



**WR-42 Waveguide Standard Gain Horn Antenna
Operating From 18 GHz to 26.5 GHz With a Nominal
20 dBi Gain With UG-597/U Square Cover Flange**

Waveguide Antennas Technical Data Sheet

PE9852B-20

Features

- WR-42 Rectangular Waveguide Interface
- 18 GHz to 26.5 GHz
- 20 dBi Nominal Gain
- UG-597/U Cover Flange

Applications

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

Description

The PE9852B-20 WR-42 Proline series standard gain horn antenna (also known as waveguide horn) from Pasternack has a nominal gain of 20 dBi. This WR-42 standard gain horn has a UG-597/U type flange. The Pasternack 20 dBi WR-42 horn antenna operates from 18 GHz to 26.5 GHz. The WR-42 PE9852B-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 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-42 standard gain horns are available in 10, 15 and 20 dBi models with pyramidal shape and rectangular input. Our WR-42 standard gain horn Proline antennas can ship worldwide the same day as it is purchased as with our other available RF parts.

Configuration

Design: WR-42 Standard Gain Horn
 Pattern: Directional
 Polarization: Linear

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|-----------------|---------|---------|---------|-------|
| Frequency Range | 18 | | 26.5 | GHz |
| Impedance | | 50 | | Ohms |
| Nominal Gain | | 20 | | dB |
| VSWR | | 1.5:1 | | |

Mechanical Specifications

Size
 Length: 4 in [101.6 mm]
 Width: 1.98 in [50.29 mm]
 Height: 1.48 in [37.59 mm]

Waveguide Interface

Waveguide Size: WR-42
 Flange Type: Square Cover

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-42 Waveguide Standard Gain Horn Antenna Operating From 18 GHz to 26.5 GHz With a Nominal 20 dBi Gain With UG-597/U Square Cover Flange PE9852B-20](#)



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Flange Designation
Body Material and Plating

UG-597/U
Aluminum

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

Plotted and Other Data

WR-42 Waveguide Standard Gain Horn Antenna Operating From 18 GHz to 26.5 GHz With a Nominal 20 dBi Gain With UG-597/U Square Cover 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-42 Waveguide Standard Gain Horn Antenna Operating From 18 GHz to 26.5 GHz With a Nominal 20 dBi Gain With UG-597/U Square Cover Flange PE9852B-20](#)

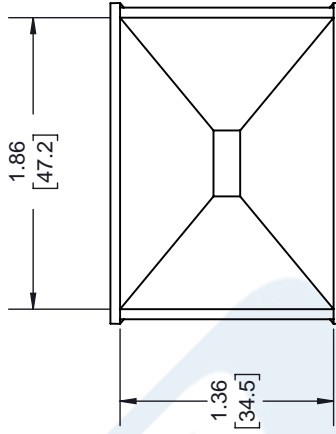
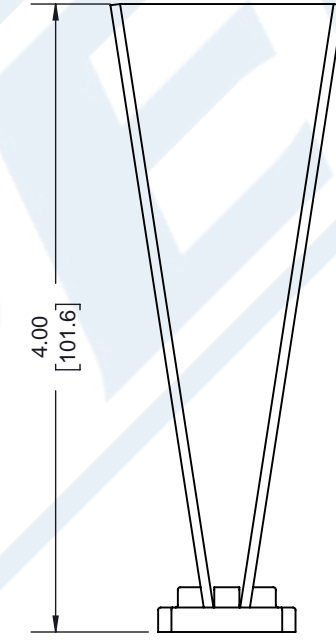
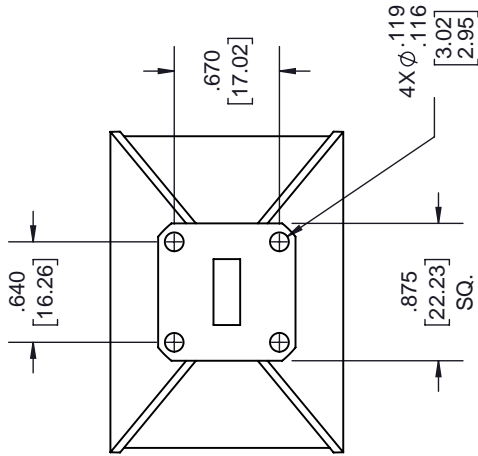
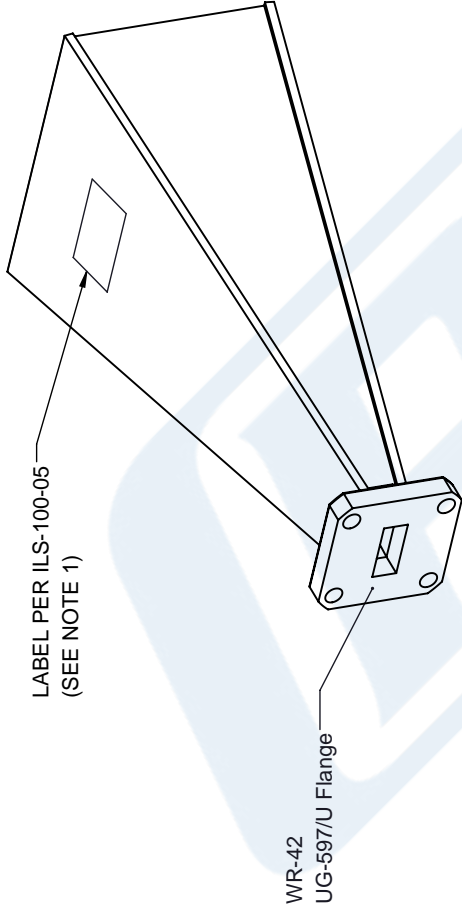
URL: <https://www.pasternack.com/wr-42-waveguide-gain-horn-antenna-20db-ug-597-square-flange-pe9852b-20-p.aspx>

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PE9852B-20 CAD Drawing

WR-42 Waveguide Standard Gain Horn Antenna Operating From 18 GHz to 26.5 GHz With a Nominal 20 dBi Gain With UG-597/U Square Cover Flange

| REVISIONS | | | |
|-----------|-----------------|------------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
| A | INITIAL RELEASE | 11/03/2020 | 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.

PE PASTERNAK
 an INFINITE brand

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 SHEET 1 OF 1
 SCALE N/A

SIZE A CAGE CODE 53919 DRAWN BY BPUCHASKI ITEM NO. PE9852B-20 REV A

NOTES:
 1. LABEL PER ILS-100-05 (FOR INTERNAL REFERENCE ONLY)
 LABEL LOCATION FOR REFERENCE ONLY

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