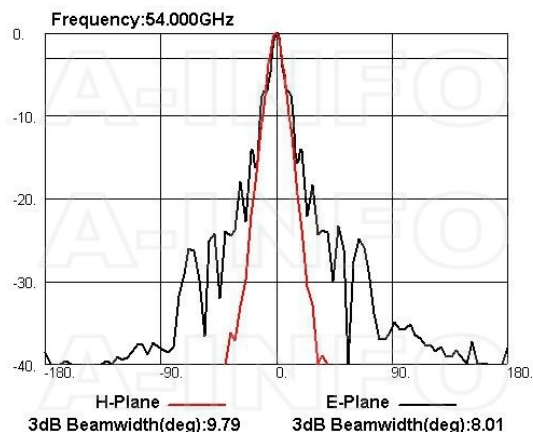


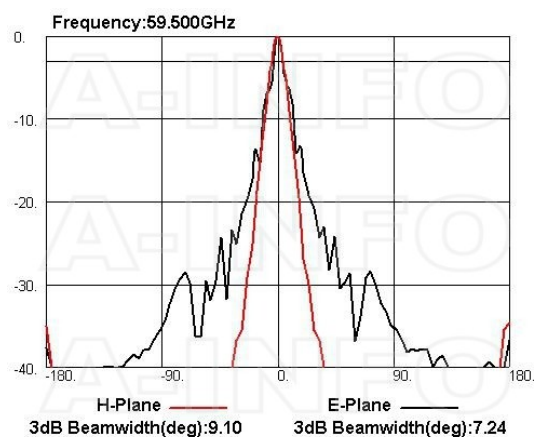
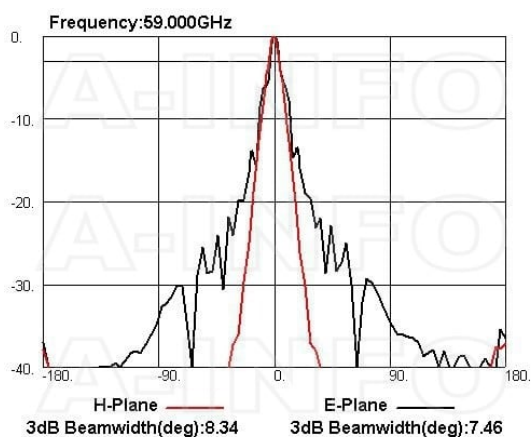
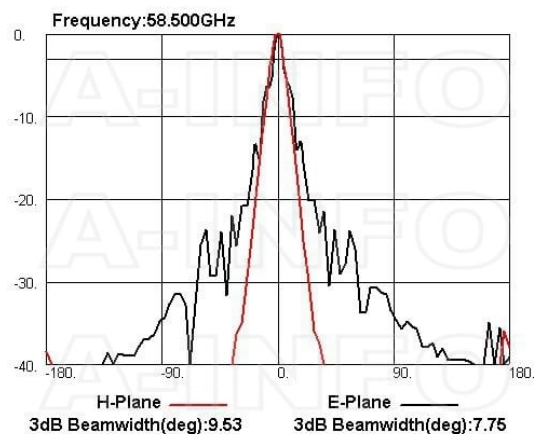
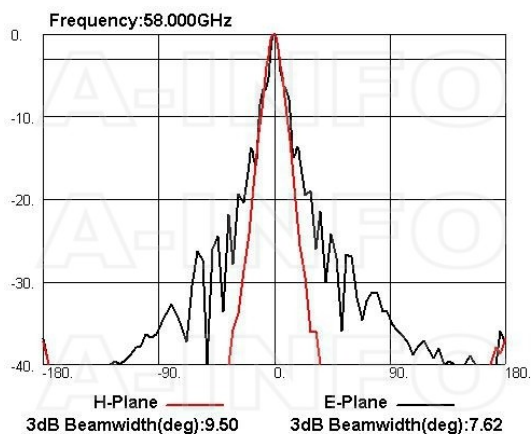
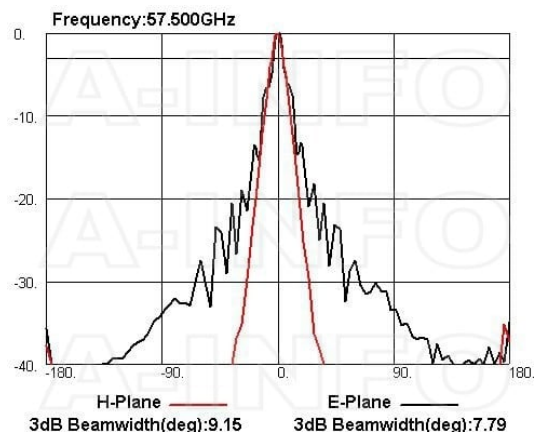
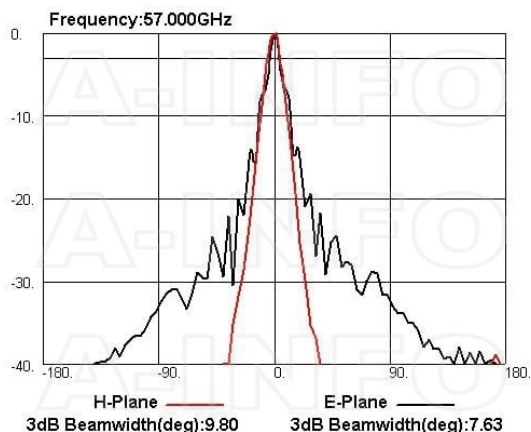


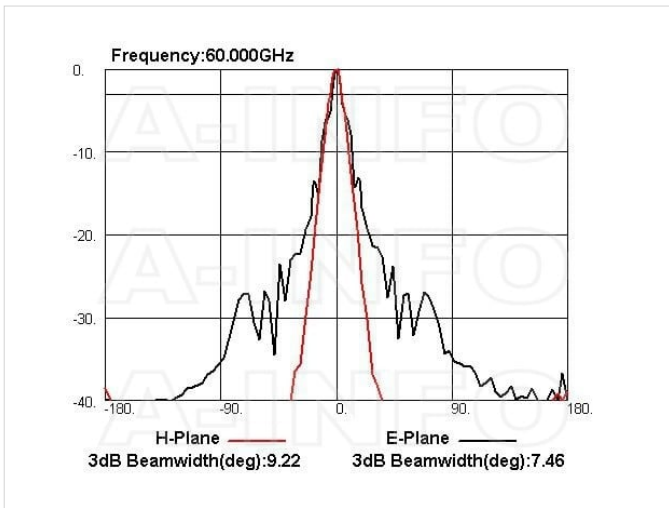












### Related Products



LB-19-10-C-MB Round Type Mounting Bracket



LB-19-10-C-MBL L type mounting bracket



LB-19-10-C-MA Stinger Type Mounting Bracket



Tripod\_15Kg Al Alloy Tripod



3033HL Wooden Tripod



3033QM Wooden Tripod Metalfree



Carrying Case\_LB-19-25-C Al Alloy Carrying Case



HSCS\_4-40UNC\_Pack Assembly Pack

### Similar Products



LB-19-25-A Standard Gain Horn  
Antenna 40-60GHz 25dB Gain  
Rectangular Waveguide Interface



LB-19-25-ASPO Standard Gain  
Horn Antenna 40-60GHz 25dB  
Gain Rectangular Waveguide  
Interface



LB-19-25-C-1.85F Standard Gain  
Horn Antenna 40-60GHz 25dB  
Gain 1.85mm Female



LB-19-25-C-2.4F Standard Gain  
Horn Antenna 40-50GHz 25dB  
Gain 2.4mm Female



LB-19-25-C-2.4FSPO Standard  
Gain Horn Antenna 40-50GHz  
25dB Gain 2.4mm Female

### About this Datasheet

|                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                             |                                                                                                                      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| <p>● <b>Product Information</b><br/>Product Link:<br/><a href="https://www.ainfoinc.com/lb-19-25-c-1-85fspo-standard-gain-horn-antenna-40-60-ghz-25db-gain-1-85mm-female">https://www.ainfoinc.com/lb-19-25-c-1-85fspo-standard-gain-horn-antenna-40-60-ghz-25db-gain-1-85mm-female</a><br/>Data subject to change without notice.<br/>© A-INFO INC. 2023. All Rights Reserved</p> | <p>● <b>Contact Us</b><br/>Address:<br/>60 Tesla, Irvine, CA 92618,<br/>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> |
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