

LB-70180-20-A Multi Octave Horn Antenna 7-18GHz 20dB Gain Double Ridge Waveguide Interface

Multi Octave Horn Antenna From 7GHz to 18GHz With a Nominal 20dB Gain With Double Ridge Waveguide Interface



### Product Information

SKU	LB-70180-20-A
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### Description

Multi octave horn antenna LB-70180-20-A, operating from 7 to 18GHz with a nominal 20dB gain and low VSWR 1.5:1 with FPWRD750D24 output. The model LB-70180-20-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 multi octave horn antenna is linearly polarized and ideally suited for EMI testing, direction finding, surveillance, antenna gain and pattern measurements and other applications.

### Technical Specification

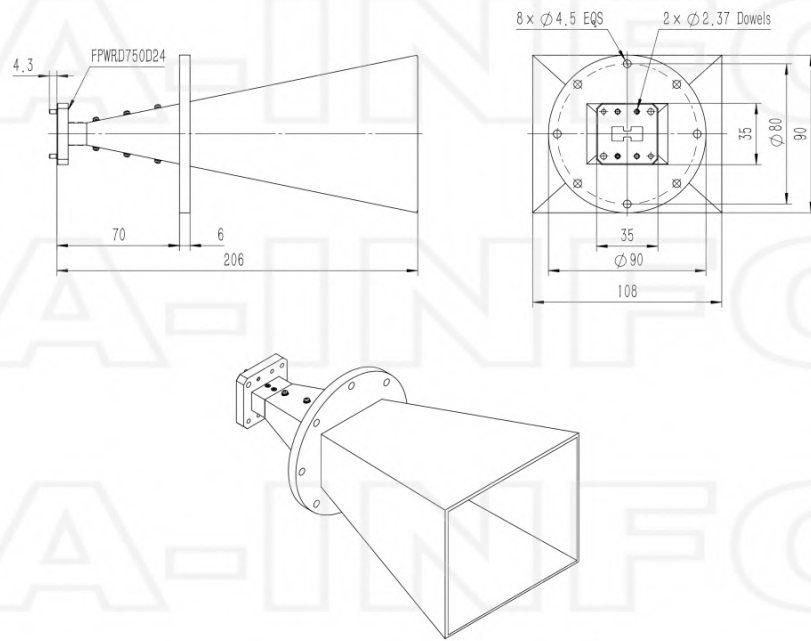
Electrical Specification		Interface	
Frequency, Min (GHz)	7	Output Type	Waveguide
Frequency, Max (GHz)	18	Flange Designation, WRD	FPWRD750D24
Waveguide Type	Double Ridge	Mechanical Specification	
Waveguide Size EIA WRD	WRD750	Figure	A Type
Gain, Typ (dBi)	20	Body Material	Al
Polarization	Linear	Finish	Chemical Conversion Coating, Gray Paint
3dB Beamwidth, E-Plane, Min (Deg.)	8	Size, W (mm)	108
3dB Beamwidth, E-Plane, Max (Deg.)	26	Size, H (mm)	90
3dB Beamwidth, H-Plane, Min (Deg.)	9	Size, L (mm)	206
3dB Beamwidth, H-Plane, Max (Deg.)	29	Weight, (kg)	0.35
Cross Pol. Isolation, Typ (dB)	40		
VSWR, Typ	1.5:1		

## Additional Information

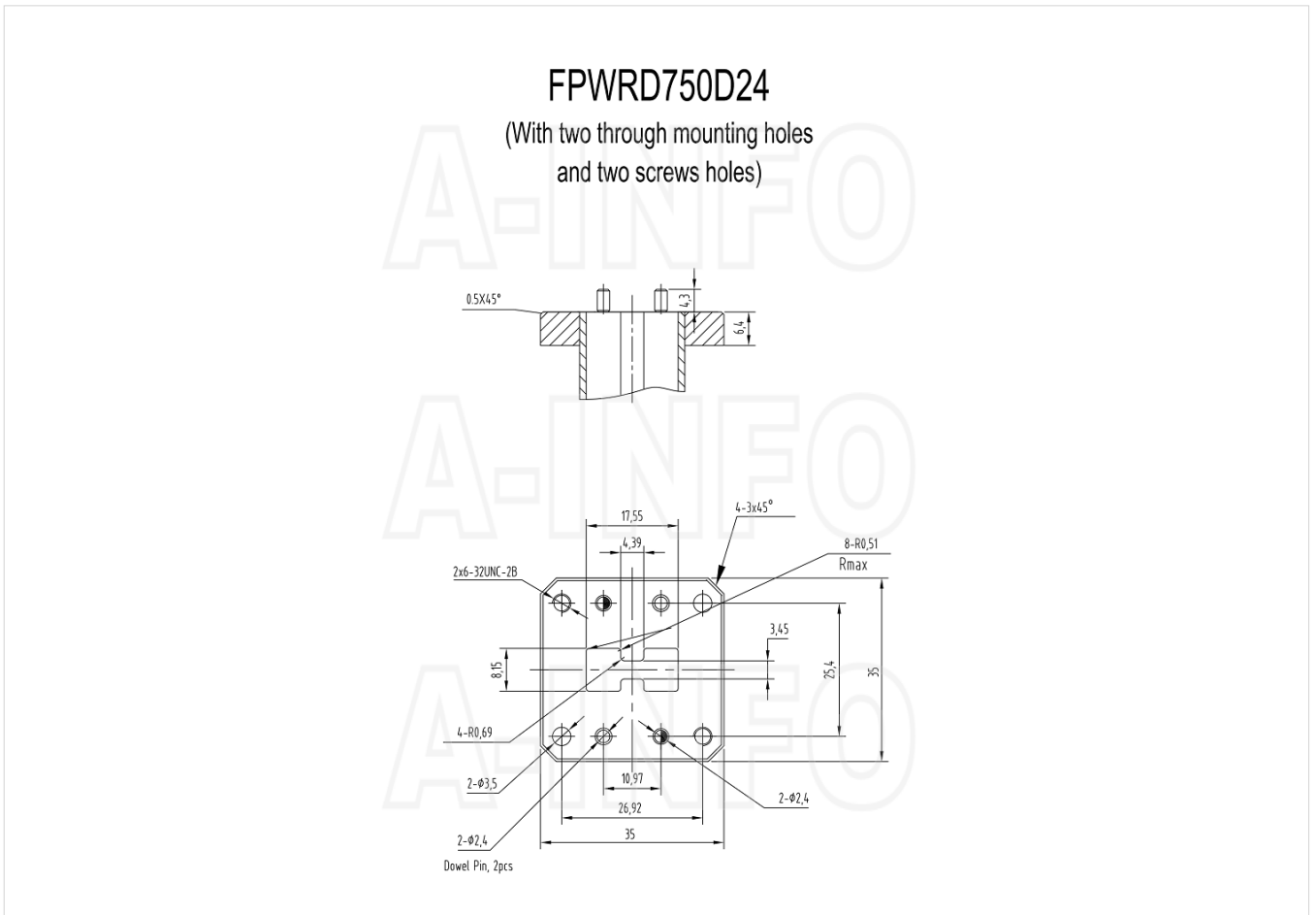
Application	General Purpose Indoor & Outdoor, Fixed	Solution for	Gain Reference Antenna Measurement Far-field Measurement System Intergration
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## Outline Drawing

FPWRD750D24 Output (P/N: LB-75180-20-A)

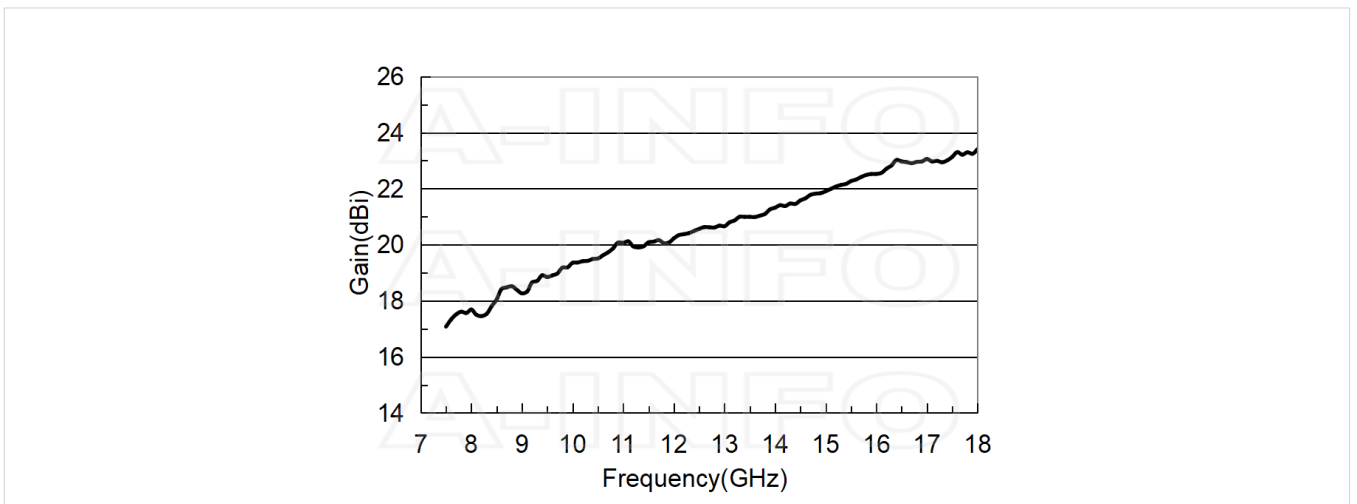


## Flange Drawing

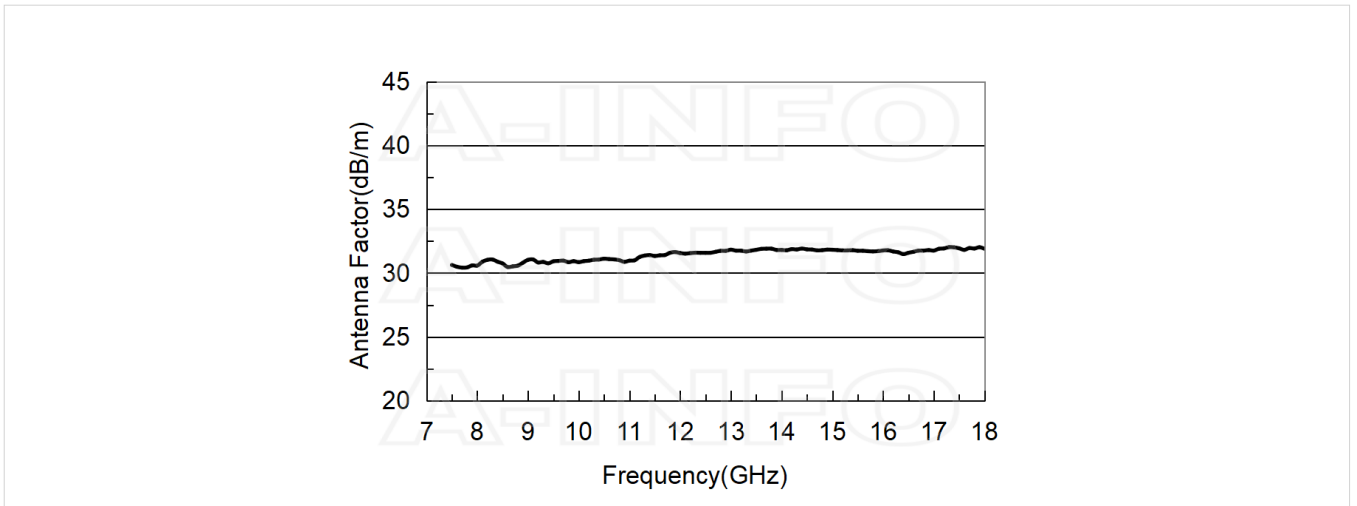


## Typical Test Results

### Gain



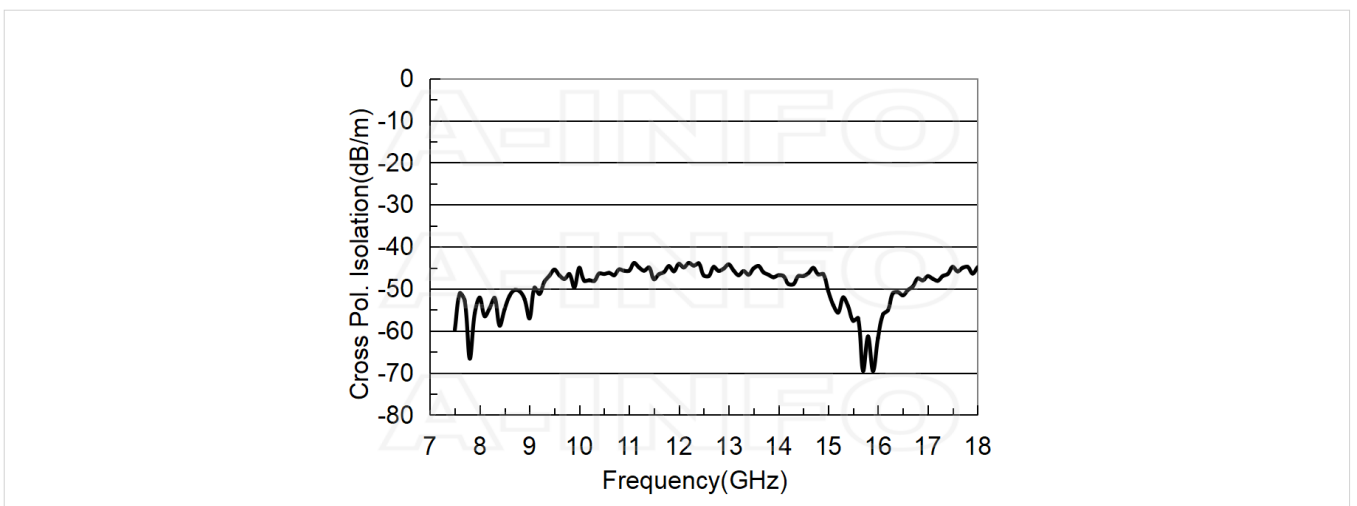
## Antenna Factor



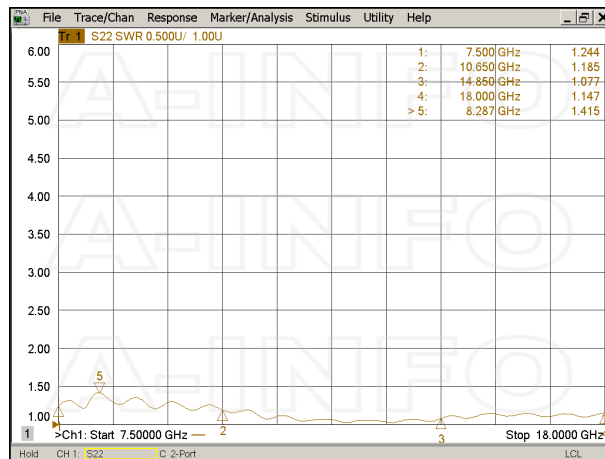
## Antenna Factor (Table)

Frequency(GHz)	Gain(dBi )	Antenna Factor(dB/m)
7.5	17.08	30.63
8.0	17.69	30.58
9.0	18.26	31.03
10.0	19.35	30.86
11.0	20.07	30.97
12.0	20.23	31.57
13.0	20.66	31.83
14.0	21.32	31.81
15.0	21.91	31.82
16.0	22.52	31.77
17.0	23.06	31.76
18.0	23.41	31.90

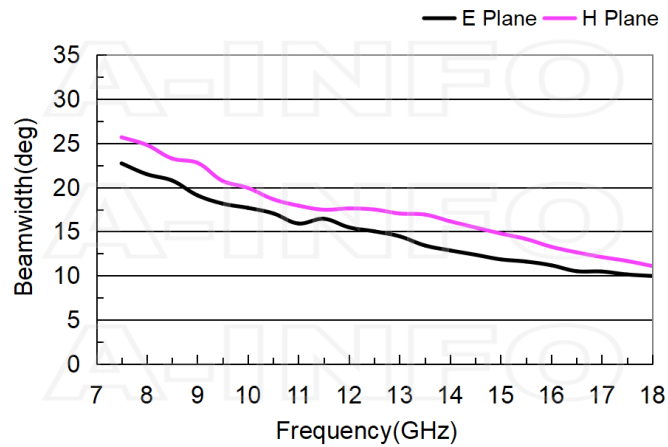
## Cross Polarization Isolation



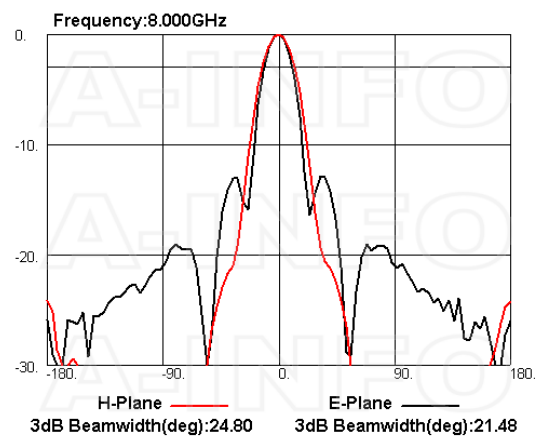
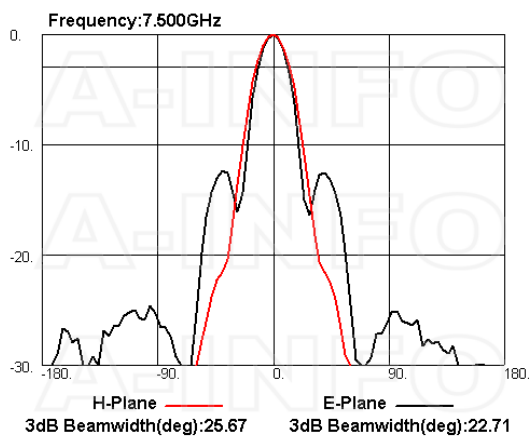
## VSWR

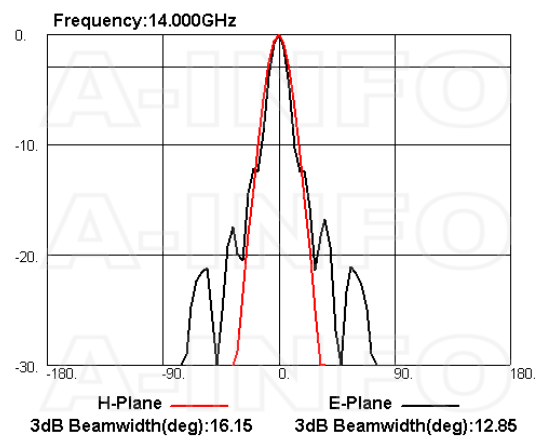
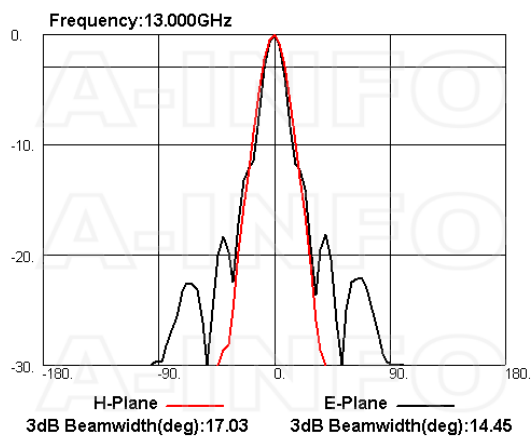
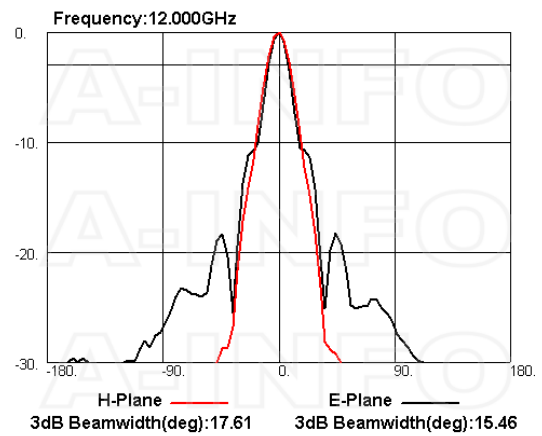
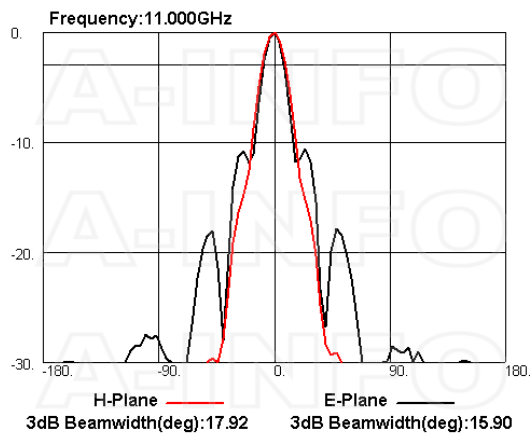
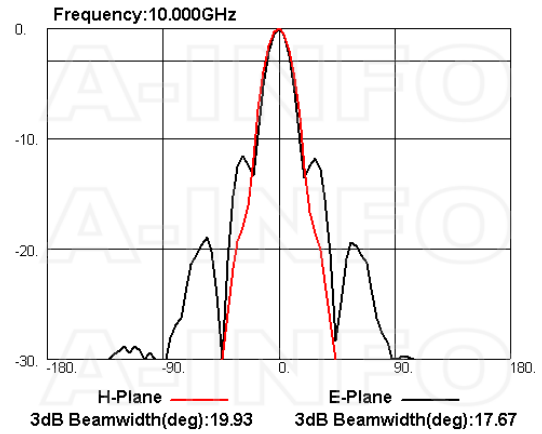
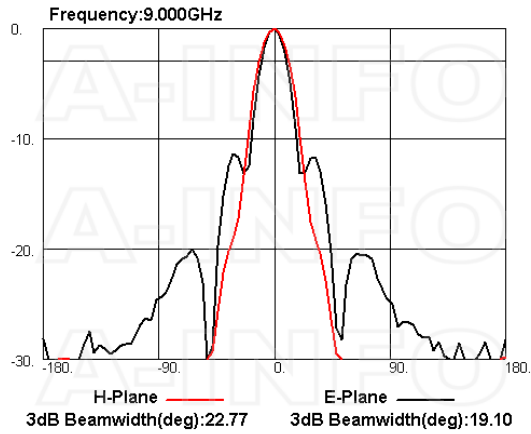


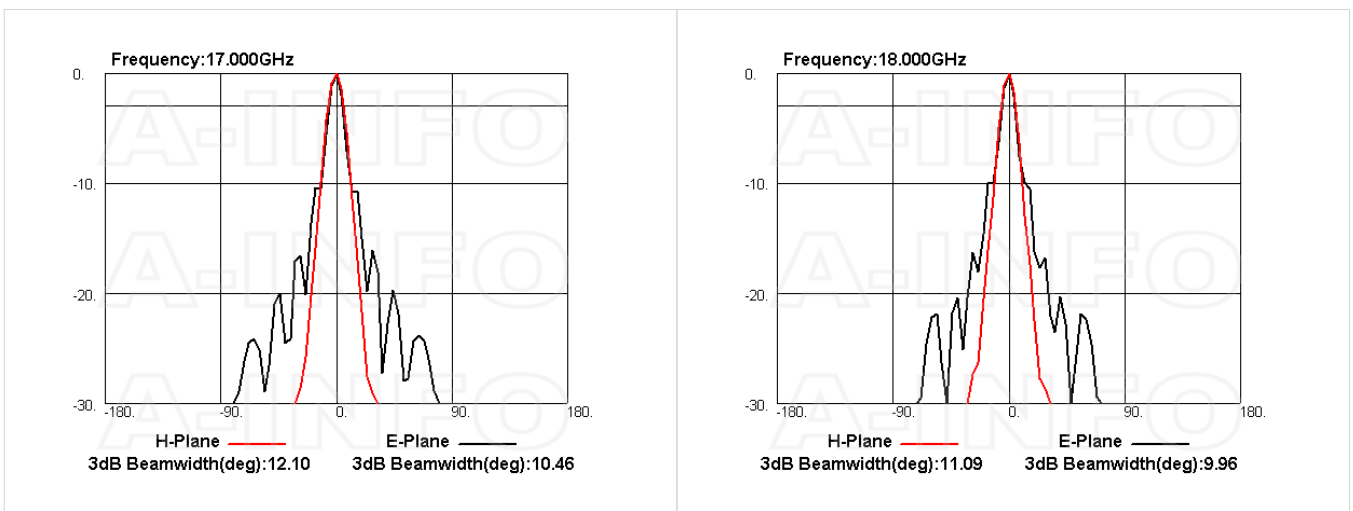
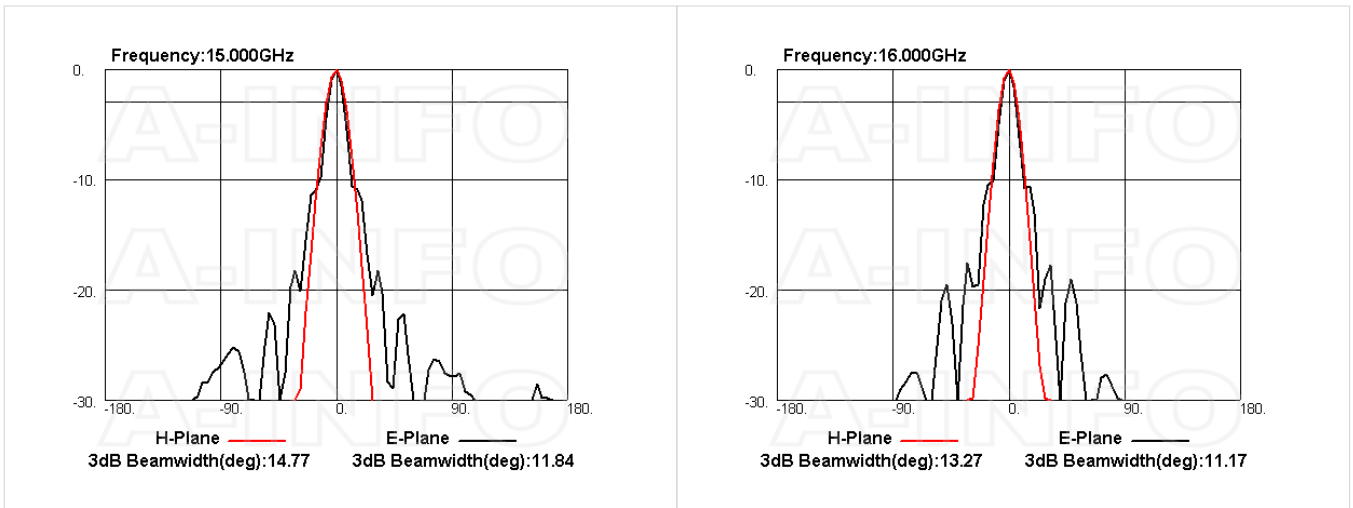
## Beamwidth



## Pattern







## Related Products



750DRWCAN\_Cu Right Angle Double Ridge Waveguide to Coaxial Adapter 7.5-18GHz WRD750 to N Type Female



750DRWCAS\_Cu Right Angle Double Ridge Waveguide to Coaxial Adapter 7.5-18GHz WRD750 to SMA Female



750DRWECAN\_Cu Endlaunch Double Ridge Waveguide to Coaxial Adapter 7.5-18GHz WRD750 to N Type Female



750DRWECAS\_Cu Endlaunch Double Ridge Waveguide to Coaxial Adapter 7.5-18GHz WRD750 to SMA Female



750DRWHCAN\_Cu Right Angle High Power Double Ridge Waveguide to Coaxial Adapter 7.5-18GHz WRD750 to N Type Female



LB-65180-20-C-MB Round Type Mounting Bracket



LB-65180-20-C-L L type mounting bracket



Tripod\_15Kg Al Alloy Tripod



3033HL Wooden Tripod



3033QM Wooden Tripod Metalfree



Carrying Case\_LB-75180-20-C Al Alloy Carrying Case

## About this Datasheet

<ul style="list-style-type: none"> <li>● <b>Product Information</b></li> </ul> <p>Product Link:  <a href="https://www.ainfoinc.com/lb-70180-20-a-multi-octave-horn-antenna-7-18-ghz-20db-gain-fpwr750d24">https://www.ainfoinc.com/lb-70180-20-a-multi-octave-horn-antenna-7-18-ghz-20db-gain-fpwr750d24</a>            Data subject to change without notice.            © A-INFO INC. 2024. All Rights Reserved</p>	<ul style="list-style-type: none"> <li>● <b>Contact Us</b></li> </ul> <p>Address:            60 Tesla, Irvine, CA 92618, USA</p> <p>Website:  <a href="http://www.ainfoinc.com">www.ainfoinc.com</a></p> <p>Email:  <a href="mailto:sales@ainfoinc.com">sales@ainfoinc.com</a></p>	<ul style="list-style-type: none"> <li>● <b>Phone &amp; Fax</b></li> </ul> <p>Phone:            +1-949-639-9688            +1-949-639-9608</p> <p>Fax:            +1-949-639-9670</p>
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