



WR-284 Waveguide Standard Gain Horn Antenna
Operating from 2.6 GHz to 3.95 GHz with a
Nominal 20 dB Gain SMA Female Input

Technical Data Sheet

PE9863B/SF-20

Features

- WR-284 Rectangular Waveguide Interface
- 2.6 GHz to 3.95 GHz
- 20 dBi Nominal Gain
- Type SMA Female Connector

Applications

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

Description

The Proline series PE9863B/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-284 input and a waveguide to coaxial transition adapter. Our WR-284 standard gain horn antenna has a nominal gain of 20 dBi. This WR-284 standard gain horn has a SMA waveguide to coax transition adapter that is female gender. The Pasternack 20 dBi WR-284 horn antenna operates from 2.6 GHz to 3.95 GHz. The WR-284 PE9863B/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 PE9863B/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-284 standard gain horns are available in 10, 15 and 20 dBi models with pyramidal shape and rectangular input. Our WR-284 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-284 Standard Gain Horn
Pattern	Directional
Polarization	Linear
Coaxial Interface	SMA Female

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	2.6		3.95	GHz
Waveguide Standard Gain Horn				
Gain		20		dB
Waveguide to Coaxial Adapter				
Input VSWR		1.25:1		

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-284 Waveguide Standard Gain Horn Antenna Operating from 2.6 GHz to 3.95 GHz with a Nominal 20 dB Gain SMA Female Input PE9863B/SF-20](#)



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Mechanical Specifications

Size

Length	33.13 in [841.5 mm]
Width	15.52 in [394.21 mm]
Height	10.67 in [271.02 mm]
Weight	8.2 lbs [3.72 kg]

RF Connector

Type	SMA Female
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Waveguide Interface

Waveguide Size	WR-284
Flange Type	CMR-284
Flange Designation	CMR
Body Material and Plating	Aluminum

Environmental Specifications

Environmental Specification Notes:
PE9863B/SF-20

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

Plotted and Other Data

2 Dimensional OML Drawing	PE9852B/2F-15
Notes:	

WR-284 Waveguide Standard Gain Horn Antenna Operating from 2.6 GHz to 3.95 GHz with a Nominal 20 dB Gain SMA Female Input 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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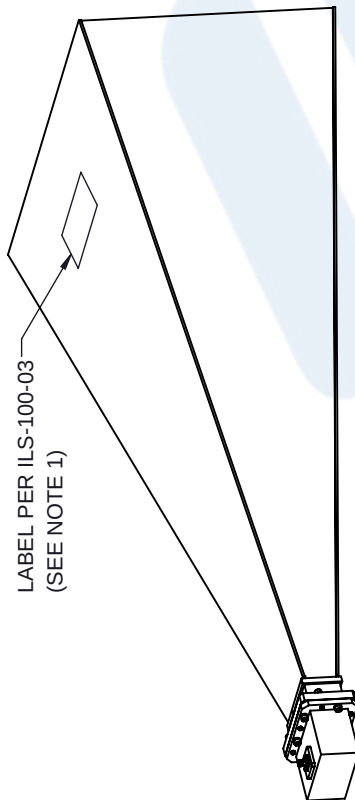
URL: <https://www.pasternack.com/wr-284-waveguide-standard-gain-horn-antenna-20-db-sma-pe9863b-sf-20-p.aspx>

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.

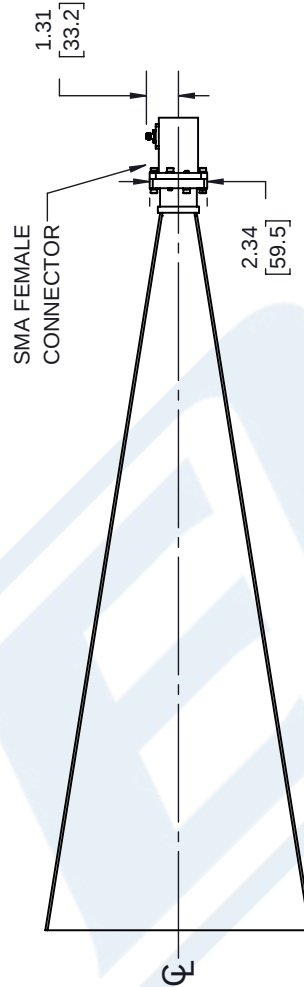
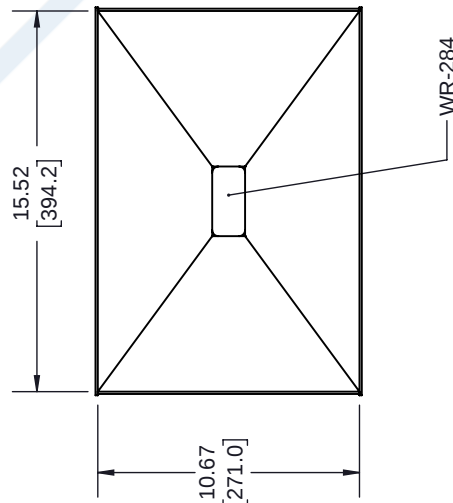
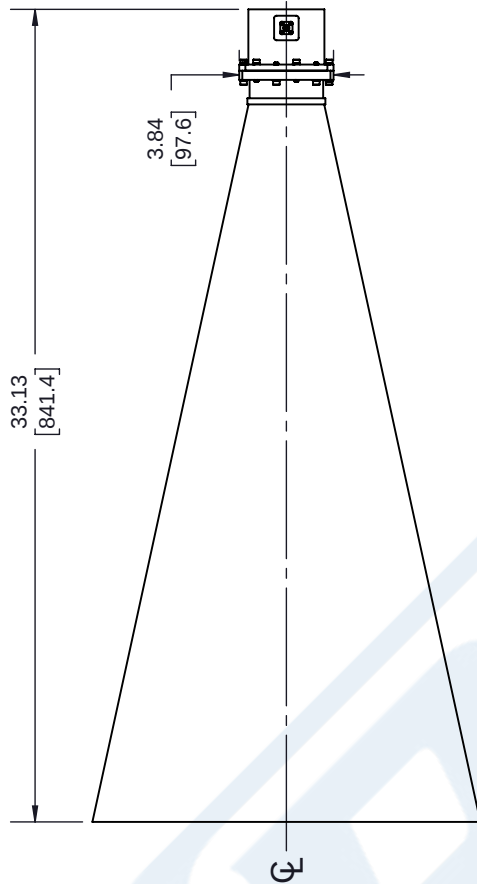
PE9863B/SF-20 CAD Drawing

WR-284 Waveguide Standard Gain Horn Antenna Operating from 2.6 GHz to 3.95 GHz with a Nominal 20 dB Gain SMA Female Input

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	05/10/2021	KHIETPAS



LABEL PER ILS-100-03
(SEE NOTE 1)



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

TOLERANCES:

.X = ±.2	[.008]	FRACTIONS
.XX = ±.02	[.51]	±.1/32
.XXX = ±.005	[.13]	ANGLES ± 1°

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.

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an INFINITE brand

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SIZE A CAGE CODE 53919 DRAWN BY BPUCHASKI ITEM NO. PE9863B/SF-20

THIRD-ANGLE PROJECTION

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DESIGN IN THIS DOCUMENT
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SHEET 1 OF 1

SCALE N/A

REV A

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

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