



**WR-159 Waveguide Standard Gain Horn Antenna**  
Operating from 4.9 GHz to 7.05 GHz with a Nominal  
15 dBi Gain with UG-1731/U Square Cover Flange

Waveguide Antennas Technical Data Sheet

PE9860-15

### Features

- Rectangular Waveguide Interface
- 4.9 GHz to 7.05 GHz
- 15 dBi Nominal Gain
- UG-1731/U Flange

### Applications

- Antenna Measurements
- Wireless Communication
- Laboratory Use
- 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 UG-1731/U 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 in [203.2 mm]
Width	4.43 in [112.52 mm]
Height	3.27 in [83.06 mm]
Weight	1.073 lbs [486.7 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 UG-1731/U Square Cover Flange PE9860-15](#)



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### Waveguide Interface

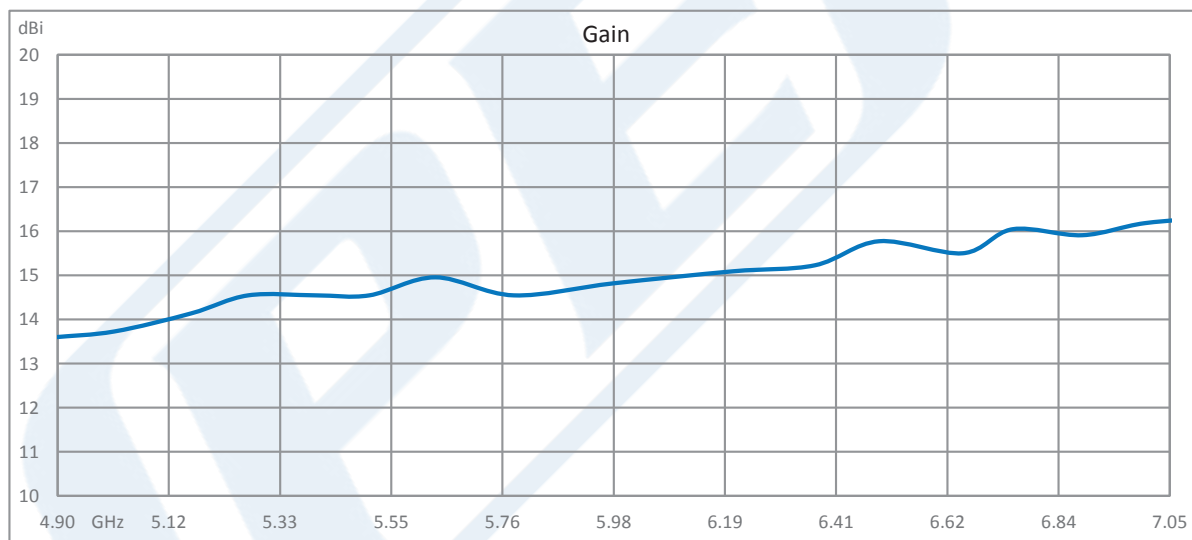
Waveguide Size  
Flange Type  
Flange Designation  
Body Material and Plating

WR-159  
Square Cover  
UG-1731/U  
Anodized Aluminum, Paint

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

### Plotted and Other Data

#### 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 UG-1731/U Square Cover 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.

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 UG-1731/U Square Cover Flange PE9860-15](https://www.pasternack.com/standard-gain-horn-waveguide-size-wr159-pe9860-15-p.aspx)

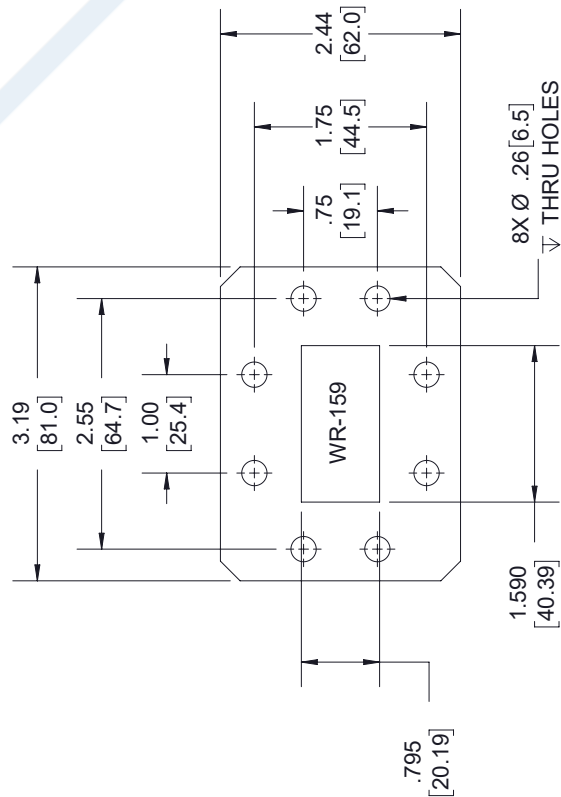
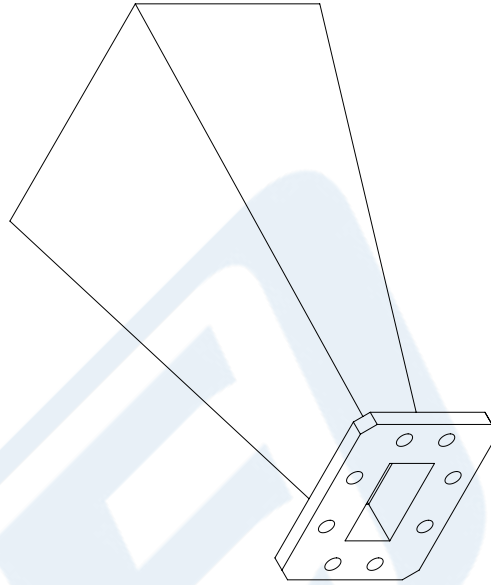
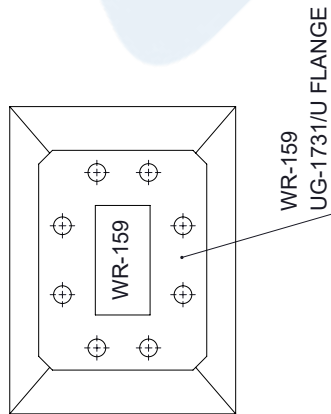
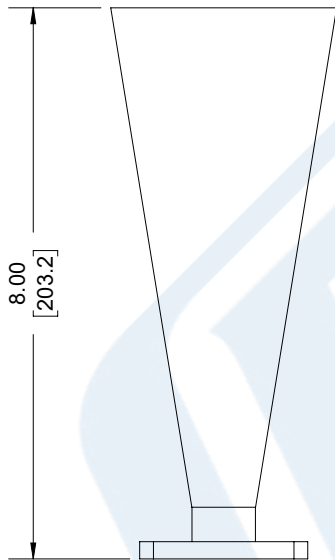
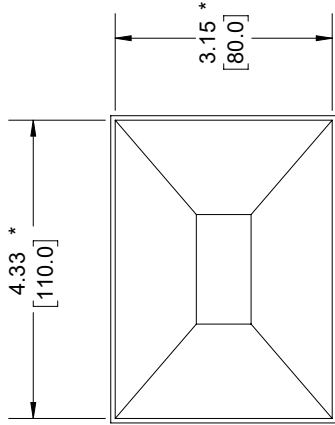
URL: <https://www.pasternack.com/standard-gain-horn-waveguide-size-wr159-pe9860-15-p.aspx>

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# 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 UG-1731/U Square Cover Flange

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	09/05/19	S. PONG



## FLANGE DETAIL

\* INSIDE DIMENSION

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE IN INCHES DIMENSIONS IN [ ] ARE MILLIMETERS	
TOLERANCES:	FRACTIONS
X±.2 [5.08]	±.132
XX±.01 [.25]	±.005
XXX±.005 [.13]	±.001
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.	
THIRD-ANGLE PROJECTION	

<b>PE PASTERNAK</b> an INFINITI brand	
Pasternack Enterprises, Inc. P.O. Box 16759, Irvine, CA 92623. Phone: 1.949.261.1920   1.866.727.8376 Fax: 1.949.261.7451 www.pasternack.com   e-mail: sales@pasternack.com	
SIZE	A
CAGE	53919
DRAWN BY	K.DANG
PART NUMBER	PE9860-15
REV	A

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SCALE	N/A

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