

WR-112 Standard Gain Horn with 20 dBi gain,
End Launch SMA Female connector

Technical Data Sheet

PEWAN112-20ELSF

Features

- 7.05 GHz to 10 GHz
- WR-112 Waveguide Band
- 20 dBi Nominal Gain
- SMA Female End Launch Connector

Applications

- Antenna Measurements
- Wireless Communication
- Laboratory Use
- Microwave Radio Systems
- Radome Testing
- Automotive Antenna Test
- Solutions
- Radar Cross Section
- Satellite Antenna Testing

Description

The PEWAN112-20ELSF standard gain horn antenna (also known as waveguide horn) from Pasternack is part of our comprehensive selection of waveguide antennas. This standard gain horn is mated with a WR-112 to SMA Female End Launch waveguide to coaxial adapter and operates from 7.05 GHz to 10 GHz.

Our PEWAN112-20ELSF standard gain horn antenna 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 SMA Female End Launch to WR-112 standard gain horns are available in 10, 15 and 20 dBi models with pyramidal shape and connectorized input.

Waveguide antennas, such as the PEWAN112-20ELSF 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-112 waveguide antennas with SMA Female End Launch interface is part of over 40,000 RF, microwave and millimeter wave components from Pasternack available worldwide and Ship same day.

Configuration

Design: WR-112 Standard Gain Horn
Coaxial Interface: SMA Female

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|-------------------------------------|---------|---------|---------|---------|
| Frequency Range | 7.05 | | 10 | GHz |
| Waveguide Standard Gain Horn | | | | |
| Gain | | 20 | | dBi |
| Horizontal Half Power Beam Width | | 17.5 | | Degrees |
| Vertical Half Power Beam Width | | 17.3 | | Degrees |
| Waveguide to Coaxial Adapter | | | | |
| Input VSWR | | | 1.4:1 | |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-112 Standard Gain Horn with 20 dBi gain, End Launch SMA Female connector PEWAN112-20ELSF](#)



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Mechanical Specifications

Size

| | |
|--------|-----------------------|
| Length | 13.359 in [339.32 mm] |
| Width | 5.487 in [139.37 mm] |
| Height | 4.071 in [103.4 mm] |
| Weight | 1.3095 lbs [593.98 g] |

RF Connector

| | |
|---------------|------------|
| Type | SMA Female |
| Specification | End Launch |

Waveguide Interface

| | |
|----------------|--------|
| Waveguide Size | WR-112 |
|----------------|--------|

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-112 Standard Gain Horn with 20 dBi gain, End Launch SMA Female connector PEWAN112-20ELSF](#)

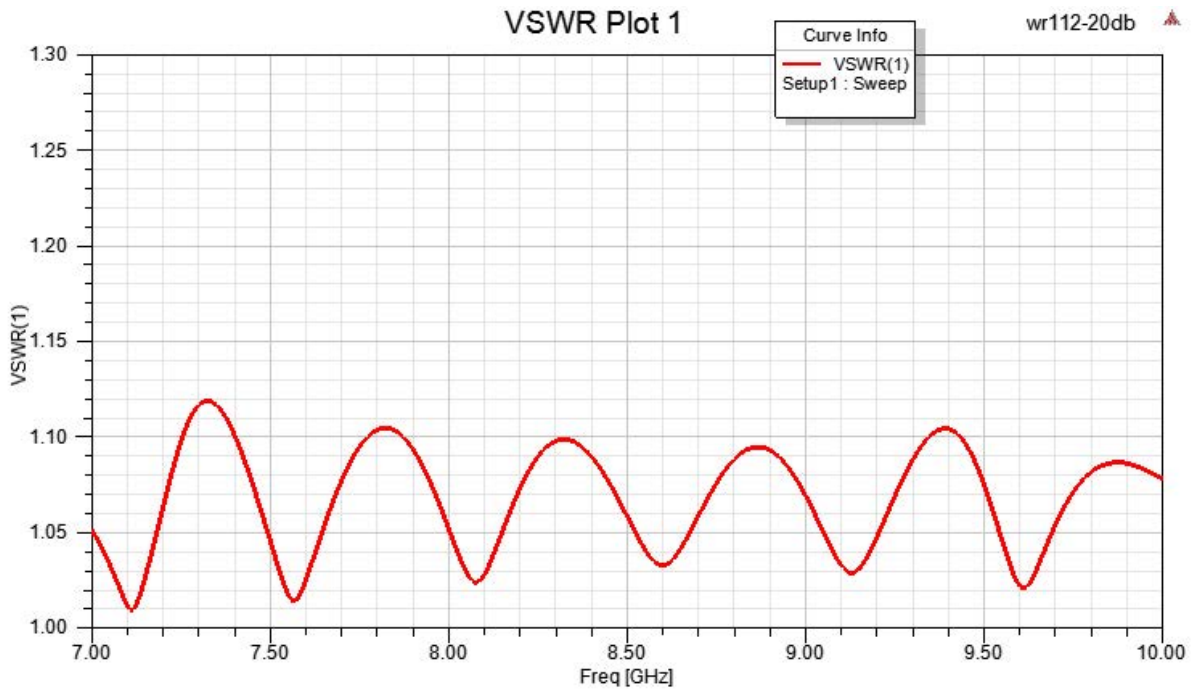


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Typical Performance Data



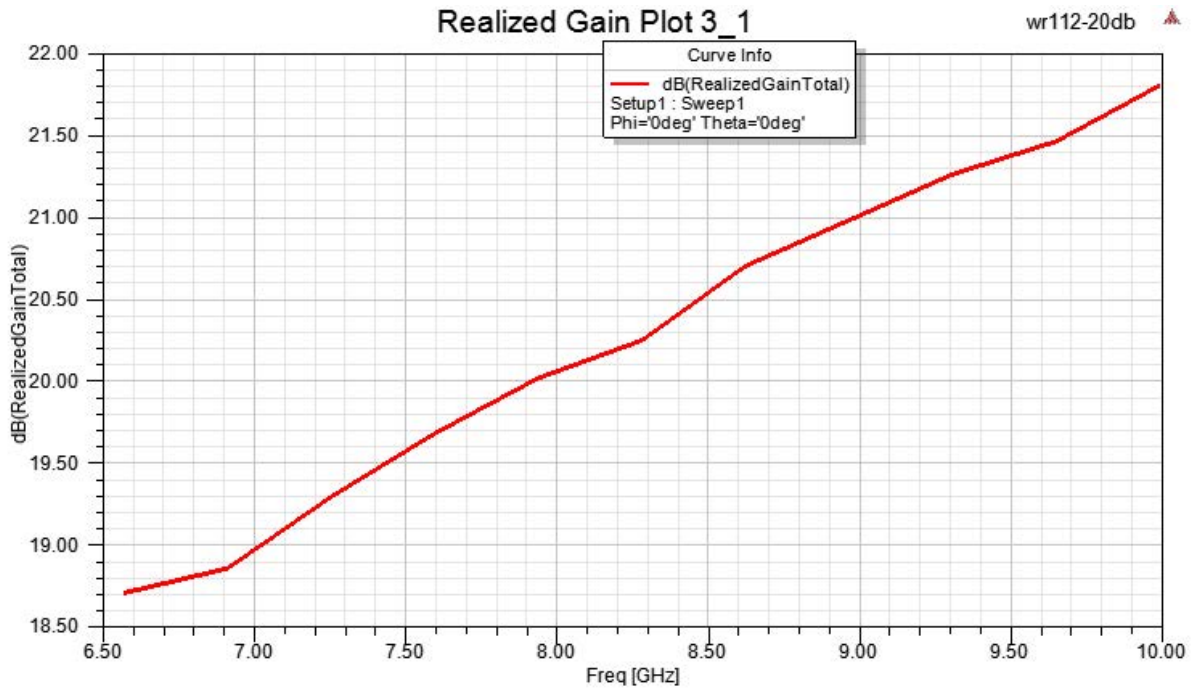
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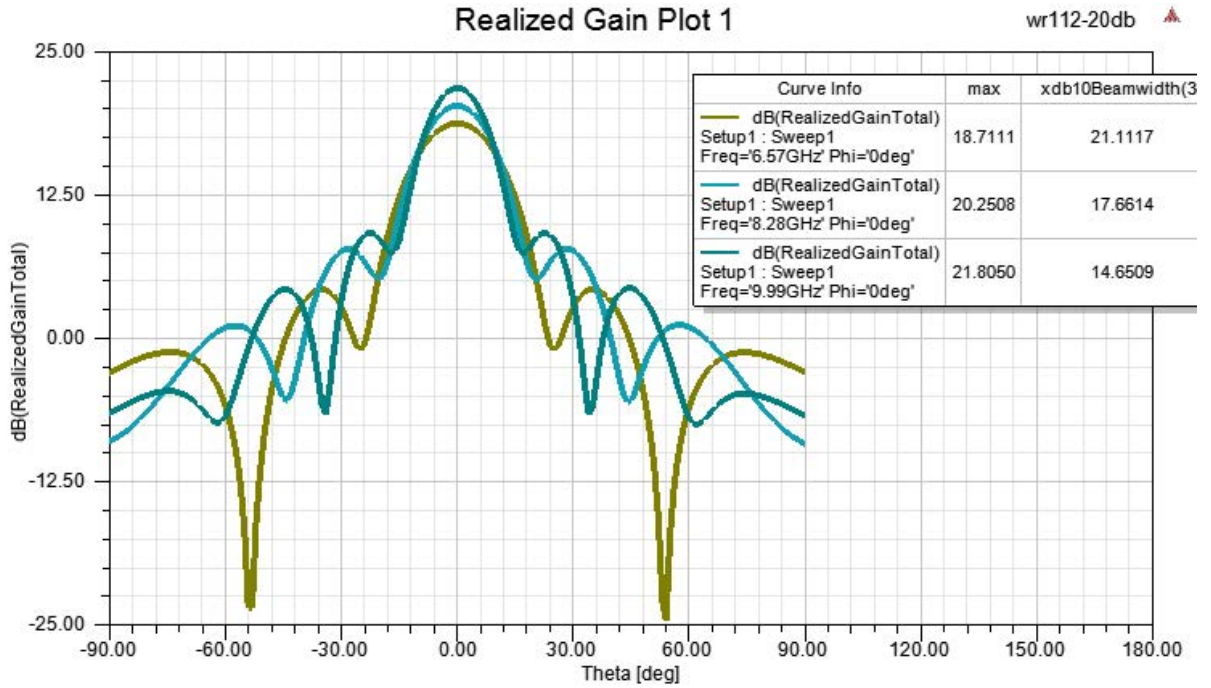
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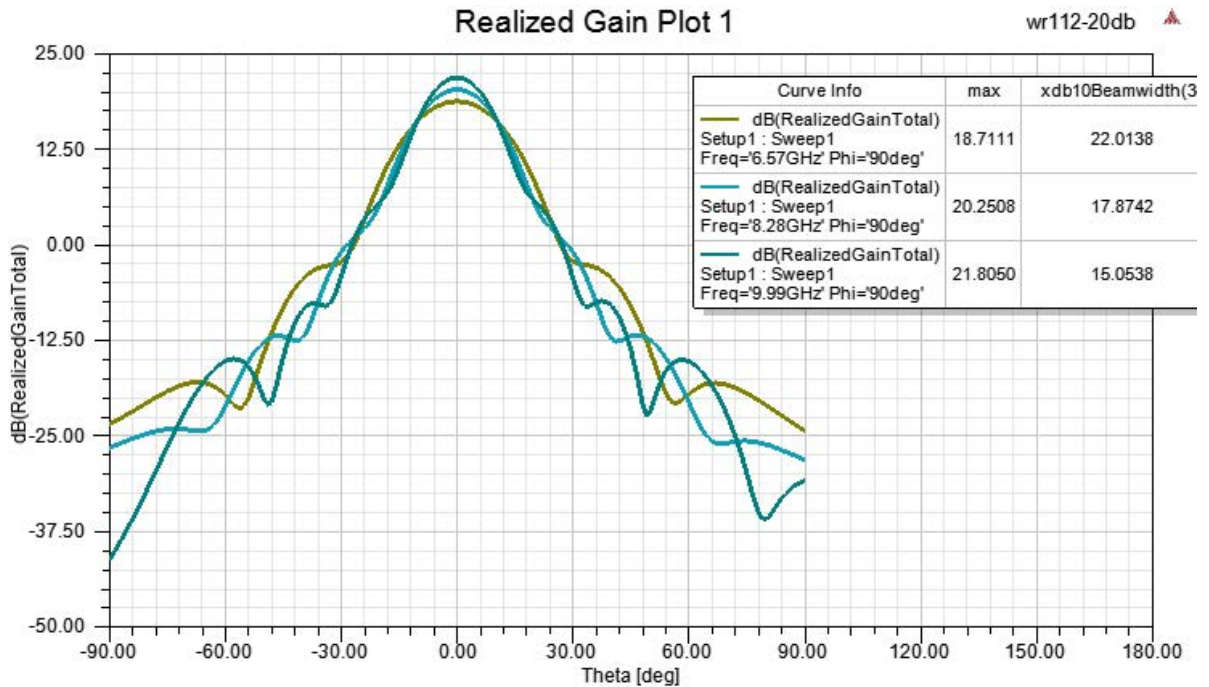
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WR-112 Standard Gain Horn with 20 dBi gain, End Launch SMA Female connector from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are 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-112 Standard Gain Horn with 20 dBi gain, End Launch SMA Female connector PEWAN112-20ELSF](#)

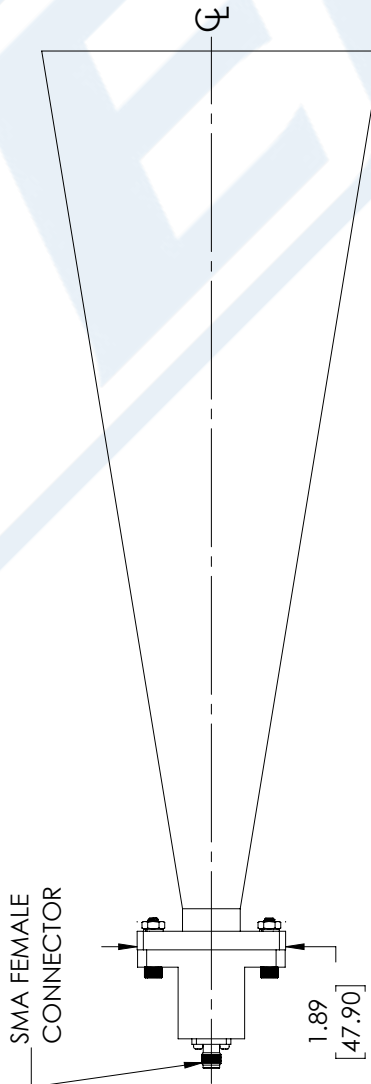
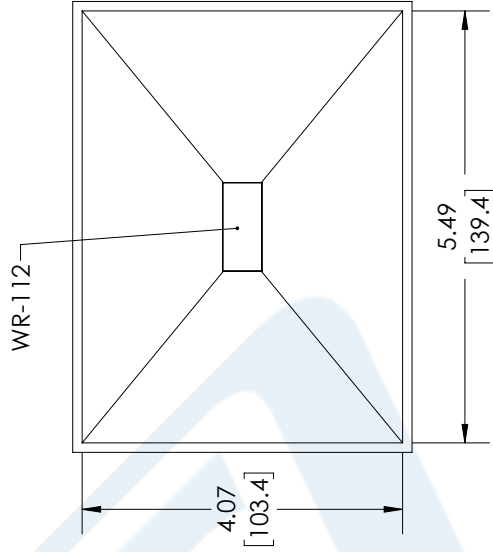
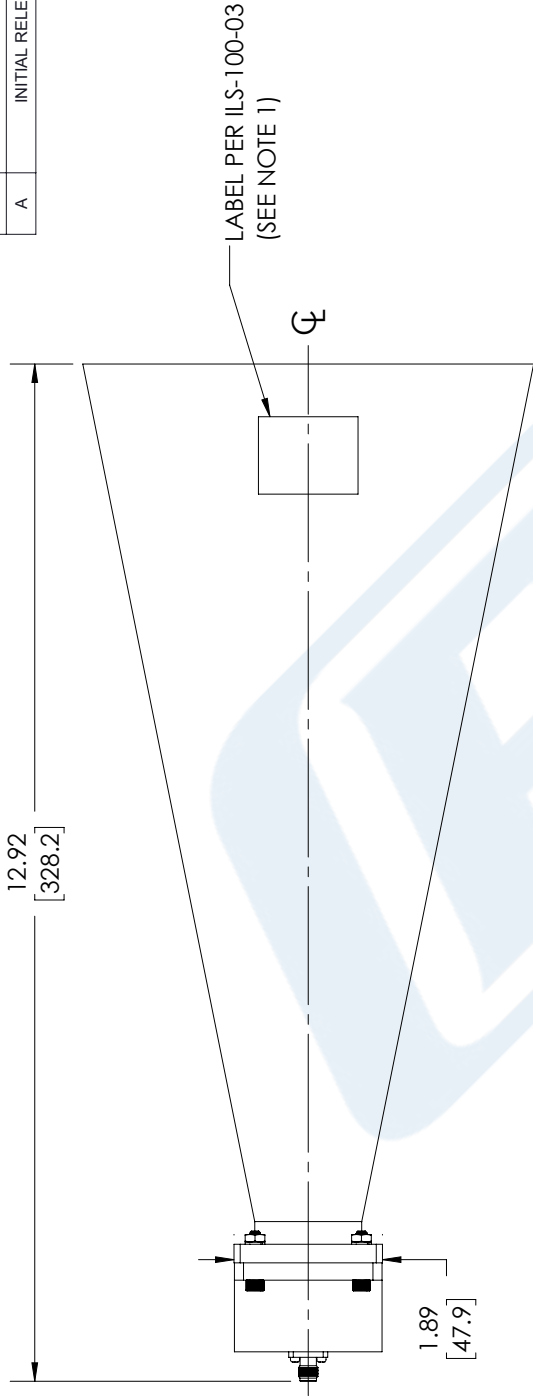
URL:

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.

PEWAN112-20ELSF CAD Drawing

WR-112 Standard Gain Horn with 20 dBi gain, End Launch SMA Female connector

| REVISIONS | | | |
|-----------|-----------------|------------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
| A | INITIAL RELEASE | 01/11/2022 | KHIETPAS |



| | | | | | | | | | | | | | | | | | | |
|--|-----------------|------------------|------------------|-------------|--------------------|--|--------------|----------|--------------------------|----------|----------------------------|-----------|-----------------------------|-----------|----------------|-------|---|---|
| <p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS</p> <p>TOLERANCES:</p> <table border="0"> <tr> <td>.X = ±.2 [5.08]</td> <td>FRACTIONS ± 1/32</td> </tr> <tr> <td>.XX = ±.02 [.51]</td> <td>ANGLES ± 1°</td> </tr> <tr> <td>.XXX = ±.005 [.13]</td> <td></td> </tr> </table> <p>CABLE LENGTH (L) TOLERANCES:</p> <table border="0"> <tr> <td>L ≤ 12 [305]</td> <td>±.1 [25]</td> </tr> <tr> <td>12 [305] < L ≤ 60 [1524]</td> <td>±.2 [51]</td> </tr> <tr> <td>60 [1524] < L ≤ 120 [3048]</td> <td>±.4 [102]</td> </tr> <tr> <td>120 [3048] < L ≤ 300 [7620]</td> <td>±.6 [152]</td> </tr> <tr> <td>300 [7620] < L</td> <td>±.5%L</td> </tr> </table> <p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p> | .X = ±.2 [5.08] | FRACTIONS ± 1/32 | .XX = ±.02 [.51] | ANGLES ± 1° | .XXX = ±.005 [.13] | | L ≤ 12 [305] | ±.1 [25] | 12 [305] < L ≤ 60 [1524] | ±.2 [51] | 60 [1524] < L ≤ 120 [3048] | ±.4 [102] | 120 [3048] < L ≤ 300 [7620] | ±.6 [152] | 300 [7620] < L | ±.5%L | <p>PE PASTERNAK an INFINITE brand</p> <p>Pasternack Enterprises, Inc. P. O. Box 16759, Irvine, CA 92623. Phone: 1.949.261.1920 1.866.727.8376 Fax: 1.949.261.7451 Website: www.pasternack.com E-mail: sales@pasternack.com</p> | <p>THIRD-ANGLE PROJECTION</p> <p>THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION ALL RIGHTS RESERVED.</p> <p>SHEET 1 OF 1</p> <p>SCALE N/A</p> |
| | .X = ±.2 [5.08] | FRACTIONS ± 1/32 | | | | | | | | | | | | | | | | |
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| 300 [7620] < L | ±.5%L | | | | | | | | | | | | | | | | | |
| <p>SIZE A</p> <p>CAGE CODE 53919</p> <p>DRAWN BY BPUCHASKI</p> <p>ITEM NO. PEWAN112-20ELSF</p> <p>REV A</p> | | | | | | | | | | | | | | | | | | |

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

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