

**LB-187-10-A Standard Gain Horn Antenna 3.95-5.85GHz 10dB Gain  
Rectangular Waveguide Interface**

Standard Gain Horn Antenna Operating From 3.95GHz to 5.85GHz With a Nominal 10dB Gain With Rectangular Waveguide Interface

**Product Information**

|     |             |
|-----|-------------|
| SKU | LB-187-10-A |
|-----|-------------|

**Description**

Standard Gain Horn Antenna LB-187-10-A, operating from 3.95 to 5.85GHz with a nominal 10dB gain and low VSWR 1.15:1 with FDP48 output. The model LB-187-10-A has uniform gain through its frequency span, providing efficient performance characteristics and directionality. 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**

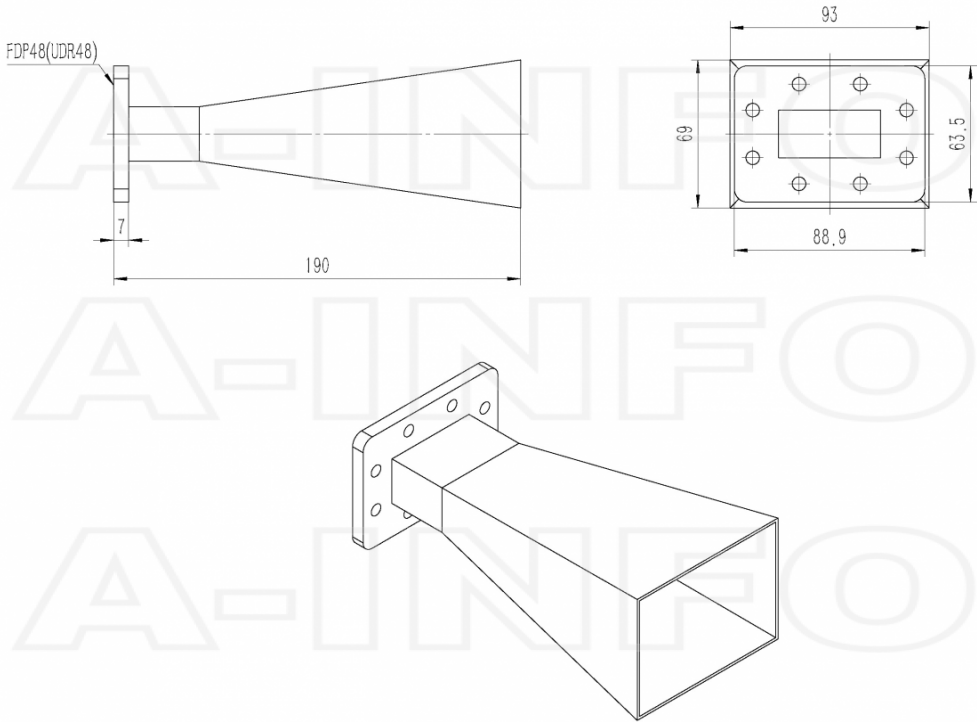
| Electrical Specification           |             | Interface                |                                         |
|------------------------------------|-------------|--------------------------|-----------------------------------------|
| Frequency, Min (GHz)               | 3.95        | Output Type              | Waveguide                               |
| Frequency, Max (GHz)               | 5.85        | Flange Style             | Rectangular                             |
| Waveguide Type                     | Rectangular | Flange Type              | Cover                                   |
| Waveguide Size EIA WR              | WR187       | Flange Designation       | FDP48(UDR48)                            |
| Gain, Typ (dBi)                    | 10          | Mechanical Specification |                                         |
| Polarization                       | Linear      | Figure                   | A Type                                  |
| 3dB Beamwidth, E-Plane, Typ (Deg.) | 43          | Body Material            | Al                                      |
| 3dB Beamwidth, H-Plane, Typ (Deg.) | 40          | Finish                   | Chemical Conversion Coating, Gray Paint |
| Cross Pol. Isolation, Typ (dB)     | 35          | Size, W (mm)             | 93                                      |
| VSWR, Typ                          | 1.15:1      | Size, H (mm)             | 69                                      |
|                                    |             | Size, L (mm)             | 190                                     |
|                                    |             | Weight, (kg)             | 0.3                                     |

Additional Information

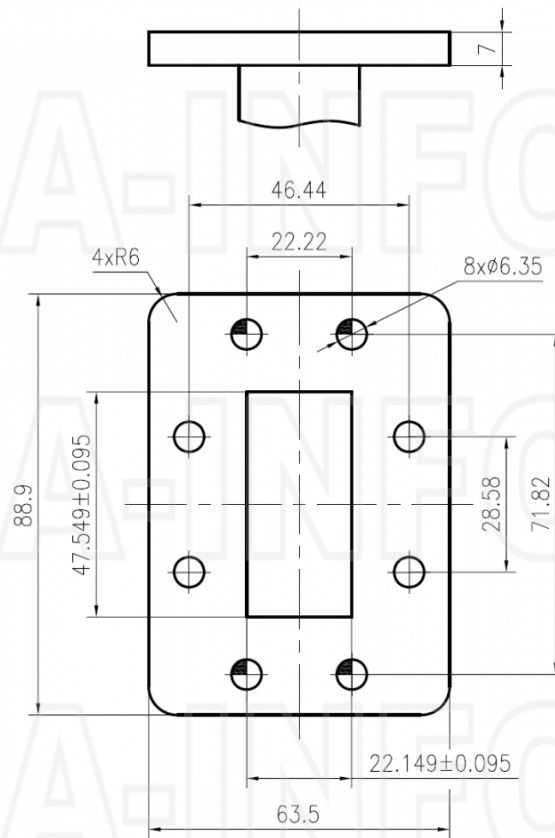
|             |                                         |              |                                                                                                                                 |
|-------------|-----------------------------------------|--------------|-----------------------------------------------------------------------------------------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

FDP48 Output (P/N: LB-187-10-A)



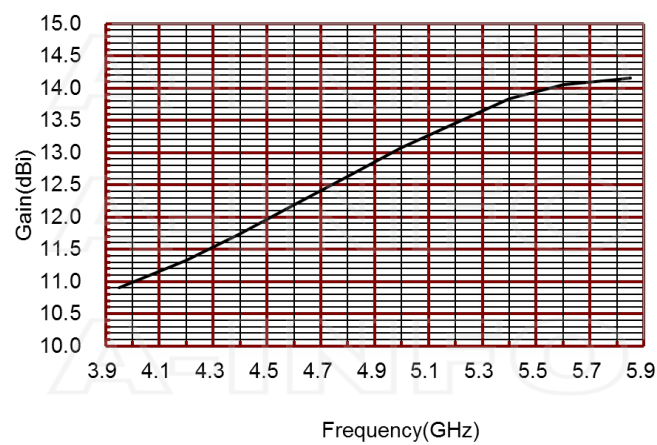
## Flange Drawing



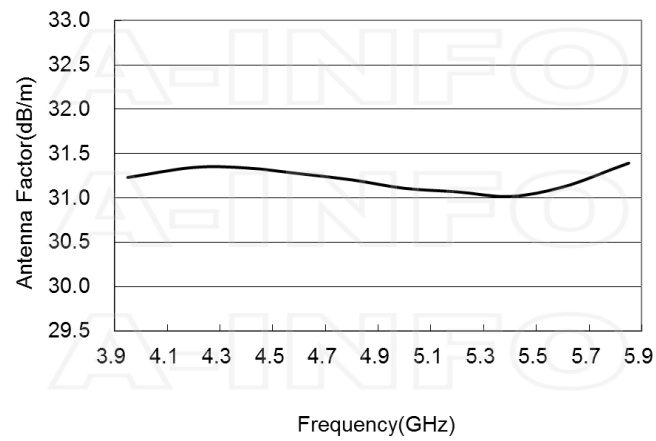
FDP48

## Typical Test Results

### Gain



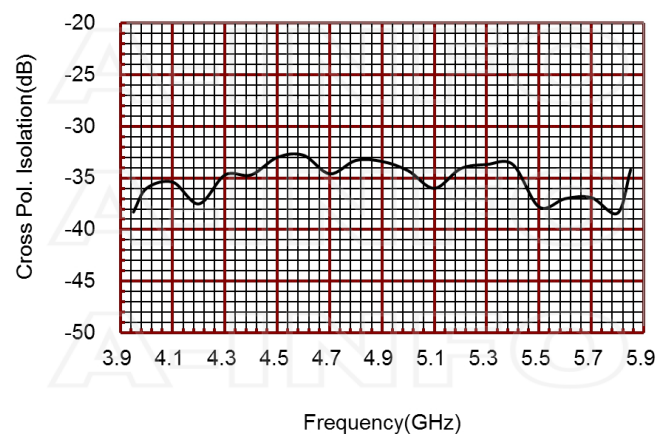
### Antenna Factor



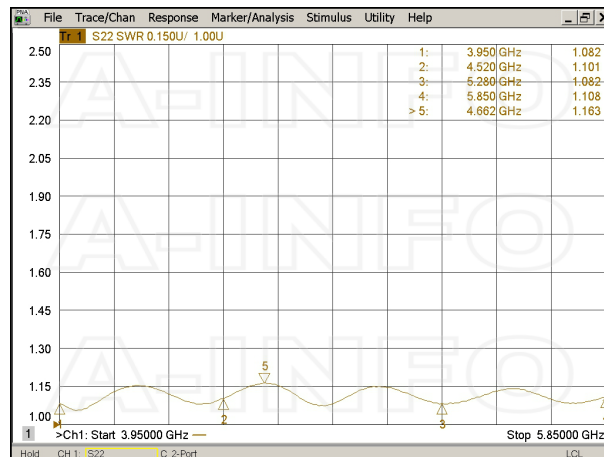
### Antenna Factor (Table)

| Frequency(GHz) | Gain(dBi) | Antenna Factor(dB/m) |
|----------------|-----------|----------------------|
| 3.95           | 10.91     | 31.23                |
| 4.20           | 11.33     | 31.34                |
| 4.40           | 11.74     | 31.34                |
| 4.60           | 12.19     | 31.28                |
| 4.80           | 12.63     | 31.20                |
| 5.00           | 13.08     | 31.11                |
| 5.20           | 13.46     | 31.07                |
| 5.40           | 13.84     | 31.02                |
| 5.60           | 14.05     | 31.12                |
| 5.80           | 14.14     | 31.34                |
| 5.85           | 14.16     | 31.39                |

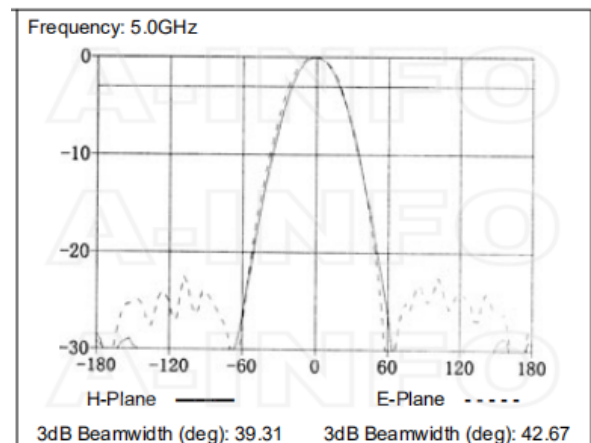
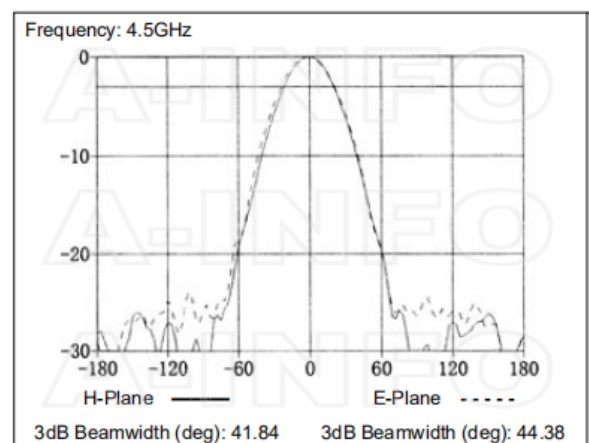
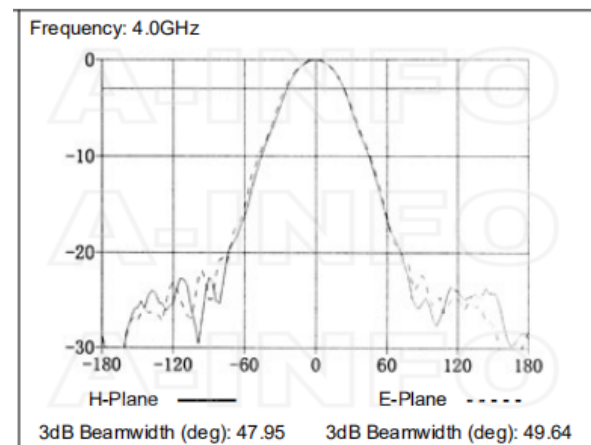
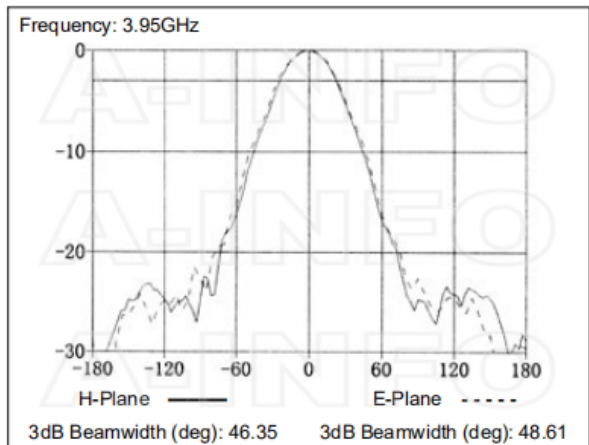
### Cross Polarization Isolation

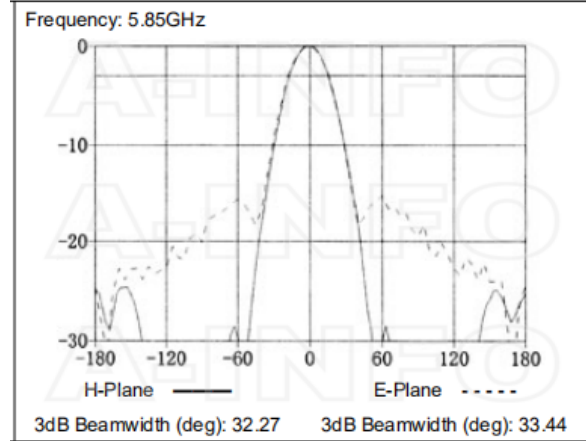
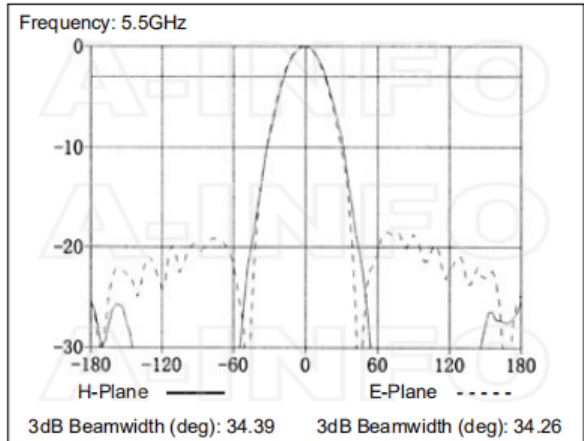


## VSWR



## Pattern





### Related Products



187WCAN Right Angle Rectangular Waveguide to Coaxial Adapter 3.95-5.85GHz WR187 to N Type Female



187WCANM Right Angle Rectangular Waveguide to Coaxial Adapter 3.95-5.85GHz WR187 to N Type Male



187WCAS Right Angle Rectangular Waveguide to Coaxial Adapter 3.95-5.85GHz WR187 to SMA Female



187WCASM Right Angle Rectangular Waveguide to Coaxial Adapter 3.95-5.85GHz WR187 to SMA Male



187WCAT Right Angle Rectangular Waveguide to Coaxial Adapter 3.95-5.85GHz WR187 to TNC Female



187WCATM Right Angle Rectangular Waveguide to Coaxial Adapter 3.95-5.85GHz WR187 to TNC Male



187WCA7 Right Angle Rectangular Waveguide to Coaxial Adapter 3.95-5.85GHz WR187 to 7mm



187WCA3.5 Right Angle Rectangular Waveguide to Coaxial Adapter 3.95-5.85GHz WR187 to 3.5mm Female



187WCA3.5M Right Angle Rectangular Waveguide to Coaxial Adapter 3.95-5.85GHz WR187 to 3.5mm Male



187WCAK Right Angle Rectangular Waveguide to Coaxial Adapter 3.95-5.85GHz WR187 to 2.92mm Female



187WCAKM Right Angle Rectangular Waveguide to Coaxial Adapter 3.95-5.85GHz WR187 to 2.92mm Male



187WCA2.4 Right Angle Rectangular Waveguide to Coaxial Adapter 3.95-5.85GHz WR187 to 2.4mm Female



187WCA2.4M Right Angle Rectangular Waveguide to Coaxial Adapter 3.95-5.85GHz WR187 to 2.4mm Male



187WECAN Endlaunch Rectangular Waveguide to Coaxial Adapter 3.95-5.85GHz WR187 to N Type Female



187WECAS Endlaunch Rectangular Waveguide to Coaxial Adapter 3.95-5.85GHz WR187 to SMA Female



187WECAK Endlaunch Rectangular Waveguide to Coaxial Adapter 3.95-5.85GHz WR187 to 2.92mm Female



M6x30 Hex\_Pack WR284-WR159 Flange Assembly Pack

### Similar Products



LB-187-10-ASPO Standard Gain Horn Antenna 3.95-5.85GHz 10dB Gain Rectangular Waveguide Interface



LB-187-10-C-NF Standard Gain Horn Antenna 3.95-5.85GHz 10dB Gain N Type Female



LB-187-10-C-NFSPO Standard Gain Horn Antenna 3.95-5.85GHz 10dB Gain N Type Female



LB-187-10-C-SF Standard Gain Horn Antenna 3.95-5.85GHz 10dB Gain SMA Female



LB-187-10-C-SFSPO Standard Gain Horn Antenna 3.95-5.85GHz 10dB Gain SMA Female



LB-187-10-C-TF Standard Gain Horn Antenna 3.95-5.85GHz 10dB Gain TNC Female



LB-187-10-C-TFSPO Standard Gain Horn Antenna 3.95-5.85GHz 10dB Gain TNC Female



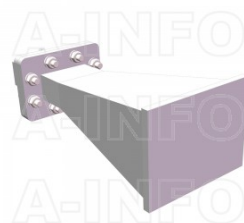
LB-187-10-C-7 Standard Gain Horn Antenna 3.95-5.85GHz 10dB Gain 7mm



LB-187-10-C-7SPO Standard Gain Horn Antenna 3.95-5.85GHz 10dB Gain 7mm



LB-187-10-C-3.5F Standard Gain Horn Antenna 3.95-5.85GHz 10dB Gain 3.5mm Female



LB-187-10-C-3.5FSPO Standard Gain Horn Antenna 3.95-5.85GHz 10dB Gain 3.5mm Female

### About this Datasheet

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| <p>● <b>Product Information</b><br/> Product Link:<br/> <a href="https://www.ainfoinc.com/lb-187-10-a-standard-gain-horn-antenna-3-95-5-85-ghz-10db-gain-fdp48">https://www.ainfoinc.com/lb-187-10-a-standard-gain-horn-antenna-3-95-5-85-ghz-10db-gain-fdp48</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> |
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