



WR-187 Standard Gain Horn Antenna Operating
From 3.95 GHz to 5.85 GHz, 20 dBi Nominal Gain,
SMA Female Input Connector, ProLine

Technical Data Sheet

PE9861B/SF-20

Features

- WR-187 Rectangular Waveguide Interface
- 3.95 GHz to 5.85 GHz
- 20 dBi Nominal Gain
- SMA Female Connector

Applications

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

Description

The Proline series PE9861B/SF-20 standard gain horn antenna (also known as waveguide horn) from Pasternack is part of our huge selection of waveguide antennas. This Pasternack standard gain horn antenna is manufactured with a WR-187 input and a waveguide to coaxial transition adapter. Our WR-187 standard gain horn antenna has a nominal gain of 20 dBi. This WR-187 standard gain horn has a SMA waveguide to coax transition adapter that is female gender. The Pasternack 20 dBi WR-187 horn antenna operates from 3.95 GHz to 5.85 GHz. The WR-187 PE9861B/SF-20 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, such as the PE9861B/SF-20, 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 SMA female 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 with SMA female interface can ship worldwide the same day as it is purchased as with our other available RF parts.

Configuration

Design	WR-187 Standard Gain Horn
Pattern	Directional
Polarization	Linear
Coaxial Interface	SMA Female

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	3.95		5.85	GHz
Waveguide Standard Gain Horn				
Gain		20		dB
Horizontal Half Power Beam Width		19.2		Degrees
Vertical Half Power Beam Width		18.9		Degrees
Waveguide to Coaxial Adapter				
Input VSWR		1.3:1		

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-187 Standard Gain Horn Antenna Operating From 3.95 GHz to 5.85 GHz, 20 dBi Nominal Gain, SMA Female Input Connector, ProLine PE9861B/SF-20](#)



WR-187 Standard Gain Horn Antenna Operating
From 3.95 GHz to 5.85 GHz, 20 dBi Nominal Gain,
SMA Female Input Connector, ProLine

Technical Data Sheet

PE9861B/SF-20

Mechanical Specifications

Size

Length	17.56 in [446.02 mm]
Width	8.92 in [226.57 mm]
Height	6.53 in [165.86 mm]
Weight	2 lbs [907.18 g]

RF Connector

Type	SMA Female
------	------------

Waveguide Interface

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

Environmental Specifications

Environmental Specification Notes:
PE9861B/SF-20

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

Plotted and Other Data

2 Dimensional OML Drawing	PE9861B/SF-20
Notes:	

WR-187 Standard Gain Horn Antenna Operating From 3.95 GHz to 5.85 GHz, 20 dBi Nominal Gain, SMA Female Input Connector, ProLine 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 Standard Gain Horn Antenna Operating From 3.95 GHz to 5.85 GHz, 20 dBi Nominal Gain, SMA Female Input Connector, ProLine PE9861B/SF-20](#)

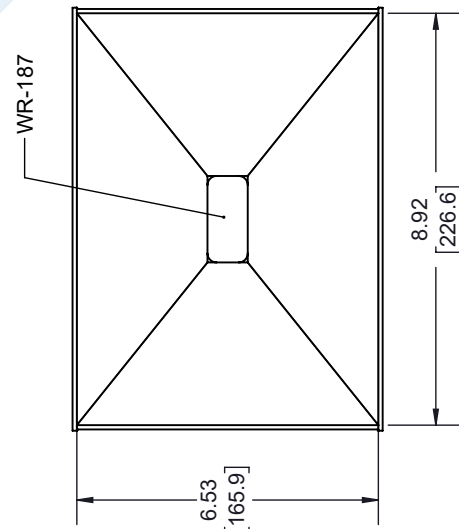
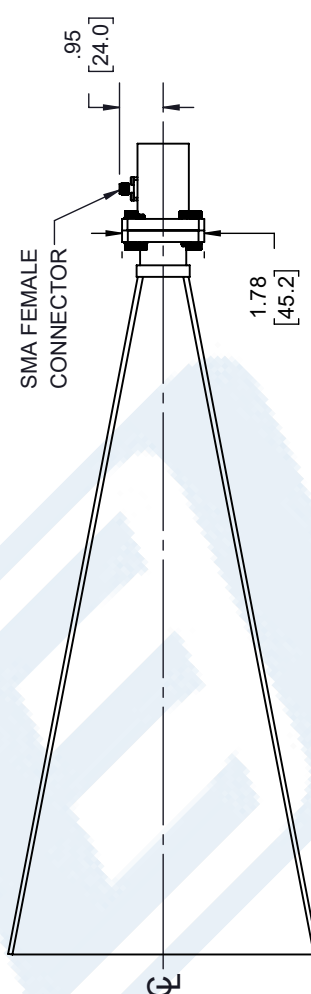
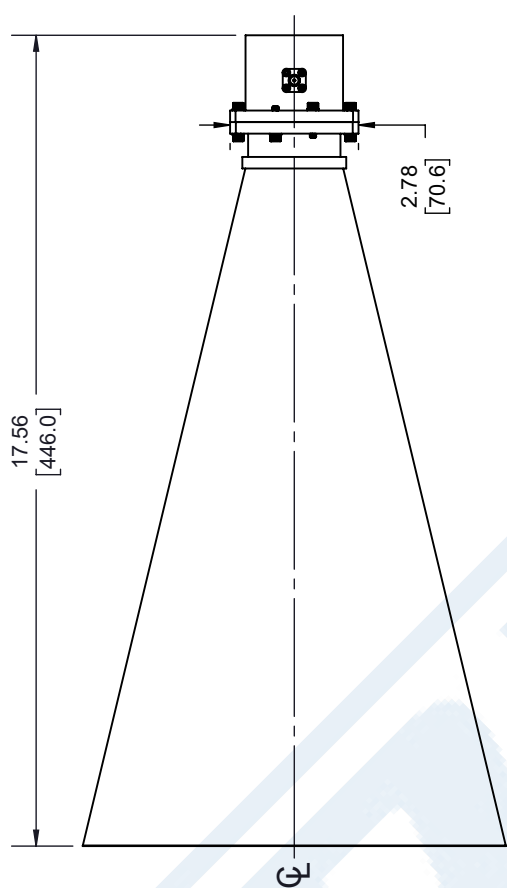
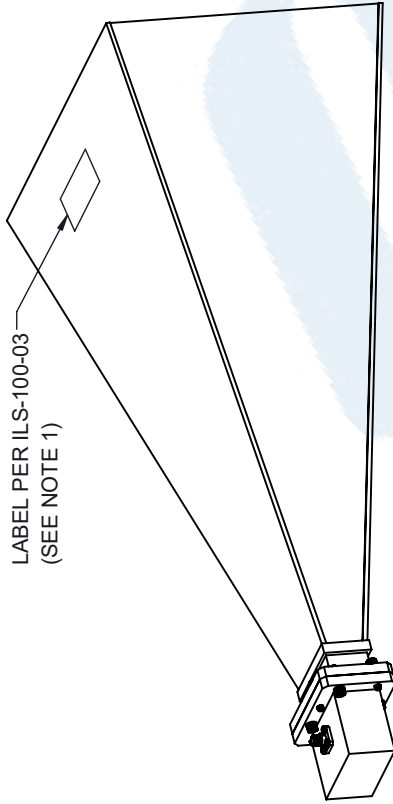
URL: <https://www.pasternack.com/wr-187-waveguide-standard-gain-horn-antenna-20-db-sma-pe9861b-sf-20-p.aspx>

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.

PE9861B/SF-20 CAD Drawing

WR-187 Standard Gain Horn Antenna Operating From 3.95 GHz to 5.85 GHz,
20 dBi Nominal Gain, SMA Female Input Connector, ProLine

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	02/23/2021	KHIETPAS



UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:
 .X = ±.2 [5.08] FRACTIONS ±.1/32
 .XX = ±.02 [.51] ANGLES ± 1°
 .XXX = ±.005 [.13]

CABLE LENGTH (L), TOLERANCES:
 L ≤ 12 [305] = +1 [25] / -0
 12 [305] < L ≤ 60 [1524] = +2 [51] / -0
 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
 300 [7620] < L = +5% / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION ALL RIGHTS RESERVED.

SHEET 1 OF 1

SCALE N/A

REV A

PE PASTERNAK
an INFINITE 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
 Website: www.pasternack.com
 E-mail: sales@pasternack.com

SIZE A CAGE CODE 53919 DRAWN BY BPUCHASKI ITEM NO. PE9861B/SF-20

NOTES:
 1. LABEL PER ILS-100-03 (FOR INTERNAL REFERENCE ONLY)
 LABEL LOCATION FOR REFERENCE ONLY

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.