



WR-159 Waveguide Standard Gain Horn Antenna

Operating From 4.9 GHz to 7.05 GHz With a Nominal 15 dBi Gain With CMR-159 Flange

Gain Horns Technical Data Sheet

PE9860-15

Features

- Rectangular Waveguide Interface
- 4.9 GHz to 7.05 GHz
- 15 dBi Nominal Gain
- CMR-159 Flange

Applications

- Antenna Measurements
- Laboratory Use
- Wireless Communication
- Microwave Radio Systems

Description

Pasternack's PE9860-15 WR-159 waveguide standard gain horn antenna operating from 4.9 GHz to 7.05 GHz with a nominal 15 dBi gain is part of our full line of RF components available for same-day shipping. This Pasternack pyramidal horn antenna has a lightweight anodized aluminum body and a precision tolerance CMR-159 flange. The PE9860-15 WR-159 waveguide standard gain horn antenna offers low gain variation across its operating frequency range and 31.3 degrees of half power beam width.

Waveguide standard gain horn antennas are used in a wide variety of applications due to their high power handling capability, low loss, high directivity, and near constant electrical performance across a broad bandwidth. Pasternack's WR-159 standard gain horns are available in 10, 15 and 20 dB models with pyramidal shape and rectangular waveguide input.

Configuration

Design	WR-159 Standard Gain Horn
Pattern	Directional
Polarization	Linear

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	4.9		7.05	GHz
Nominal Gain		15		dBi
Horizontal Half Power Beam Width		30.8		Degrees
Vertical Half Power Beam Width		31.3		Degrees

Electrical Specification Notes:
 Half power beam width is calculated by computer simulation.

Mechanical Specifications

Size	
Length	8.025 in [203.84 mm]
Width	4.43 in [112.52 mm]
Height	3.27 in [83.06 mm]
Weight	0.58 lbs [263.08 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-159 Waveguide Standard Gain Horn Antenna Operating From 4.9 GHz to 7.05 GHz With a Nominal 15 dBi Gain With CMR-159 Flange PE9860-15](#)



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Waveguide Interface

Waveguide Size

Flange Type

Body Material and Plating

WR-159

CMR-159

Anodized Aluminum, Paint

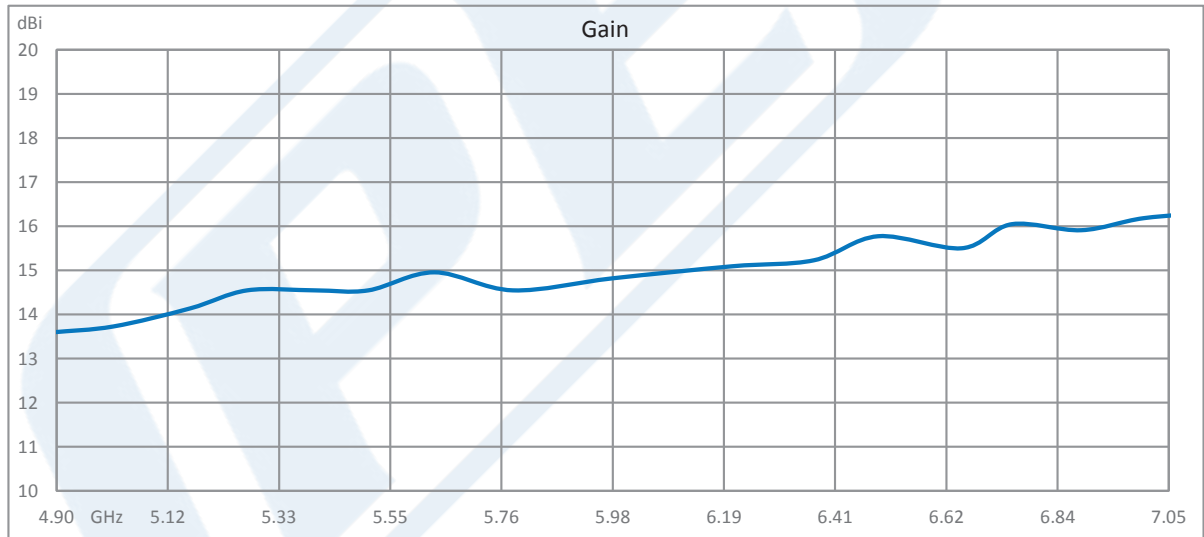
Environmental Specifications

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

Typical Performance Data



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WR-159 Waveguide Standard Gain Horn Antenna Operating From 4.9 GHz to 7.05 GHz With a Nominal 15 dBi Gain With CMR-159 Flange from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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URL: <https://www.pasternack.com/standard-gain-horn-waveguide-size-wr159-pe9860-15-p.aspx>

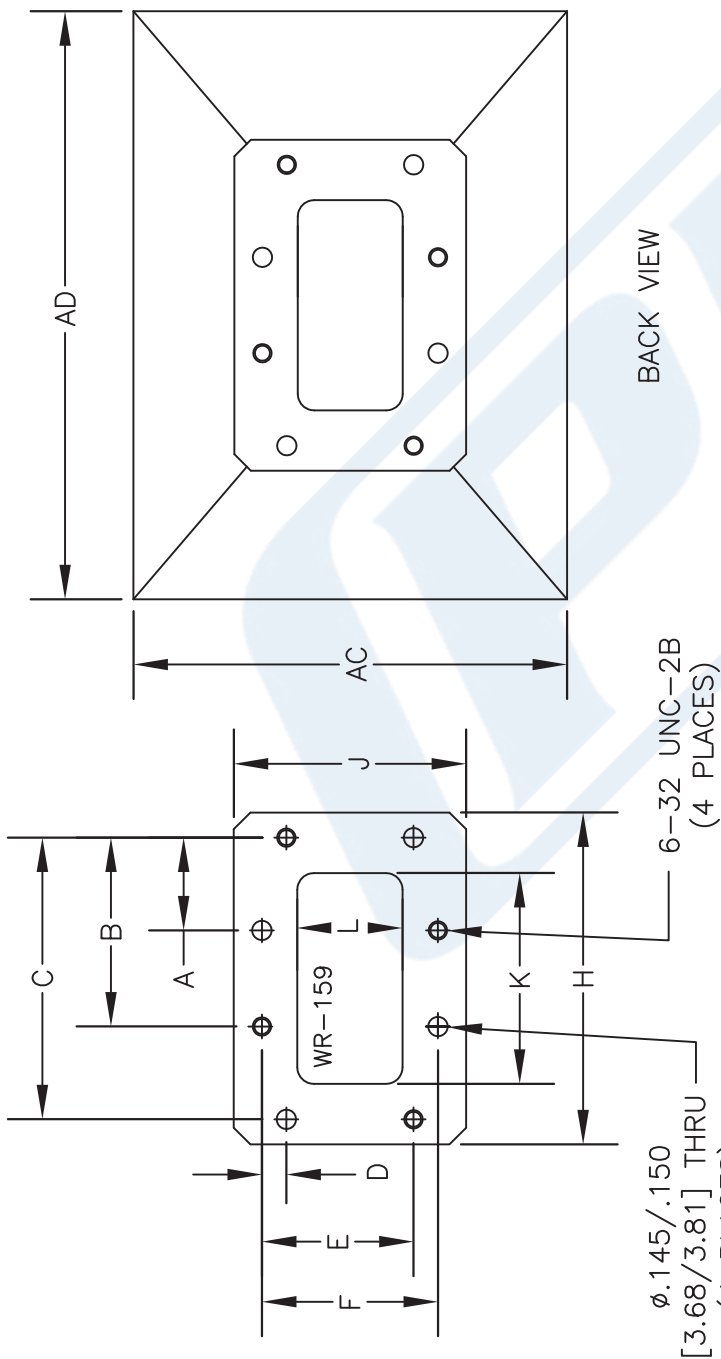
The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

PE9860-15 CAD Drawing

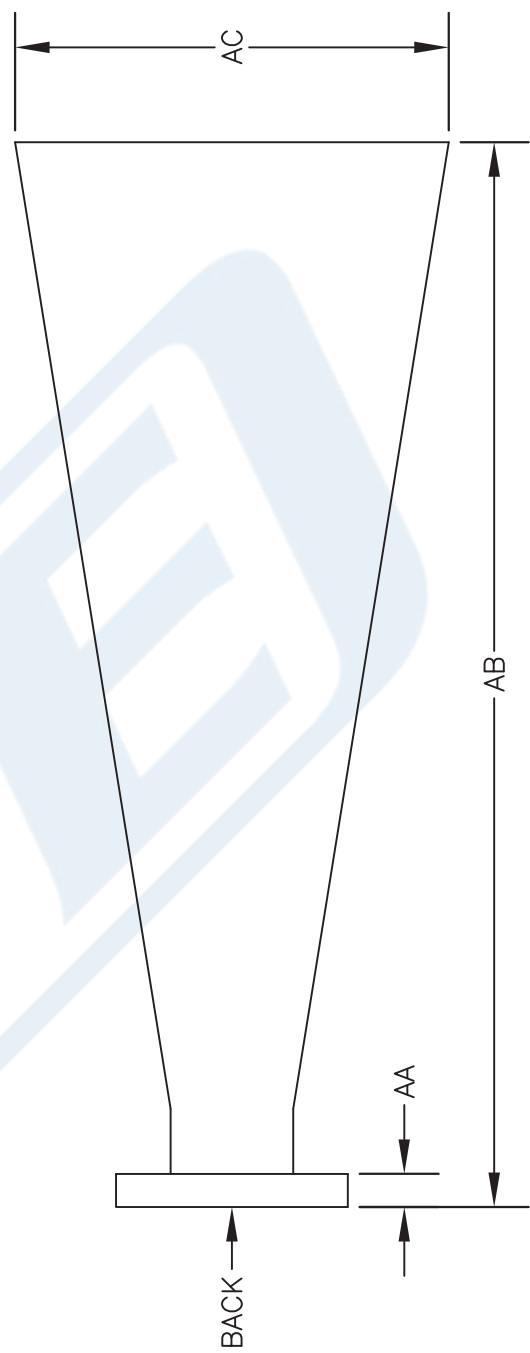
WR-159 Waveguide Standard Gain Horn Antenna Operating From 4.9 GHz to 7.05 GHz With a Nominal 15 dBi Gain With CMR-159 Flange

WR159		
Dimension	Inches	mm
A	0.699	17.75
B	1.423	36.14
C	2.122	53.90
D	0.184	4.67
E	1.142	29.01
F	1.326	33.68
H	2.500	63.50
J	1.750	44.45
K (± 0.004)	1.590	40.39
L (± 0.004)	0.795	20.19

AA	0.250	6.35		
AB	8.025	203.84		
AC	3.270	AD	4.430	112.52
AD	4.430	112.52		



BACK VIEW



STANDARD TOLERANCES	
.X	± 0.2
.XX	± 0.1
.XXX	± 0.05

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

NOTES:
 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
 3. DIMENSIONS ARE IN INCHES [mm].

DWG TITLE
PE9860-15

CAGE CODE **53919**

SCALE N/A

SIZE A

CAD FILE 112116

41742

(PE) PASTERNAK®
 THE ENGINEER'S RF SOURCE

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