



WR-12 Waveguide Conical Gain Horn Antenna  
 Operating from 77 GHz to 87 GHz with a Nominal  
 25 dBi Gain with UG-387/U Round Cover Flange

Gain Horns Technical Data Sheet

PEWAN1048

**Features**

- Circular Waveguide Interface
- 77 GHz to 87 GHz
- 25 dBi Nominal Gain
- UG-387/U Round Cover Flange

**Applications**

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

**Description**

Waveguide conical 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 across a broad bandwidth. Pasternack's PEWAN1048 WR-12 waveguide conical gain horn antenna operating from 77 GHz to 87 GHz with a nominal 25 dBi gain is part of our full line of RF components available for same-day shipping. This Pasternack circular horn antenna has a gold plated brass body and a precision tolerance UG-387/U round cover flange. The PEWAN1048 WR-12 waveguide conical gain horn antenna offers low gain variation across its operating frequency range.

**Configuration**

Design	WR-12 Conical Gain Horn
Pattern	Directional
Polarization	Linear

**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	77		87	GHz
Nominal Gain		25		dBi
Horizontal Half Power Beam Width		10		Degrees
Vertical Half Power Beam Width		9		Degrees
VSWR		1.15:1		

**Mechanical Specifications**

<b>Size</b>	
Length	3.66 in [92.96 mm]
Width	1.09 in [27.69 mm]
Height	1.09 in [27.69 mm]
Weight	0.06 lbs [27.22 g]

**Waveguide Interface**

Waveguide Size	WR-12
Flange Type	Round Cover
Flange Designation	UG-387/U

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-12 Waveguide Conical Gain Horn Antenna Operating from 77 GHz to 87 GHz with a Nominal 25 dBi Gain with UG-387/U Round Cover Flange PEWAN1048](#)



WR-12 Waveguide Conical Gain Horn Antenna  
Operating from 77 GHz to 87 GHz with a Nominal  
25 dBi Gain with UG-387/U Round Cover Flange

## Gain Horns Technical Data Sheet

PEWAN1048

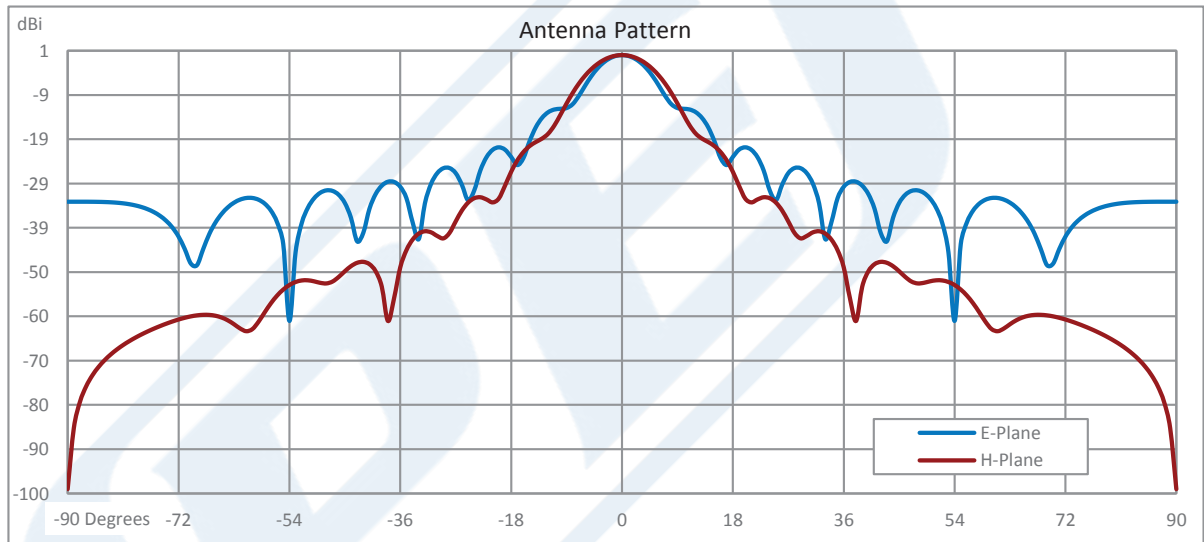
Body Material and Plating

Brass, Gold

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

### Plotted and Other Data

#### Typical Performance Data



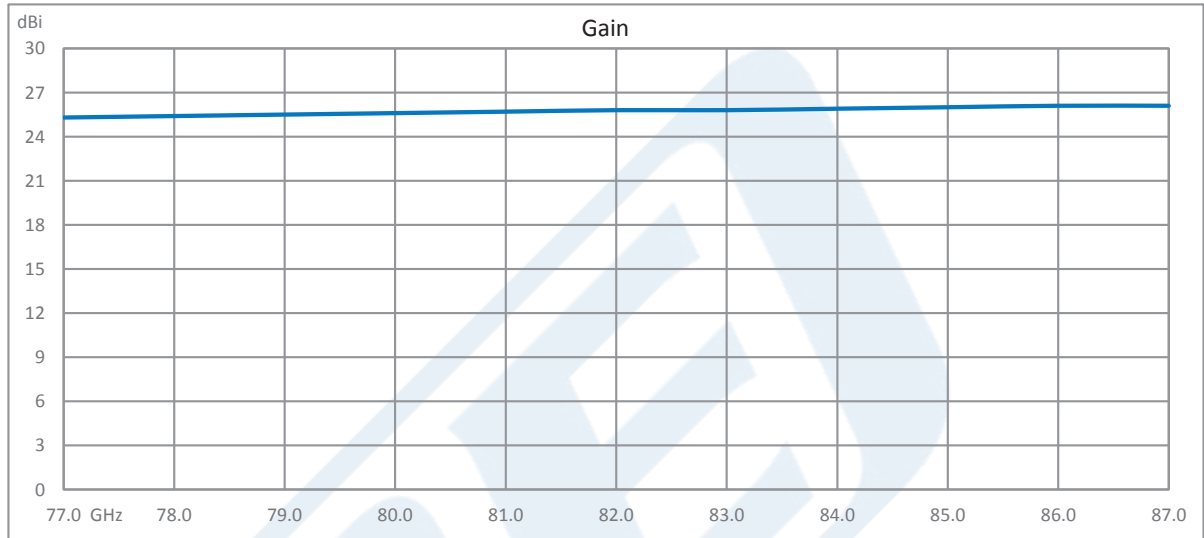
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-12 Waveguide Conical Gain Horn Antenna Operating from 77 GHz to 87 GHz with a Nominal 25 dBi Gain with UG-387/U Round Cover Flange PEWAN1048](#)



WR-12 Waveguide Conical Gain Horn Antenna  
Operating from 77 GHz to 87 GHz with a Nominal  
25 dBi Gain with UG-387/U Round Cover Flange

Gain Horns Technical Data Sheet

PEWAN1048



WR-12 Waveguide Conical Gain Horn Antenna Operating from 77 GHz to 87 GHz with a Nominal 25 dBi Gain with UG-387/U Round 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-12 Waveguide Conical Gain Horn Antenna Operating from 77 GHz to 87 GHz with a Nominal 25 dBi Gain with UG-387/U Round Cover Flange PEWAN1048](https://www.pasternack.com/wr-12-waveguide-gain-horn-antenna-25dbi-ug-387-round-flange-pewan1048-p.aspx)

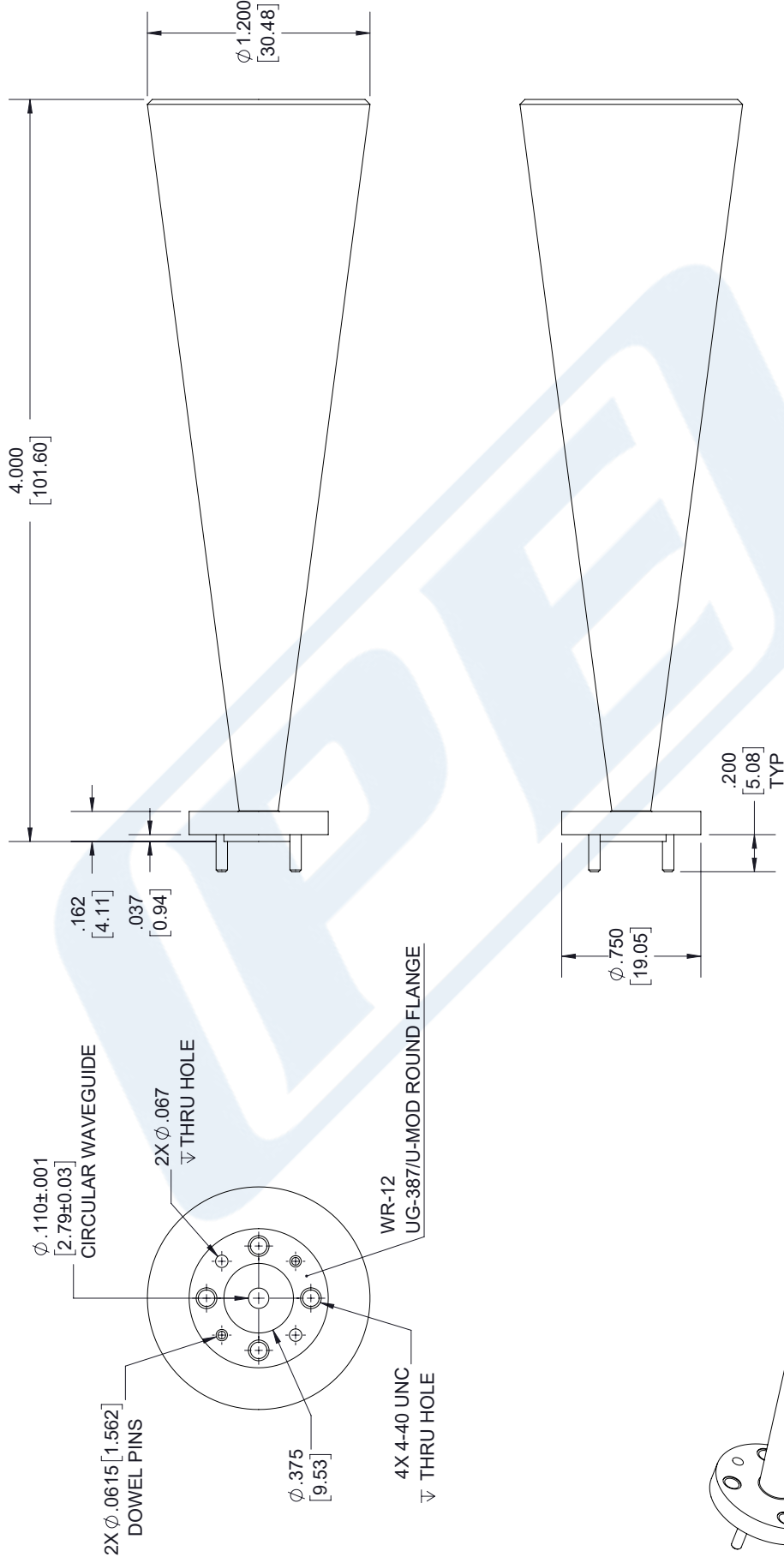
URL: <https://www.pasternack.com/wr-12-waveguide-gain-horn-antenna-25dbi-ug-387-round-flange-pewan1048-p.aspx>

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.

# PEWAN1048 CAD Drawing

WR-12 Waveguide Conical Gain Horn Antenna Operating from 77 GHz to 87 GHz with a Nominal 25 dBi Gain with UG-387/U Round Cover Flange

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	02/21/19	M.MILLER



UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS	
TOLERANCES:	FRACTIONS
X $\pm$ 2 [5.08]	$\pm$ 1/32
.XX $\pm$ .01 [0.25]	$\pm$ .005
.XXX $\pm$ .005 [0.13]	ANGLES $\pm$ 1°
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.	
THIRD-ANGLE PROJECTION	

 <b>PASTERNAK</b> an INFINITO 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 www.pasternack.com   e-mail: sales@pasternack.com		THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION. ALL RIGHTS RESERVED. SHEET 1 OF 1 SCALE N/A
SIZE A CAGE 53919 DRAWN BY K.DANG	PART NUMBER PEWAN1048 REV A	www.pasternack.com   e-mail: sales@pasternack.com SIZE A CAGE 53919 DRAWN BY K.DANG PART NUMBER PEWAN1048 REV A

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.