



## WR-90 Standard Gain Horn with 20 dBi gain, End Launch SMA Female connector, Integrated Cage-Style Mount

### Technical Data Sheet

### PE1WAN090-20ELSF

#### Features

- 8.2 GHz to 12.4 GHz
- WR-90 Waveguide Band
- 20 dBi Nominal Gain
- SMA Female End Launch 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 PE1WAN090-20ELSF 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-90 to SMA Female End Launch waveguide to coaxial adapter and operates from 8.2 GHz to 12.4 GHz.

Our PE1WAN090-20ELSF 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 SMA Female End Launch to WR-90 standard gain horns are available in 10, 15 and 20 dBi models with pyramidal shape and connectorized input.

Waveguide antennas, such as the PE1WAN090-20ELSF 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-90 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  
Coaxial Interface

WR-90 Standard Gain Horn  
SMA Female

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	8.2		12.4	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			1.25:1	

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-90 Standard Gain Horn with 20 dBi gain, End Launch SMA Female connector, Integrated Cage-Style Mount PE1WAN090-20ELSF](#)



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### Mechanical Specifications

#### Size

Length	4.724 in [119.99 mm]
Width	4.724 in [119.99 mm]
Height	12.72 in [323.09 mm]
Weight	1.18355 lbs [536.85 g]

#### RF Connector

Type	SMA Female
Specification	End Launch

#### Waveguide Interface

Waveguide Size	WR-90
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### Environmental Specifications

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

### Plotted and Other Data

Notes:

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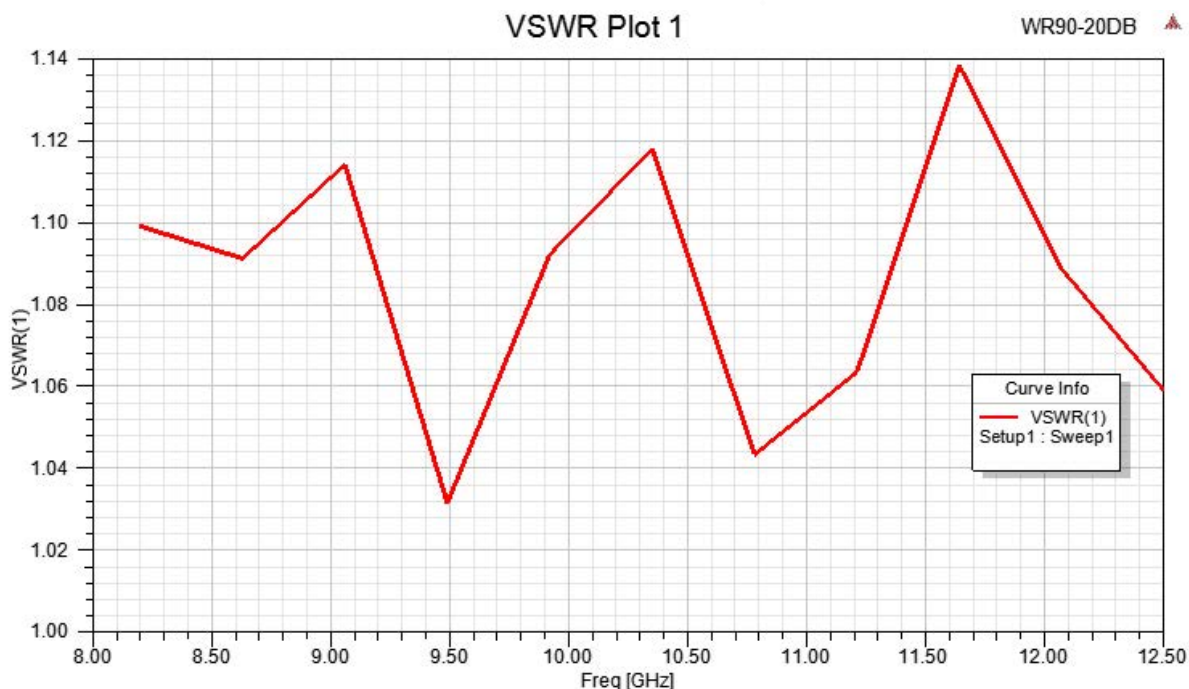


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### Typical Performance Data



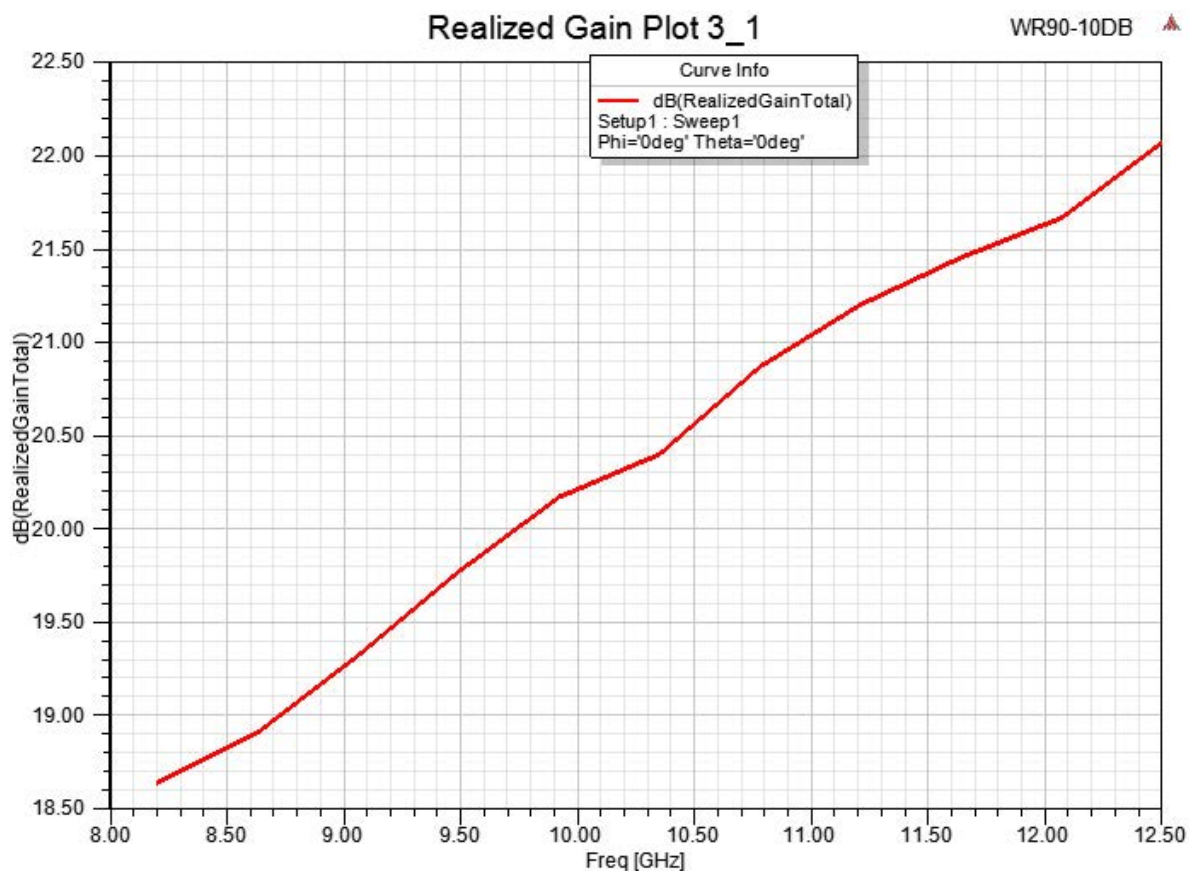
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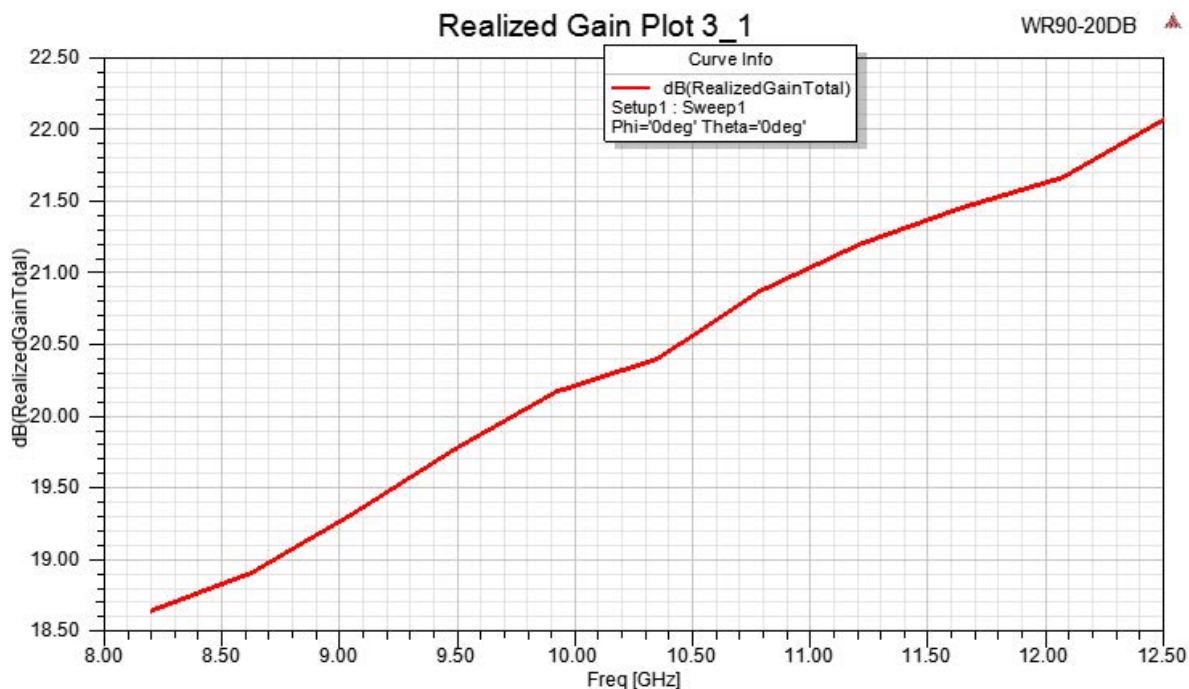
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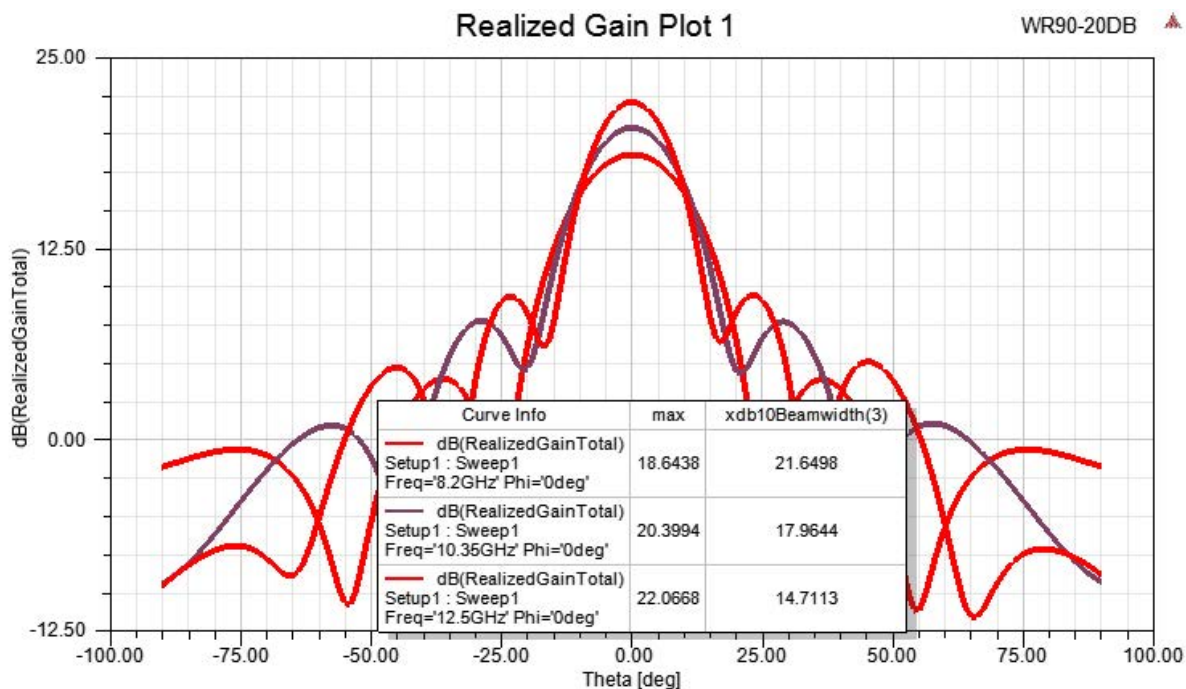




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WR-90 Standard Gain Horn with 20 dBi gain, End Launch SMA Female connector, Integrated Cage-Style Mount from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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