

WR-28 Waveguide Antenna, 26.5 GHz to 40 GHz Frequency Range, 20 dBi Gain, UG-599/U Flange, Integrated Cage-Style Mount

Waveguide Antennas Technical Data Sheet

PE1WAN028-20

Features

- WR-28 Rectangular Waveguide Interface
- 26.5 GHz to 40 GHz
- 20 dBi Nominal Gain
- UG-599/U Cover Flange
- Ka Band
- Ruggedized Aluminum Cage-Style Mount
- Integrates with Positioning Systems

Applications

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

Description

The PE1WAN028-20 Ka Band standard gain horn antenna (also known as waveguide horn) from Pasternack has a nominal gain of 20 dBi. This WR-28 standard gain horn has a UG-599/U type flange and integrated cage-style mount. The mount is a ruggedized aluminum mounting solution that integrates with test and measurement positioning systems, ensuring precise alignment and protection of the antenna. The Pasternack 20 dBi WR-28 horn antenna operates from 26.5 GHz to 40 GHz. The WR-28 PE1WAN028-20 waveguide horn is powder coated Aluminum for added protection and corrosion resistance. 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-28 standard gain horns are available in 10, 15 and 20 dBi models with pyramidal shape and rectangular input. Our WR-28 standard gain horn antennas can ship worldwide the same day as it is purchased as with our other available RF parts.

Configuration

Design	WR-28
Polarization	Linear

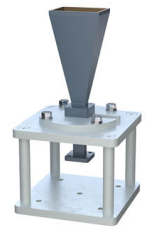
Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	26.5		40	GHz
Nominal Gain		20		dBi
Horizontal Half Power Beam Width		17.5		Degrees
Vertical Half Power Beam Width		17.3		Degrees
VSWR		1.3:1		

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	0.541 lbs [245.39 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-28 Waveguide Antenna, 26.5 GHz to 40 GHz Frequency Range, 20 dBi Gain, UG-599/U Flange, Integrated Cage-Style Mount PE1WAN028-20](#)



WR-28 Waveguide Antenna, 26.5 GHz to
40 GHz Frequency Range, 20 dBi Gain, UG-599/U Flange,
Integrated Cage-Style Mount

Waveguide Antennas Technical Data Sheet

PE1WAN028-20

Waveguide Interface

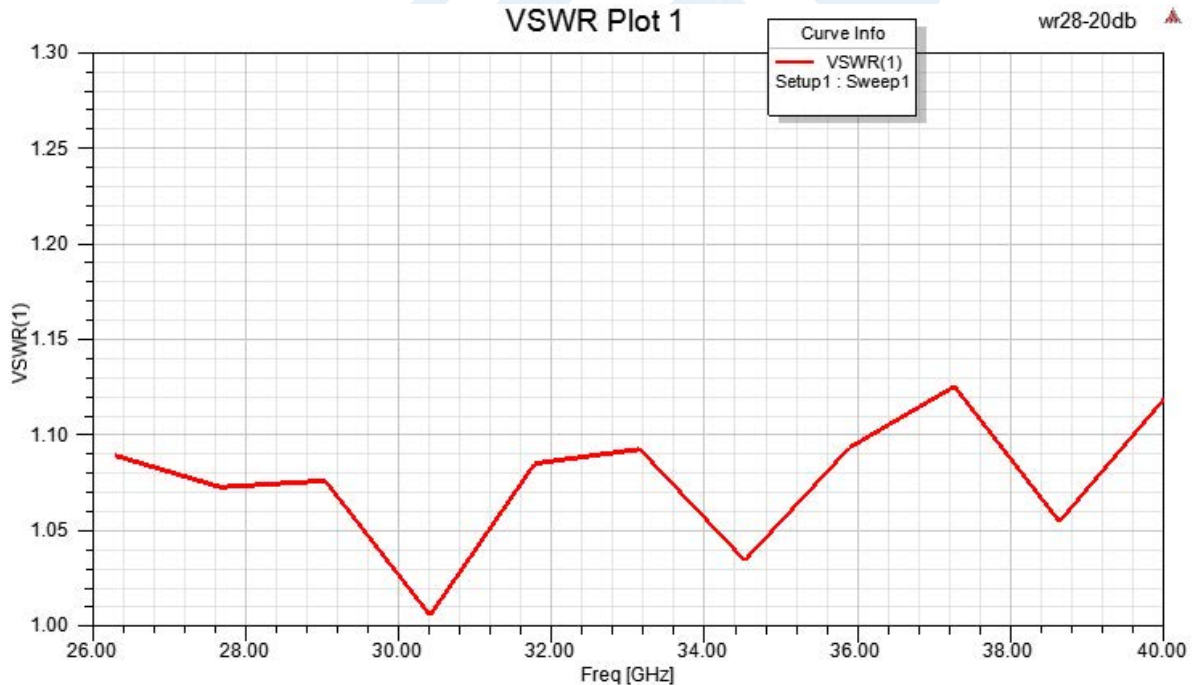
Waveguide Size
Flange Type
Flange Designation
Body Material and Plating

WR-28
Square Cover
UG-599/U
Aluminum, Gray

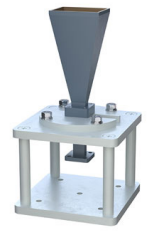
Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Typical Performance Data



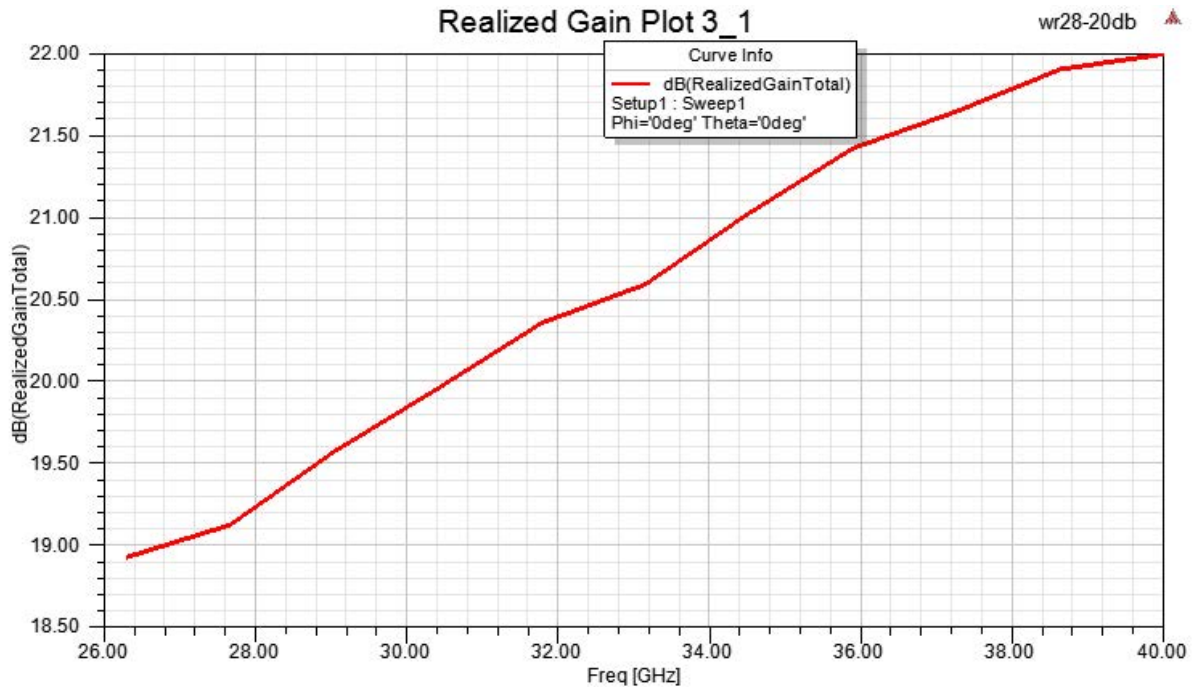
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-28 Waveguide Antenna, 26.5 GHz to 40 GHz Frequency Range, 20 dBi Gain, UG-599/U Flange, Integrated Cage-Style Mount PE1WAN028-20](#)



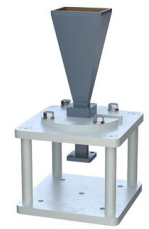
WR-28 Waveguide Antenna, 26.5 GHz to
40 GHz Frequency Range, 20 dBi Gain, UG-599/U Flange,
Integrated Cage-Style Mount

Waveguide Antennas Technical Data Sheet

PE1WAN028-20



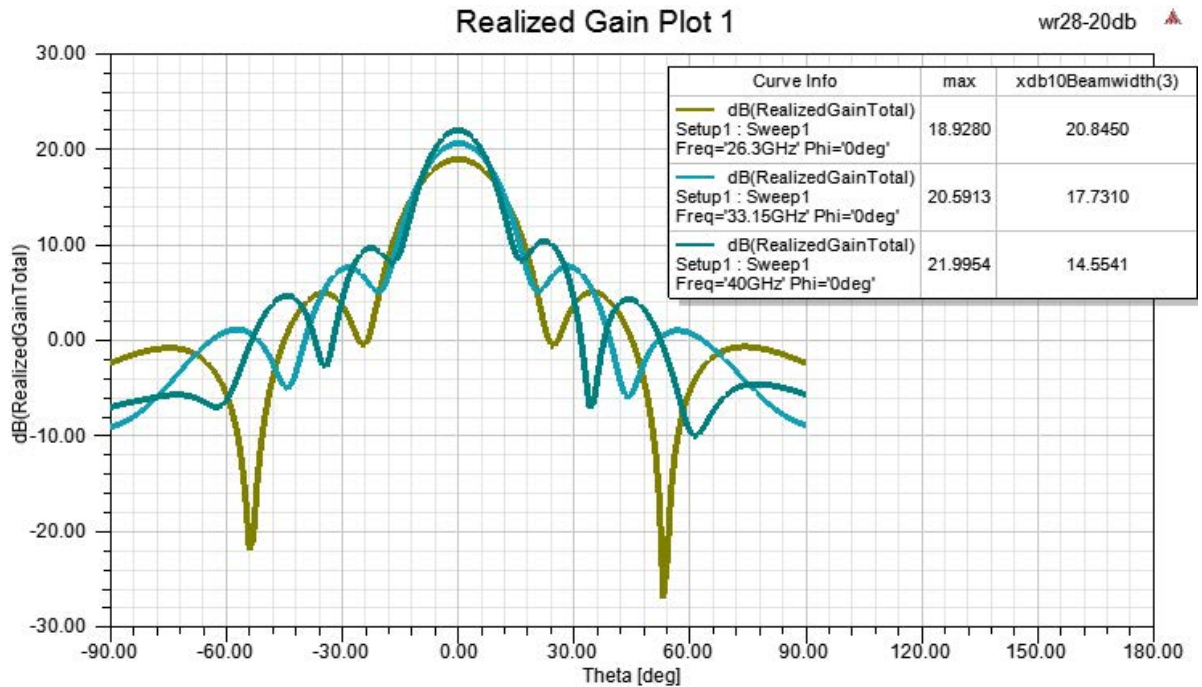
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-28 Waveguide Antenna, 26.5 GHz to 40 GHz Frequency Range, 20 dBi Gain, UG-599/U Flange, Integrated Cage-Style Mount PE1WAN028-20](#)



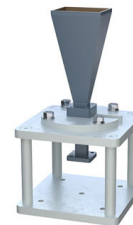
WR-28 Waveguide Antenna, 26.5 GHz to
40 GHz Frequency Range, 20 dBi Gain, UG-599/U Flange,
Integrated Cage-Style Mount

Waveguide Antennas Technical Data Sheet

PE1WAN028-20



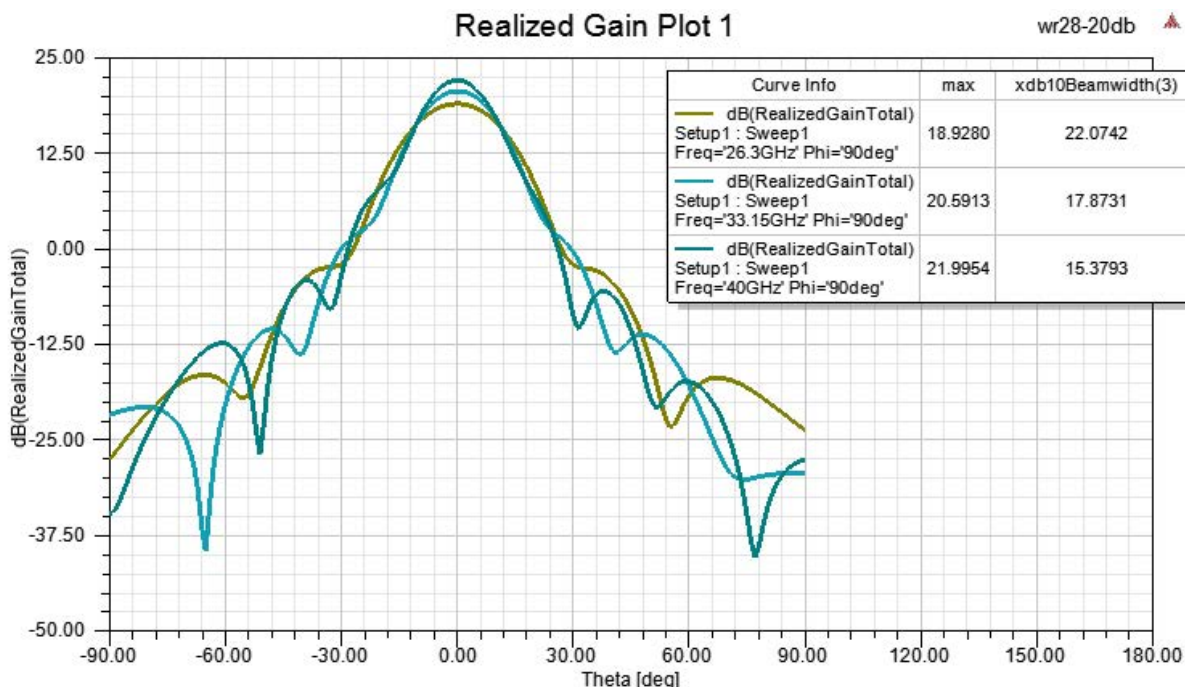
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-28 Waveguide Antenna, 26.5 GHz to 40 GHz Frequency Range, 20 dBi Gain, UG-599/U Flange, Integrated Cage-Style Mount PE1WAN028-20](#)



WR-28 Waveguide Antenna, 26.5 GHz to
40 GHz Frequency Range, 20 dBi Gain, UG-599/U Flange,
Integrated Cage-Style Mount

Waveguide Antennas Technical Data Sheet

PE1WAN028-20



WR-28 Waveguide Antenna, 26.5 GHz to 40 GHz Frequency Range, 20 dBi Gain, UG-599/U Flange, 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 Waveguide Antenna, 26.5 GHz to 40 GHz Frequency Range, 20 dBi Gain, UG-599/U Flange, Integrated Cage-Style Mount PE1WAN028-20](https://www.pasternack.com/wr-28-waveguide-antenna-26.5-ghz-to-40-ghz-frequency-range-20-dbi-gain-ug-599-u-flange-integrated-cage-style-mount-pe1wan028-20-p.aspx)

URL: <https://www.pasternack.com/wr-28-waveguide-antenna-26.5-ghz-to-40-ghz-frequency-range-20-dbi-gain-ug-599-u-flange-integrated-cage-style-mount-pe1wan028-20-p.aspx>

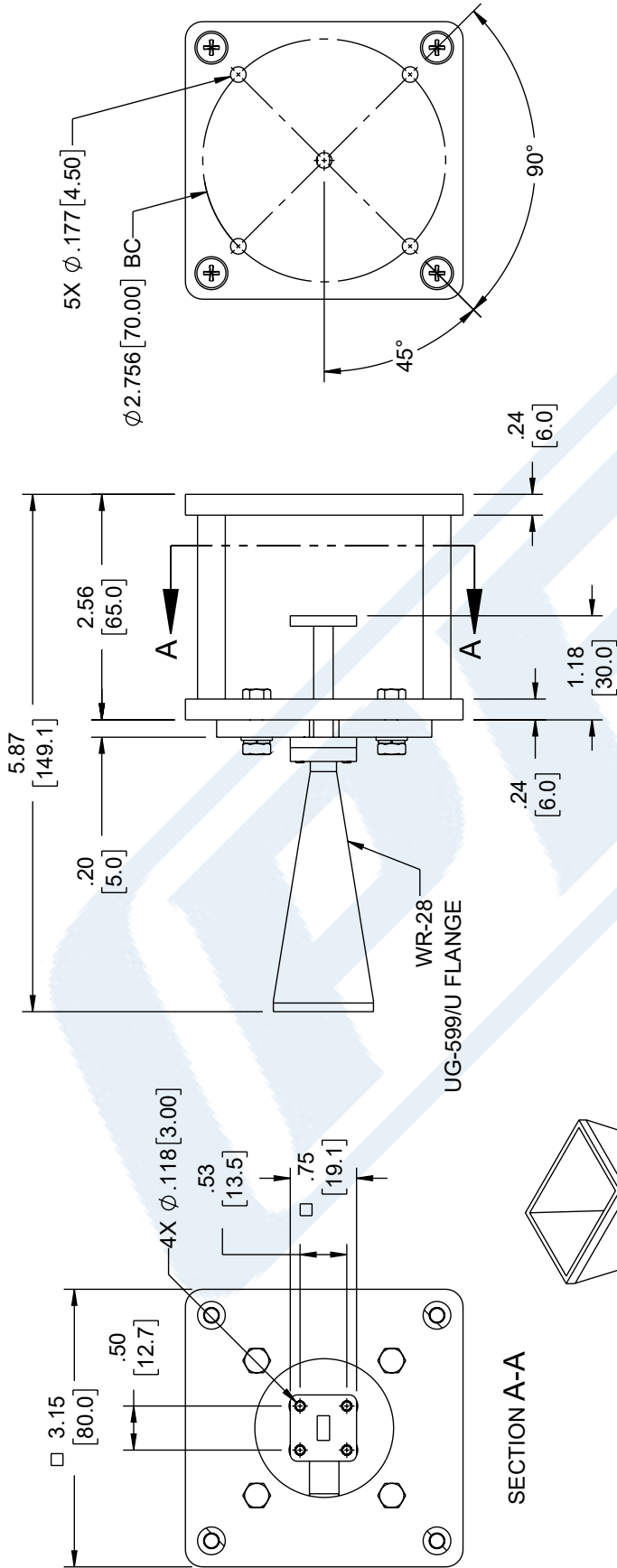
The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such 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.

PE1WAN028-20 CAD Drawing

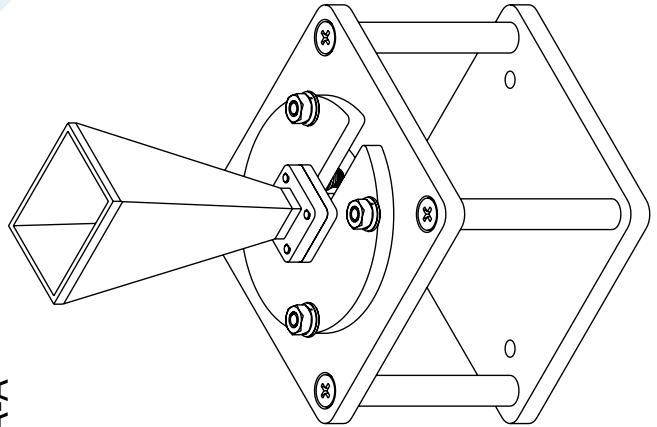
WR-28 Waveguide Antenna, 26.5 GHz to 40 GHz Frequency Range,
20 dBi Gain, UG-599/U Flange, Integrated Cage-Style Mount

6 5 4 3 2 1

REVISION			
ZONE	REV	DESCRIPTION	DATE
	A	INITIAL RELEASE	10/19/2023
		CHANGED BY	HBAKKE
		APPROVED	KHIETPAS



SECTION A-A



Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920		SCALE	NONE
		SHEET	1 OF 1
DESCRIPTION WR-28 WAVEGUIDE ANTENNA, 26.5 GHZ TO 40 GHZ FREQUENCY RANGE, 20 DBI GAIN, UG-599/U FLANGE WITH PRE-INSTALLED CAGE-STYLE MOUNT			
SIZE	A	CAGE CODE	53919
REV	A	ITEM NO.	PE1WAN028-20

UNLESS OTHERWISE SPECIFIED: LEADING DIMENSIONS ARE IN INCHES DIMENSIONS IN [] ARE IN MILLIMETERS	
TOLERANCES:	
X = ±.2 [5]	FRACTIONS
XX = ±.02 [0.5]	± 1/32
XXX = ±.005 [0.13]	ANGLES ± 1°
CABLE LENGTH TOLERANCES:	
>12 [305] ≤ 512 [1300]	± 1/32 [0.762]
>512 [1300] ≤ 120 [3048]	± 1/16 [1.524]
>60 [1524] ≤ 120 [3048]	± 1/16 [1.524]
>120 [3048] ≤ 300 [7620]	± 1/8 [3.175]
>300 [7620]	± 1/4 [6.350]

ALL DIMENSIONS ARE FOR REFERENCE ONLY
 UNLESS OTHERWISE SPECIFIED, DIMENSIONS
 UNLESS OTHERWISE SPECIFIED, DIMENSIONS
 MAY VARY IN SIZE AND LOCATION
 COLORS MAY VARY