



### LB-5-15-A Standard Gain Horn Antenna 140-220GHz 15dB Gain Rectangular Waveguide Interface

Standard Gain Horn Antenna Operating From 140GHz to 220GHz With a Nominal 15dB Gain With Rectangular Waveguide Interface

## Product Information

SKU	LB-5-15-A
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## Description

Standard Gain Horn Antenna LB-5-15-A, operating from 140 to 220GHz with a nominal 15dB gain and low VSWR 1.2:1 with UG387/U-M output. The model LB-5-15-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

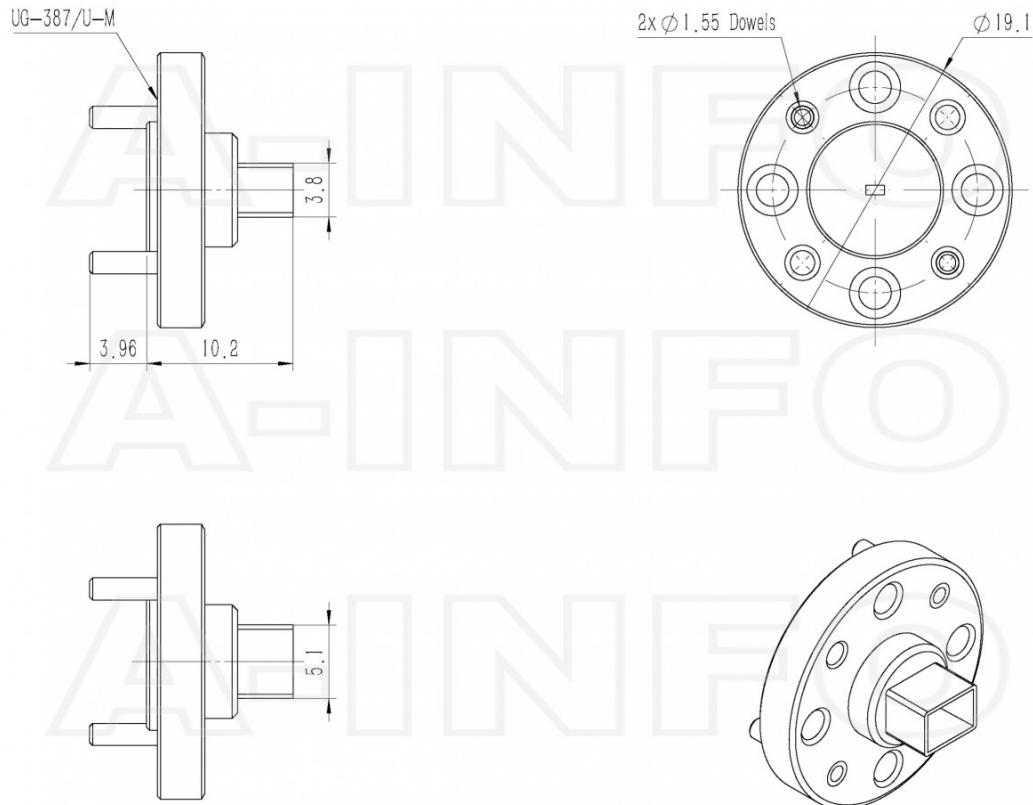
Electrical Specification		Interface	
Frequency, Min (GHz)	140	Output Type	Waveguide
Frequency, Max (GHz)	220	Flange Style	Round
Waveguide Type	Rectangular	Flange Type	Cover
Waveguide Size EIA WR	WR5	Flange Designation	UG-387/U-M
Gain, Typ (dBi)	15	Mechanical Specification	
Polarization	Linear	Figure	A Type
3dB Beamwidth, E-Plane, Typ (Deg.)	23	Body Material	Cu
3dB Beamwidth, H-Plane, Typ (Deg.)	26	Finish	Gold Plated
Cross Pol. Isolation, Typ (dB)	30	Size, W (mm)	19.1
VSWR, Typ	1.2:1	Size, H (mm)	19.1
		Size, L (mm)	10.2
		Weight, (kg)	0.01

## Additional Information

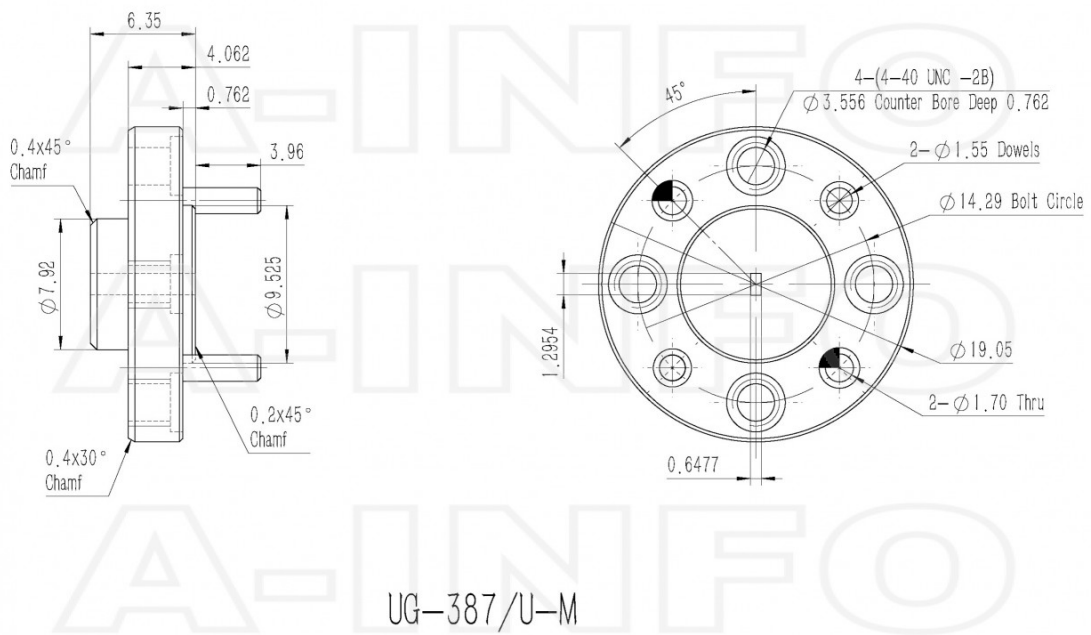
Application	General Purpose Indoor & Outdoor, Fixed	Solution for	Gain Reference Antenna Measurement Reflector Feed Far-field Measurement System Intergration Material Measurement
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## Outline Drawing

UG-387/U-M Output (P/N: LB-5-15-A)

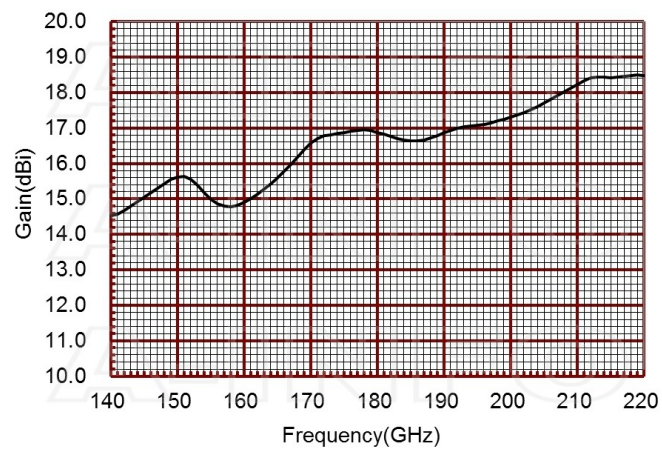


## Flange Drawing

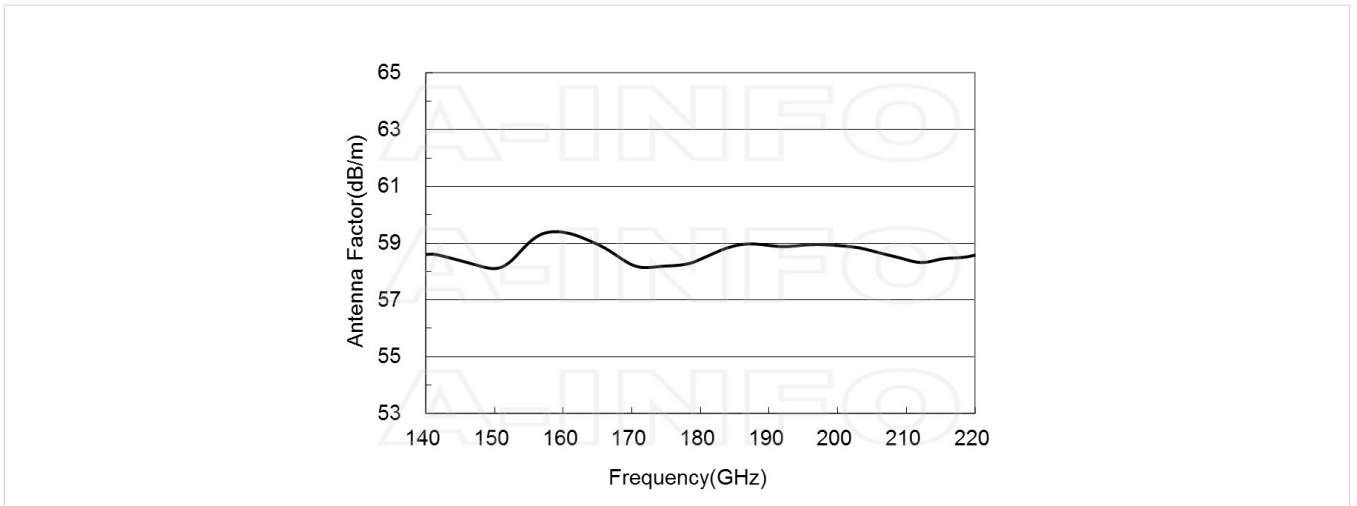


## Typical Test Results

### Gain



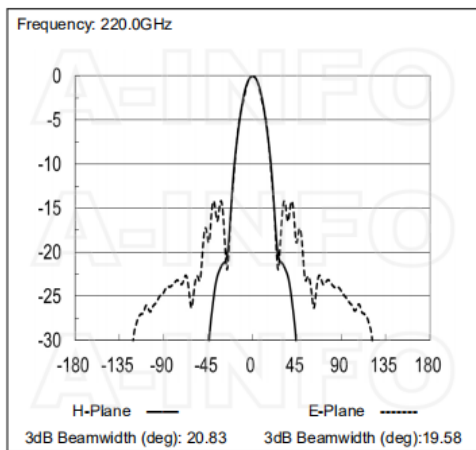
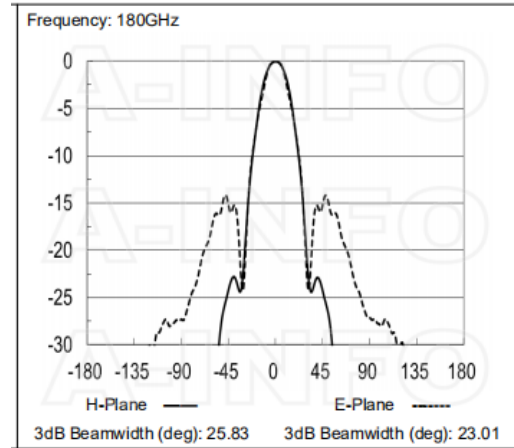
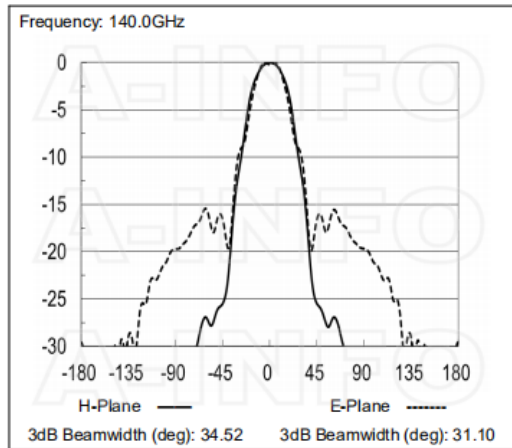
## Antenna Factor



Antenna Factor (Table)

Frequency (GHz)	Gain (dBi)	Antenna Factor (dB/m)		Frequency (GHz)	Gain (dBi)	Antenna Factor (dB/m)
140	14.53	58.60		181	16.82	58.54
141	14.58	58.61		182	16.76	58.65
142	14.68	58.57		183	16.70	58.76
143	14.80	58.51		184	16.66	58.84
144	14.93	58.45		185	16.64	58.91
145	15.05	58.39		186	16.65	58.95
146	15.18	58.32		187	16.67	58.97
147	15.30	58.25		188	16.72	58.97
148	15.43	58.18		189	16.79	58.95
149	15.55	58.13		190	16.87	58.92
150	15.63	58.11		191	16.94	58.89
151	15.64	58.15		192	17.00	58.88
152	15.55	58.29		193	17.03	58.89
153	15.39	58.51		194	17.06	58.91
154	15.19	58.77		195	17.08	58.93
155	15.00	59.02		196	17.11	58.95
156	14.86	59.21		197	17.15	58.95
157	14.79	59.33		198	17.20	58.95
158	14.79	59.39		199	17.25	58.93
159	14.83	59.41		200	17.31	58.92
160	14.91	59.39		201	17.38	58.90
161	15.01	59.34		202	17.44	58.88
162	15.13	59.27		203	17.52	58.84
163	15.28	59.17		204	17.61	58.79
164	15.44	59.07		205	17.72	58.73
165	15.60	58.96		206	17.82	58.66
166	15.77	58.84		207	17.93	58.60
167	15.97	58.69		208	18.03	58.55
168	16.19	58.53		209	18.13	58.48
169	16.40	58.37		210	18.24	58.42
170	16.58	58.24		211	18.34	58.36
171	16.71	58.16		212	18.42	58.32
172	16.78	58.14		213	18.44	58.33
173	16.82	58.15		214	18.43	58.39
174	16.84	58.18		215	18.42	58.44
175	16.87	58.20		216	18.43	58.47
176	16.91	58.21		217	18.46	58.48
177	16.94	58.23		218	18.48	58.49
178	16.95	58.27		219	18.49	58.53
179	16.94	58.33		220	18.48	58.58
180	16.88	58.44				

## Pattern



## Related Products



HSCS\_4-40UNC\_Pack Assembly Pack

### Similar Products



LB-5-15-ASPO Standard Gain Horn Antenna 140-220GHz 15dB Gain Rectangular Waveguide Interface



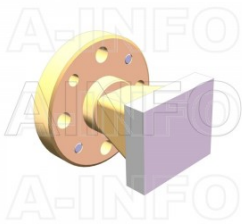
LB-5-10-A Standard Gain Horn Antenna 140-220GHz 10dB Gain Rectangular Waveguide Interface



LB-5-10-ASPO Standard Gain Horn Antenna 140-220GHz 10dB Gain Rectangular Waveguide Interface



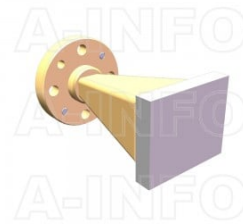
LB-5-20-A Standard Gain Horn Antenna 140-220GHz 20dB Gain Rectangular Waveguide Interface



LB-5-20-ASPO Standard Gain Horn Antenna 140-220GHz 20dB Gain Rectangular Waveguide Interface



LB-5-25-A Standard Gain Horn Antenna 140-220GHz 25dB Gain Rectangular Waveguide Interface



LB-5-25-ASPO Standard Gain Horn Antenna 140-220GHz 25dB Gain Rectangular Waveguide Interface

### About this Datasheet

- **Product Information**

Product Link:  
<https://www.ainfoinc.com/lb-5-15-a-standard-gain-horn-antenna-140-220-ghz-15db-gain-ug387-u-m>  
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- **Contact Us**

Address:  
 60 Tesla, Irvine, CA 92618, USA  
 Website:  
[www.ainfoinc.com](http://www.ainfoinc.com)  
 Email:  
[sales@ainfoinc.com](mailto:sales@ainfoinc.com)

- **Phone & Fax**

Phone:  
 +1-949-639-9688  
 +1-949-639-9608  
 Fax:  
 +1-949-639-9670