



WR-159 Waveguide Standard Gain Horn Antenna  
 Operating From 4.9 GHz to 7.05 GHz With a  
 Nominal 10 dBi Gain With CMR-159 Flange

Gain Horns Technical Data Sheet

PE9860-10

**Features**

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

**Applications**

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

**Description**

Pasternack's PE9860-10 WR-159 waveguide standard gain horn antenna operating from 4.9 GHz to 7.05 GHz with a nominal 10 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 PE9860-10 WR-159 waveguide standard gain horn antenna offers low gain variation across its operating frequency range, 59.8 degrees of vertical half power beam width and 48.3 degrees of horizontal 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		10		dBi
Horizontal Half Power Beam Width		48.3		Degrees
Vertical Half Power Beam Width		59.8		Degrees

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

**Mechanical Specifications**

<b>Size</b>	
Length	4.28 in [108.71 mm]
Width	2.805 in [71.25 mm]
Height	1.75 in [44.45 mm]
Weight	0.233 lbs [105.69 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 10 dBi Gain With CMR-159 Flange PE9860-10](#)



WR-159 Waveguide Standard Gain Horn Antenna  
Operating From 4.9 GHz to 7.05 GHz With a  
Nominal 10 dBi Gain With CMR-159 Flange

Gain Horns Technical Data Sheet

PE9860-10

**Waveguide Interface**

Waveguide Size	WR-159
Flange Type	CMR-159
Body Material and Plating	Anodized Aluminum, Paint

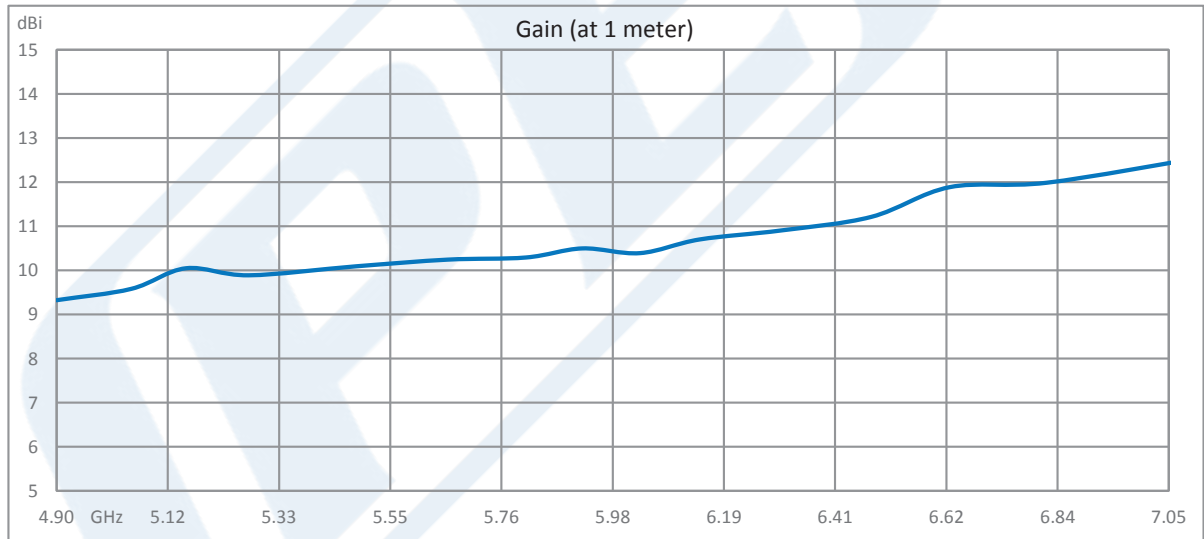
**Environmental Specifications**

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

**Plotted and Other Data**

Notes:

**Typical Performance Data**



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 10 dBi Gain With CMR-159 Flange PE9860-10](#)



WR-159 Waveguide Standard Gain Horn Antenna  
Operating From 4.9 GHz to 7.05 GHz With a  
Nominal 10 dBi Gain With CMR-159 Flange

Gain Horns Technical Data Sheet

PE9860-10

WR-159 Waveguide Standard Gain Horn Antenna Operating From 4.9 GHz to 7.05 GHz With a Nominal 10 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.

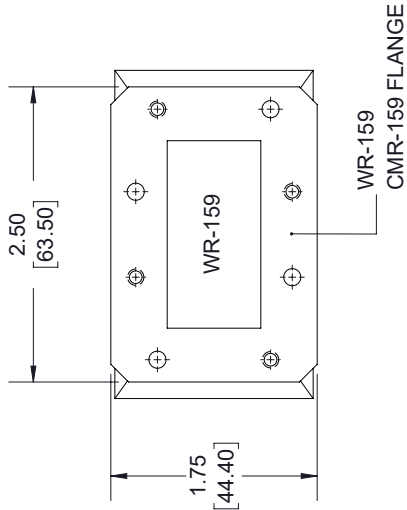
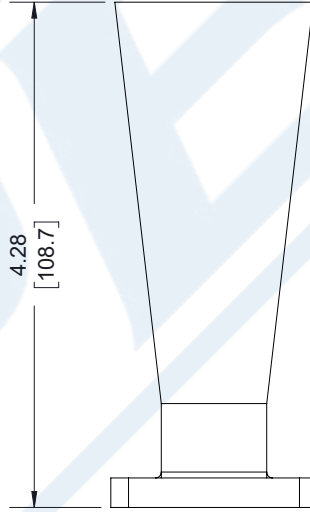
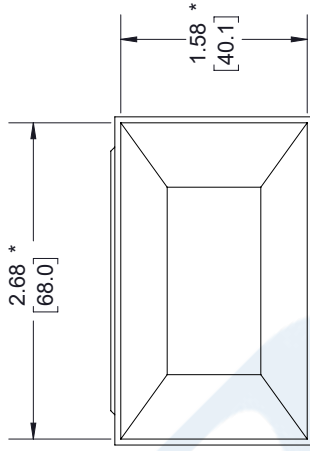
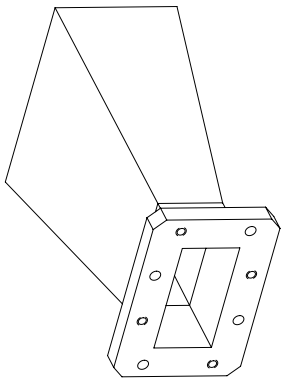
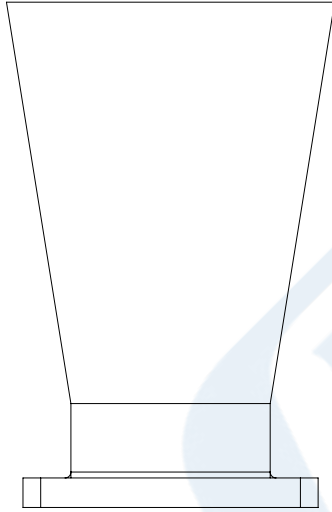
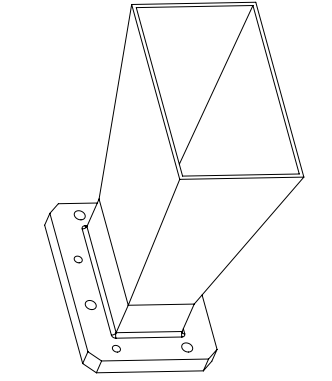
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-159 Waveguide Standard Gain Horn Antenna Operating From 4.9 GHz to 7.05 GHz With a Nominal 10 dBi Gain With CMR-159 Flange PE9860-10](#)

URL: <https://www.pasternack.com/standard-gain-horn-waveguide-size-wr159-pe9860-10-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.

# PE9860-10 CAD Drawing


WR-159 Waveguide Standard Gain Horn Antenna Operating From 4.9 GHz to 7.05 GHz With a Nominal 10 dBi Gain With CMR-159 Flange



STANDARD TOLERANCES	
.X	±0.2
.XX	±0.03
.XXX	±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

\* INSIDE DIMENSION

 <b>THE ENGINEER'S RF SOURCE</b> Pasternack Enterprises, Inc. P.O. Box 16759   Irvine   CA   92623 Phone: (949) 261-1920   Fax: (949) 261-7451 Website: www.pasternack.com   E-Mail: sales@pasternack.com	DWG TITLE <b>PE9860-10</b>	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].	
	CAGE CODE <b>53919</b>	CAD FILE 111517	SCALE N/A
		SIZE A	7361