



WR-187 Waveguide Standard Gain Horn Antenna

Operating From 3.95 GHz to 5.85 GHz With a Nominal 20 dBi Gain With CMR-187 Flange

Gain Horns Technical Data Sheet

PE9861-20

Features

- Rectangular Waveguide Interface
- 3.95 GHz to 5.85 GHz
- 20 dBi Nominal Gain
- CMR-187 Flange

Applications

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

Description

Pasternack's PE9861-20 WR-187 waveguide standard gain horn antenna operating from 3.95 GHz to 5.85 GHz with a nominal 20 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-187 flange. The PE9861-20 WR-187 waveguide standard gain horn antenna offers low gain variation across its operating frequency range and 19.2 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-187 standard gain horns are available in 10, 15 and 20 dB models with pyramidal shape and rectangular waveguide input.

Configuration

Design	WR-187 Standard Gain Horn
Pattern	Directional
Polarization	Linear

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	3.95		5.85	GHz
Nominal Gain		20		dBi
Horizontal Half Power Beam Width		19.2		Degrees
Vertical Half Power Beam Width		18.9		Degrees

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

Mechanical Specifications

Size	
Length	15 in [381 mm]
Width	9.075 in [230.51 mm]
Height	6.7 in [170.18 mm]
Weight	2.491 lbs [1.13 Kg]

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 Operating From 3.95 GHz to 5.85 GHz With a Nominal 20 dBi Gain With CMR-187 Flange PE9861-20](#)



WR-187 Waveguide Standard Gain Horn Antenna
Operating From 3.95 GHz to 5.85 GHz With a
Nominal 20 dBi Gain With CMR-187 Flange

Gain Horns Technical Data Sheet

PE9861-20

Waveguide Interface

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

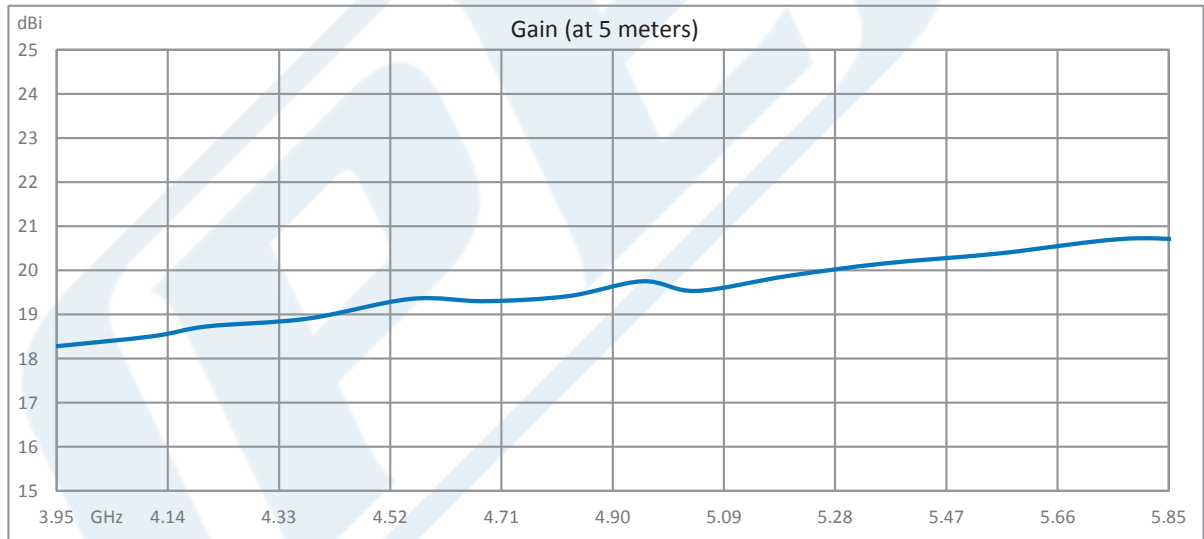
Environmental Specifications

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-187 Waveguide Standard Gain Horn Antenna Operating From 3.95 GHz to 5.85 GHz With a Nominal 20 dBi Gain With CMR-187 Flange PE9861-20](#)



WR-187 Waveguide Standard Gain Horn Antenna
Operating From 3.95 GHz to 5.85 GHz With a
Nominal 20 dBi Gain With CMR-187 Flange

Gain Horns Technical Data Sheet

PE9861-20

WR-187 Waveguide Standard Gain Horn Antenna Operating From 3.95 GHz to 5.85 GHz With a Nominal 20 dBi Gain With CMR-187 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-187 Waveguide Standard Gain Horn Antenna Operating From 3.95 GHz to 5.85 GHz With a Nominal 20 dBi Gain With CMR-187 Flange PE9861-20](#)

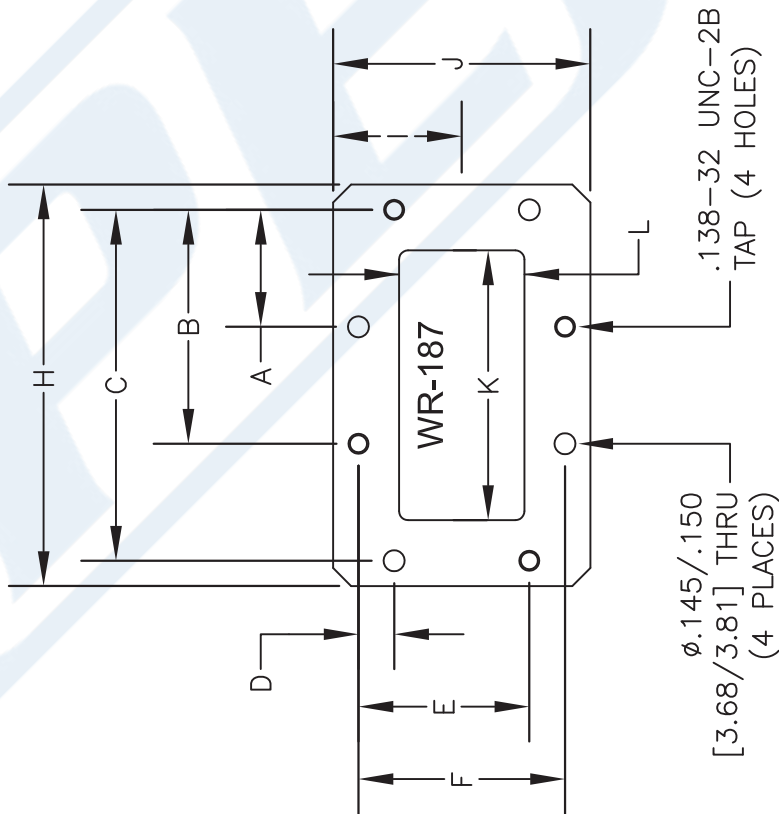
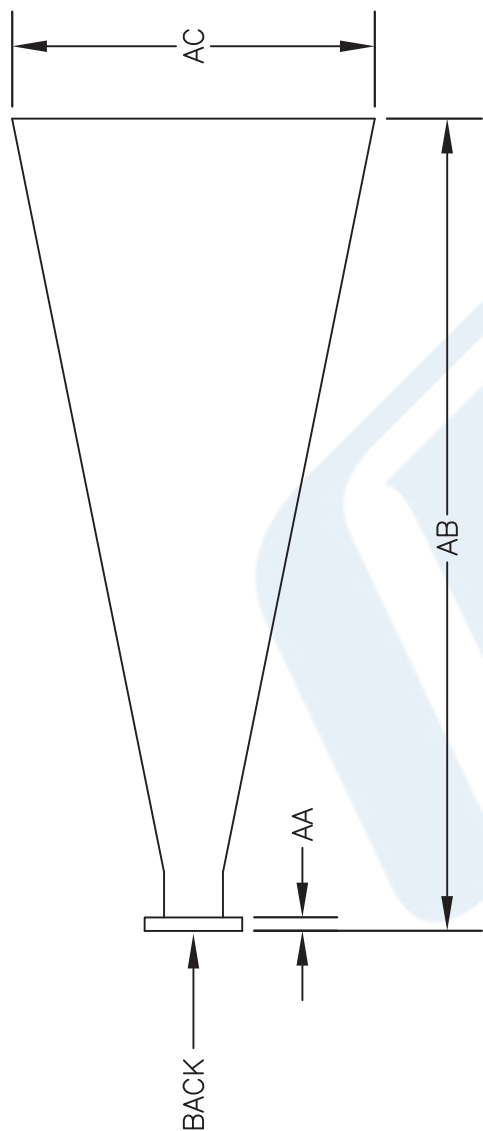
URL: <https://www.pasternack.com/standard-gain-horn-waveguide-size-wr187-pe9861-20-p.aspx>

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.

PE9861-20 CAD Drawing

WR-187 Waveguide Standard Gain Horn Antenna Operating From 3.95 GHz to 5.85 GHz With a Nominal 20 dBi Gain With CMR-187 Flange

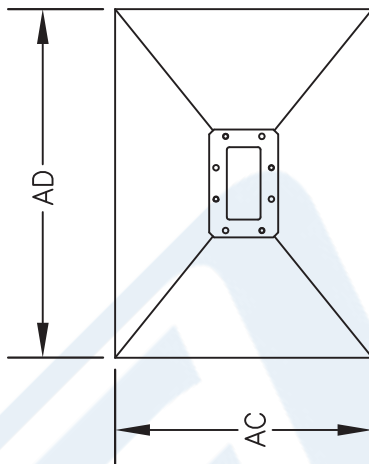
WR187	Dimension	Inches	mm
	A	0.810	20.57
	B	1.620	41.15
	C	2.430	61.72
	D	0.247	6.27
	E	1.183	30.05
	F	1.430	36.32
	H	2.781	70.64
	I	0.890	22.61
	J	1.781	45.24
	K (± 0.004)	1.872	47.55
	L (± 0.004)	0.872	22.15
	AA	0.250	6.35
	AB	15.000	381.00
	AC	6.700	170.18
	AD	9.075	230.51



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

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

BACK VIEW



DWG TITLE

PE9861-20

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).

PE PASTERNAK
 THE ENGINEER'S RF SOURCE
 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

FSCM NO. 53919

CAD FILE 111816

SCALE N/A

SIZE A

41742