

## WR-187 Waveguide Standard Gain Horn Antenna, 3.95 GHz to 5.85 GHz Frequency Range, 10 dBi Gain, Flange



### Waveguide Antennas Technical Data Sheet

PE9861B-10

#### Features

- WR-187 Rectangular Waveguide Interface
- 3.95 GHz to 5.85 GHz
- 10 dBi Nominal Gain
- CMR-187 Cover Flange

#### Applications

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

#### Description

The PE9861B-10 WR-187 Proline series standard gain horn antenna (also known as waveguide horn) from Pasternack has a nominal gain of 10 dBi. This WR-187 standard gain horn has a CMR-187 type flange. The Pasternack 10 dBi WR-187 horn antenna operates from 3.95 GHz to 5.85 GHz. The WR-187 PE9861B-10 waveguide horn is US made and TAA compliant. It is part of over 40,000 RF, microwave and millimeter wave components available from Pasternack. 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. Pasternack's WR-187 standard gain horns are available in 10, 15 and 20 dBi models with pyramidal shape and rectangular input. Our WR-187 standard gain horn Proline antennas can ship worldwide the same day as it is purchased as with our other available RF parts.

#### Configuration

Design  
Pattern  
Polarization

WR-187 Standard Gain Horn  
Directional  
Linear

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	3.95		5.85	GHz
Nominal Gain		10		dB
VSWR		1.5:1		

#### Mechanical Specifications

**Size**  
Length 5.28 in [134.11 mm]  
Width 2.89 in [73.41 mm]  
Height 2.12 in [53.85 mm]

#### Waveguide Interface

Waveguide Size WR-187  
Flange Type CMR-187  
Body Material and Plating Aluminum

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-187 Waveguide Standard Gain Horn Antenna, 3.95 GHz to 5.85 GHz Frequency Range, 10 dBi Gain, Flange PE9861B-10](#)

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

### Plotted and Other Data

WR-187 Waveguide Standard Gain Horn Antenna, 3.95 GHz to 5.85 GHz Frequency Range, 10 dBi Gain, 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.

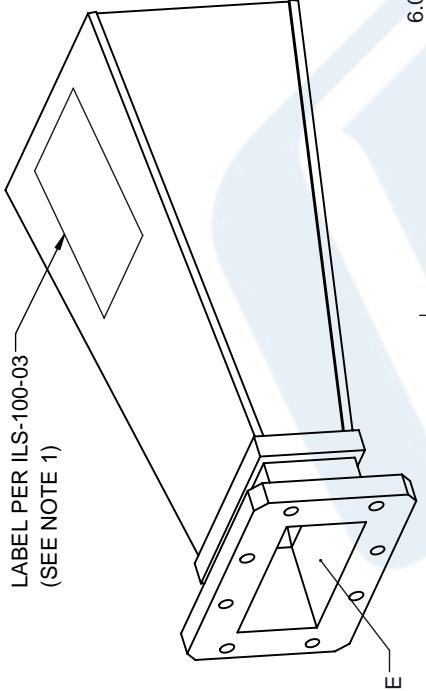
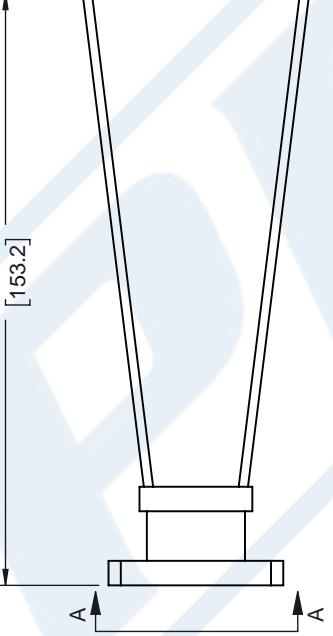
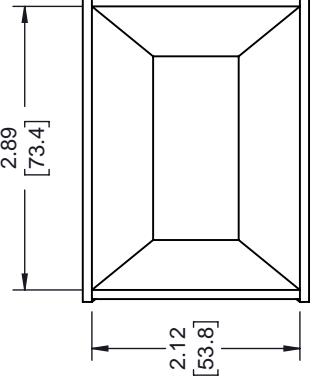
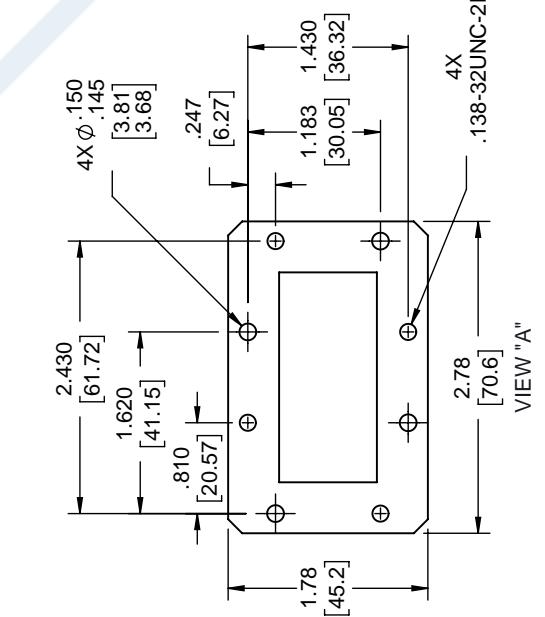
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URL: <https://www.pasternack.com/wr-187-waveguide-gain-horn-antenna-10db-cmr-187-flange-pe9861b-10-p.aspx>

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.

PE9861B-10 CAD Drawing

WR-187 Waveguide Standard Gain Horn Antenna, 3.95 GHz to 5.85 GHz Frequency Range, 10 dBi Gain, Flange

<p style="margin: 0;">REV. <b>A</b></p> <p style="margin: 0;">DESCRIPTION <b>PCR PE9863B-10 202010526</b></p> <p style="margin: 0;">DATE <b>06/24/2020</b></p> <p style="margin: 0;">APPROVED <b>KHIEPT PAS</b></p>	<p style="margin: 0;">REV. <b>B</b></p> <p style="margin: 0;">DESCRIPTION <b>PCR PE9863B-10 202010526</b></p> <p style="margin: 0;">DATE <b>06/24/2020</b></p> <p style="margin: 0;">APPROVED <b>KHIEPT PAS</b></p>																								
																									
																									
																									
																									
<p style="text-align: right;"><b>PASTERNACK</b> an <b>INFINITE</b> brand</p> <p style="text-align: right;">Pasternack Enterprises, Inc. P.O. Box 16759, Irvine, CA 92623. Phone: 1.949.261.1920   1.866.727.8376 Fax: 1.949.261.7451 Website: <a href="http://www.pasternack.com">www.pasternack.com</a> E-mail: <a href="mailto:sales@pasternack.com">sales@pasternack.com</a></p> <p style="text-align: right;">ITEM NO. <b>PE9861B-10</b></p> <p style="text-align: right;">SIZE <b>A</b> CAGE CODE <b>53919</b> DRAWN BY <b>BPUCHASKI</b></p> <p style="text-align: right;">REV. <b>B</b></p>																									
<p style="text-align: right;"><b>NOTES:</b></p> <p style="text-align: right;">1. <b>LABEL PER ILS-100-03 (FOR INTERNAL REFERENCE ONLY)</b> <b>LABEL LOCATION FOR REFERENCE ONLY</b></p> <p style="text-align: right;">THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.</p>																									
<p style="text-align: right;"><b>UNLESS OTHERWISE SPECIFIED</b> LEADING DIMENSIONS ARE IN INCHES DIMENSIONS IN [ ] ARE MILLIMETERS</p> <p style="text-align: right;"><b>TOLERANCES:</b></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding: 2px;"><math>X = \pm .2</math></td> <td style="padding: 2px;"><math>[5.08]</math></td> <td style="padding: 2px;">FRACTIONS</td> </tr> <tr> <td style="padding: 2px;"><math>XX = \pm .02</math></td> <td style="padding: 2px;"><math>[.51]</math></td> <td style="padding: 2px;"><math>\pm 1/32</math></td> </tr> <tr> <td style="padding: 2px;"><math>XXX = \pm .005</math></td> <td style="padding: 2px;"><math>[.13]</math></td> <td style="padding: 2px;">ANGLES <math>\pm 1^\circ</math></td> </tr> </table> <p style="text-align: right;"><b>CABLE LENGTH (L) TOLERANCES:</b></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding: 2px;"><math>L \leq 12</math></td> <td style="padding: 2px;"><math>[305]</math></td> <td style="padding: 2px;"><math>= +1 [25] / -0</math></td> </tr> <tr> <td style="padding: 2px;"><math>12 [305] &lt; L \leq 60</math></td> <td style="padding: 2px;"><math>[1224]</math></td> <td style="padding: 2px;"><math>= +2 [51] / -0</math></td> </tr> <tr> <td style="padding: 2px;"><math>60 [1524] &lt; L \leq 120</math></td> <td style="padding: 2px;"><math>[3048]</math></td> <td style="padding: 2px;"><math>= +4 [102] / -0</math></td> </tr> <tr> <td style="padding: 2px;"><math>120 [3048] &lt; L \leq 300</math></td> <td style="padding: 2px;"><math>[7220]</math></td> <td style="padding: 2px;"><math>= +6 [152] / -0</math></td> </tr> <tr> <td colspan="3" style="padding: 2px;"><math>300 [7620] &lt; L = +5\% L / -0</math></td> </tr> </table> <p style="text-align: right;">ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p>		$X = \pm .2$	$[5.08]$	FRACTIONS	$XX = \pm .02$	$[.51]$	$\pm 1/32$	$XXX = \pm .005$	$[.13]$	ANGLES $\pm 1^\circ$	$L \leq 12$	$[305]$	$= +1 [25] / -0$	$12 [305] < L \leq 60$	$[1224]$	$= +2 [51] / -0$	$60 [1524] < L \leq 120$	$[3048]$	$= +4 [102] / -0$	$120 [3048] < L \leq 300$	$[7220]$	$= +6 [152] / -0$	$300 [7620] < L = +5\% L / -0$		
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