

WR-650 Waveguide Standard Gain Horn Antenna Operating  
From 1.13 GHz to 1.73 GHz, 10 dBi Gain with CPR-650F Flange

## Waveguide Antennas Technical Data Sheet

**PEWAN650-10**

### Features

- 1130 MHz to 1730 MHz
- Linearly Polarized
- 10 dBi Nominal Gain
- WR-650 with CPR-650F Flange
- Powder Coated Aluminum

### Applications

- Antenna Measurements
- Wireless Communication
- Laboratory Use
- Microwave Testing
- Radome Testing
- EMC measurement
- Satellite Antenna Testing

### Description

The PEWAN650-10 standard horn antenna (also known as waveguide horn) from Pasternack is part of our comprehensive selection of waveguide antennas. This WR-650 waveguide horn features an CPR-650F waveguide flange and operates from 1130 to 1730 MHz.

Our PEWAN650-10 standard gain horn antenna has a nominal gain of 10 dBi with a typical input VSWR of 1.5:1. Pasternack's waveguide horns are available in 10, 15, and 20 dBi models with varying frequency ranges to suit the application needs.

Waveguide antennas, such as the PEWAN650-10 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-650 waveguide antennas are part of over 40,000 RF, microwave, and millimeter wave components from Pasternack available worldwide and Ship same day.

### Configuration

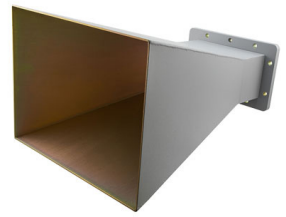
Design  
Pattern  
Polarization

WR-650 Standard Gain Horn  
Directional  
Linear

### Electrical Specifications

| Description                      | Minimum | Typical | Maximum | Units   |
|----------------------------------|---------|---------|---------|---------|
| Frequency Range                  | 1.13    |         | 1.73    | GHz     |
| Nominal Gain                     |         | 10      |         | dBi     |
| Horizontal Half Power Beam Width |         | 55      |         | Degrees |
| Vertical Half Power Beam Width   |         | 55      |         | Degrees |
| VSWR                             |         |         | 1.5:1   |         |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-650 Waveguide Standard Gain Horn Antenna Operating From 1.13 GHz to 1.73 GHz, 10 dBi Gain with CPR-650F Flange PEWAN650-10](#)



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### Mechanical Specifications

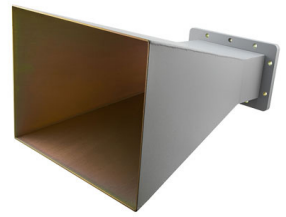
#### Size

|        |                     |
|--------|---------------------|
| Length | 11 in [279.4 mm]    |
| Width  | 12.4 in [314.96 mm] |
| Height | 9.3 in [236.22 mm]  |
| Weight | 7 lbs [3.18 kg]     |

#### Waveguide Interface

|                           |          |
|---------------------------|----------|
| Waveguide Size            | WR-650   |
| Flange Type               | CPR-650F |
| Body Material and Plating | Aluminum |

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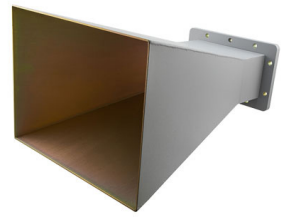
**PEWAN650-10**

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

**Plotted and Other Data**

**Typical Performance Data**

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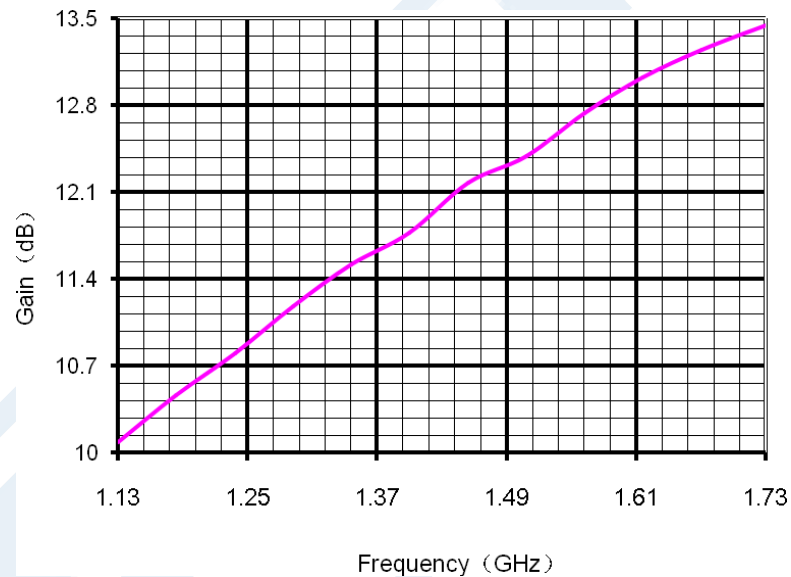


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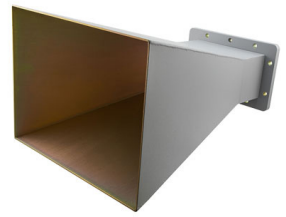
**PEWAN650-10**

Gain VS Frequency Curve:



| Freq     | Gain     | Freq     | Gain     |
|----------|----------|----------|----------|
| 1.13 GHz | 10.08 dB | 1.45 GHz | 12.17 dB |
| 1.18 GHz | 10.47 dB | 1.51 GHz | 12.39 dB |
| 1.24 GHz | 10.80 dB | 1.56 GHz | 12.74 dB |
| 1.29 GHz | 11.18 dB | 1.62 GHz | 13.02 dB |
| 1.35 GHz | 11.52 dB | 1.67 GHz | 13.25 dB |
| 1.40 GHz | 11.77 dB | 1.73 GHz | 13.45 dB |

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**PEWAN650-10**

WR-650 Waveguide Standard Gain Horn Antenna Operating From 1.13 GHz to 1.73 GHz, 10 dBi Gain with CPR-650F 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-650 Waveguide Standard Gain Horn Antenna Operating From 1.13 GHz to 1.73 GHz, 10 dBi Gain with CPR-650F Flange PEWAN650-10](https://www.pasternack.com/wr-650-waveguide-standard-gain-horn-antenna-operating-from-1.13-ghz-to-1.73-ghz-10-dbi-gain-with-cpr-650f-flange-pewan650-10-p.aspx)

URL: <https://www.pasternack.com/wr-650-waveguide-standard-gain-horn-antenna-operating-from-1.13-ghz-to-1.73-ghz-10-dbi-gain-with-cpr-650f-flange-pewan650-10-p.aspx>

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# PEWAN650-10 CAD Drawing

WR-650 Waveguide Standard Gain Horn Antenna Operating From  
1.13 GHz to 1.73 GHz, 10 dBi Gain with CPR-650F Flange

F

F

E

E

D

D

C

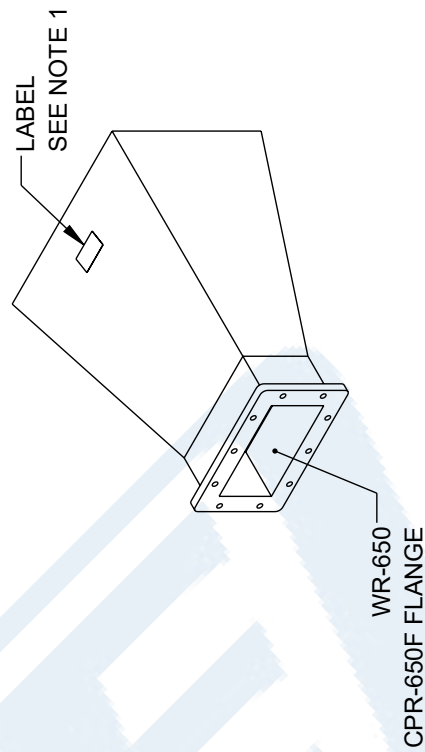
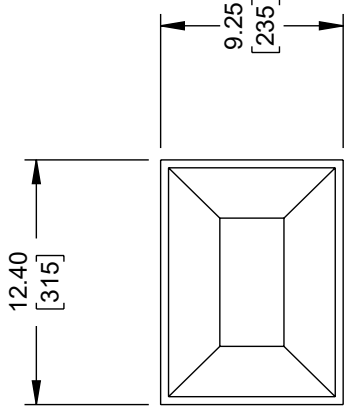
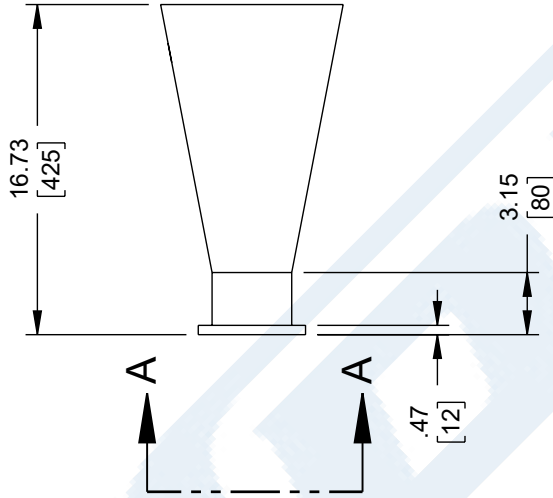
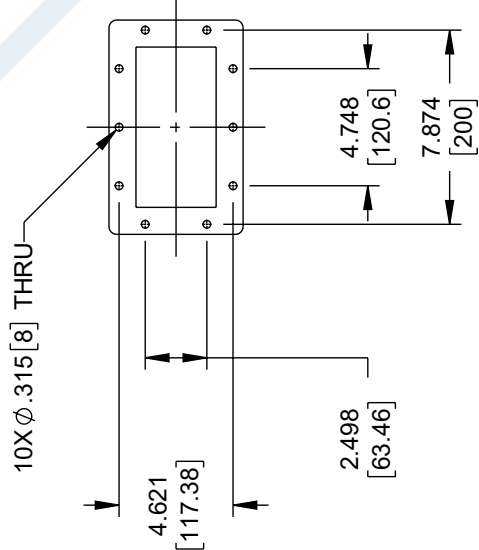
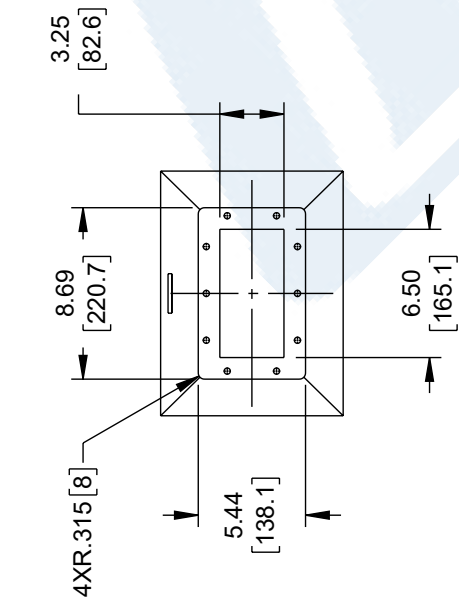
C

B

B

A

A



VIEW A-A

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

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|---------------------------------------------------------------------------------------------------------------|--------------------|----------------------|
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| Website: <a href="http://www.Pasternack.com">www.Pasternack.com</a><br>Phone: 1.866.727.8376   1.949.261.1920 | SCALE<br>NONE      | SHEET<br>1 OF 1      |
| DESCRIPTION<br>WR-650 STANDARD GAIN HORN ANTENNA, 1.13-1.73 GHz,<br>10 dBi Gain, CPR-650F FLANGE              |                    |                      |
| SIZE<br>A                                                                                                     | CASE CODE<br>53919 | DRAWN BY<br>KGLEBOVA |
| ITEM NO.<br>PEWAN650-10                                                                                       |                    | REV<br>A             |