



## WR-28 Standard Gain Horn with 20 dBi gain, 2.92mm Female connector, Integrated Cage-Style Mount

### Technical Data Sheet

**PE1WAN028-20KF**

#### Features

- 26.5 GHz to 40 GHz
- WR-28 Waveguide Band
- 20 dBi Nominal Gain

- 2.92mm Female Connector
- Ruggedized Aluminum Cage-Style Mount
- Integrates with Positioning Systems

#### Applications

- Antenna Measurements
- Wireless Communication
- Laboratory Use

- Microwave Radio Systems
- Radome Testing
- Automotive Antenna Test

Solutions

- Radar Cross Section
- Satellite Antenna Testing

#### Description

The PE1WAN028-20KF standard gain horn antenna with integrated cage-style mount (also known as waveguide horn) from Pasternack is part of our comprehensive selection of waveguide antennas. The cage-style mount is a ruggedized aluminum mounting solution that integrates with test and measurement positioning systems, ensuring precise alignment and protection of the antenna. This standard gain horn is mated with a WR-28 to 2.92mm Female waveguide to coaxial adapter and operates from 26.5 GHz to 40 GHz.

Our PE1WAN028-20KF standard gain horn antenna with integrated cage-style mount has a nominal gain of 20 dBi with a Horizontal and Vertical HPBW (Half Power Beam Width) of 17.5 dB and 17.3 dB respectively. Pasternack's 2.92mm Female to WR-28 standard gain horns are available in 10, 15 and 20 dBi models with pyramidal shape and connectorized input.

Waveguide antennas, such as the PE1WAN028-20KF are used in a wide variety of applications due to the high-power handling capability, low loss, high directivity, and near constant electrical performance. Our WR-28 waveguide antennas with 2.92mm Female interface is part of over 40,000 RF, microwave and millimeter wave components from Pasternack available worldwide and Ship same day.

#### Configuration

Design  
Coaxial Interface

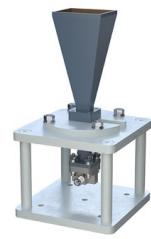
WR-28 Standard Gain Horn  
2.92mm Female

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	26.5		40	GHz
<b>Waveguide Standard Gain Horn</b>				
Gain		20		dBi
Horizontal Half Power Beam Width		17.5		Degrees
Vertical Half Power Beam Width		17.3		Degrees
<b>Waveguide to Coaxial Adapter</b>				
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-28 Standard Gain Horn with 20 dBi gain, 2.92mm Female connector, Integrated Cage-Style Mount PE1WAN028-20KF](#)

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### Mechanical Specifications

#### Size

Length

3.15 in [80.01 mm]

Width

3.15 in [80.01 mm]

Height

5.87 in [149.1 mm]

Weight

0.869 lbs [394.17 g]

#### RF Connector

Type

2.92mm Female

#### Waveguide Interface

Waveguide Size

WR-28

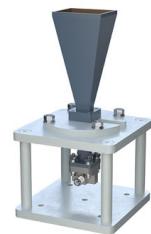
### Environmental Specifications

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

### Plotted and Other Data

Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-28 Standard Gain Horn with 20 dBi gain, 2.92mm Female connector, Integrated Cage-Style Mount PE1WAN028-20KF](#)

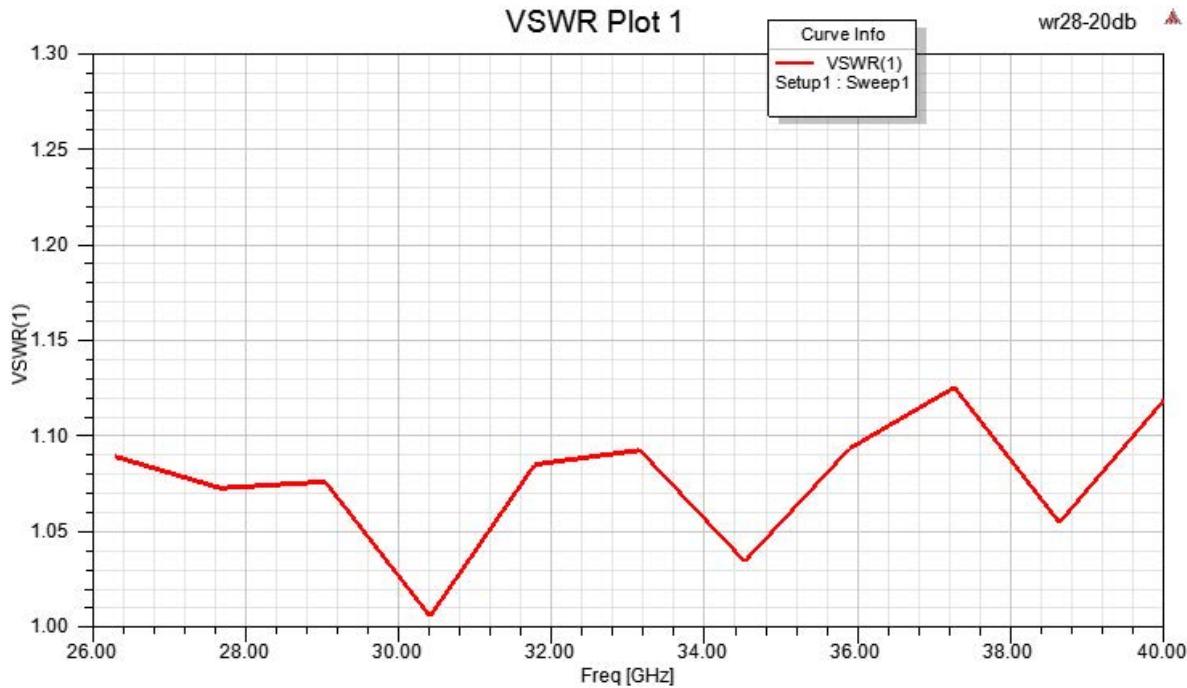


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Female connector, Integrated Cage-Style Mount

## Technical Data Sheet

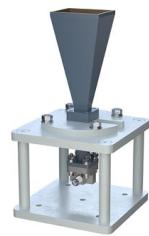
**PE1WAN028-20KF**

### Typical Performance Data



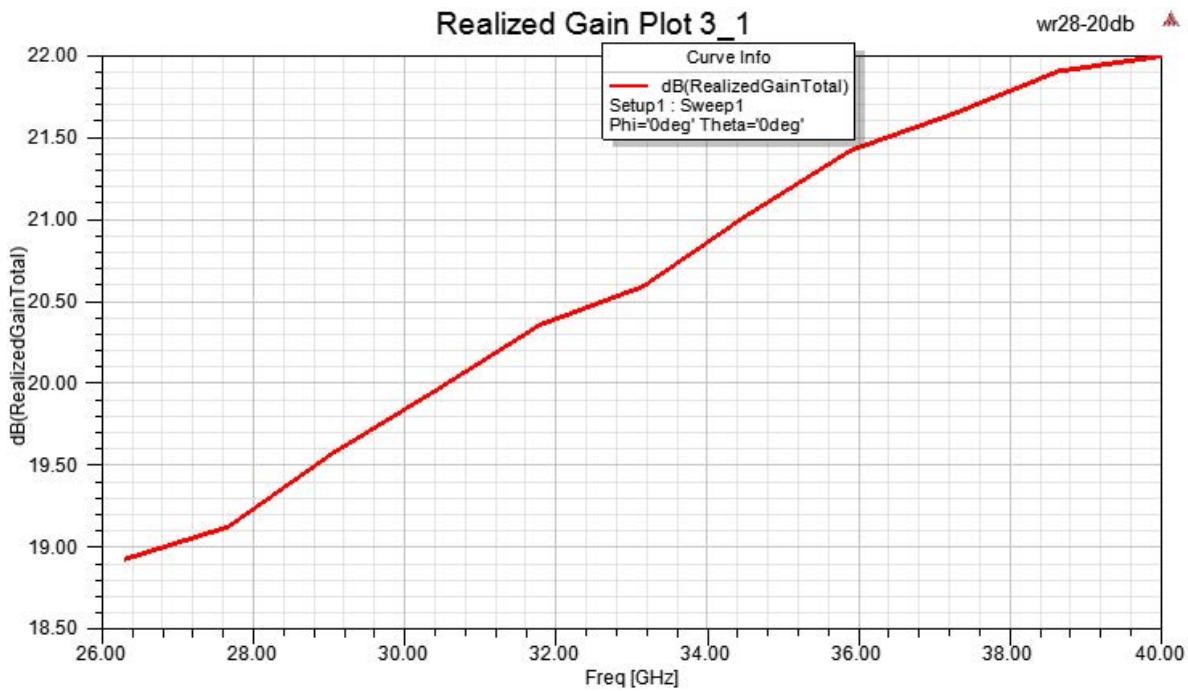
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**PE1WAN028-20KF**



WR-28 Standard Gain Horn with 20 dBi gain, 2.92mm Female connector, Integrated Cage-Style Mount 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-28 Standard Gain Horn with 20 dBi gain, 2.92mm Female connector, Integrated Cage-Style Mount PE1WAN028-20KF](https://www.pasternack.com/wr-28-standard-gain-horn-with-20-dbi-gain-2.92mm-female-connector-integrated-cage-style-mount-pe1wan028-20kf-p.aspx)

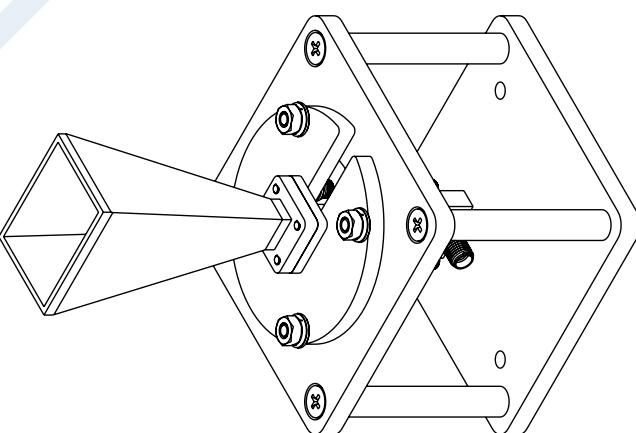
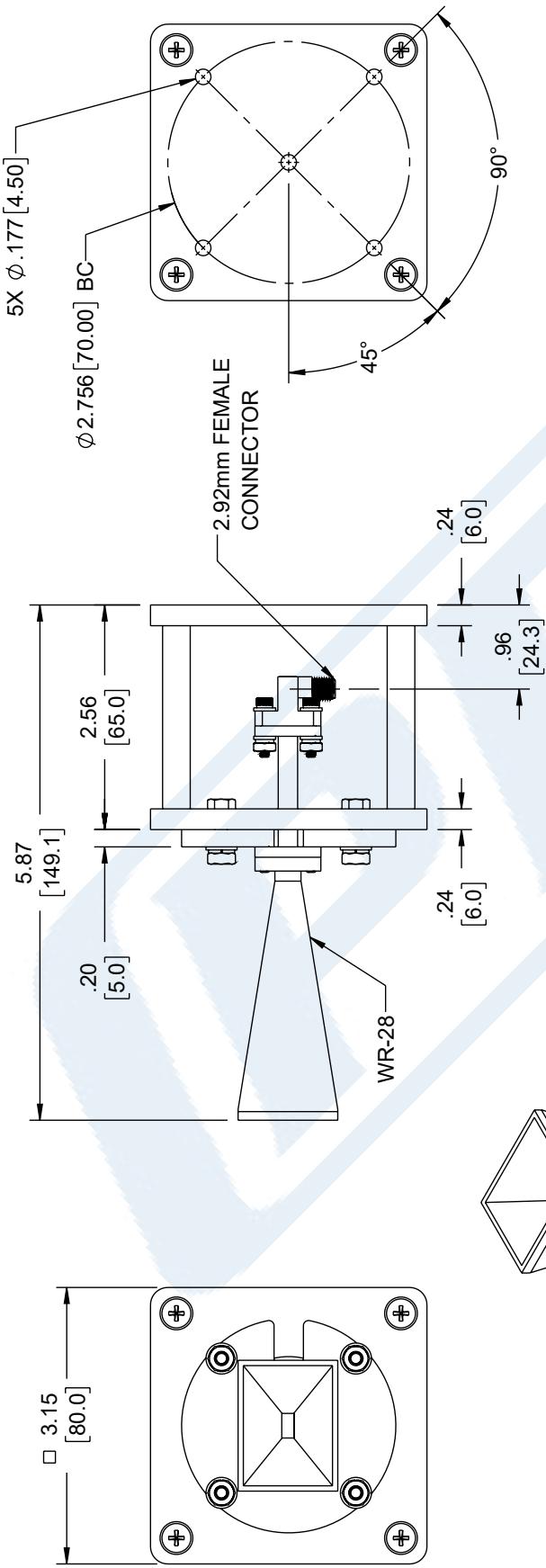
URL: <https://www.pasternack.com/wr-28-standard-gain-horn-with-20-dbi-gain-2.92mm-female-connector-integrated-cage-style-mount-pe1wan028-20kf-p.aspx>

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# PE1WAN028-20KF CAD Drawing

WR-28 Standard Gain Horn with 20 dBi gain, 2.92mm

Female connector, Integrated Cage-Style Mount



REV		DESCRIPTION		DATE	CHANGED BY	APPROVED
A	A	INITIAL RELEASE		10/19/2023	HBAKKE	KHETPAS
REVISION						
F E D C B A						

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. FOLLOWING DIMENSIONS ARE IN MILLIMETERS. TOLERANCES:  $X = \pm 0.12 [3.0]$   $XX = \pm 0.02 [0.5]$   $XXX = \pm 0.005 [0.13]$  FRACTIONS  $\frac{1}{16}$   $\frac{1}{32}$   $\frac{1}{64}$  ANGLES  $\pm 1^\circ$

CABLE LENGTH TOLERANCES:  $1.12 [30.5] \leq 6.0 [152.4] = +1 [25.4]$   $>12.0 [304.8] \leq 20.0 [508.0] = +2 [50.8]$   $>60.0 [1524.0] \leq 80.0 [2032.0] = +4 [102.0]$   $>300.0 [7620.0] \leq 400.0 [10160.0] = +6 [152.0]$   $>1200.0 [30480.0] \leq 1600.0 [40160.0] = +8 [203.2]$   $>6000.0 [152400.0] \leq 8000.0 [203200.0] = +16 [30.48]$

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE. UN-UNITS INDICATED. CAGE FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE

1 OF 1

WEBSITE: [www.Pasternack.com](http://www.Pasternack.com)

PHONE: 1.866.727.8376 | 1.949.261.1920

DESCRIPTION: WR-28 STANDARD GAIN HORN WITH 20 DBI GAIN, 2.92MM FEMALE CONNECTOR WITH PRE-INSTALLED CAGE-STYLE MOUNT

ITEM NO. PE1WAN028-20KF

REV A

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