

WR-159 Standard Gain Horn with 20 dBi gain, SMA Female Connector, Integrated Cage-Style Mount

PE1WAN159-20SF

Features

- 4.9 GHz to 7.05 GHz
- WR-159 Waveguide Band
- 20 dBi Nominal Gain
- SMA Female Connector
- Ruggedized Aluminum Cage-Style Mount

Applications

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

Description

The PE1WAN159-20SF standard gain horn antenna (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-159 to SMA Female waveguide to coaxial adapter and operates from 4.9 GHz to 7.05 GHz.

Our PE1WAN159-20SF 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 to WR-159 standard gain horns are available in 10, 15 and 20 dBi models with pyramidal shape and connectorized input.

Waveguide antennas, such as the PE1WAN159-20SF 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-159 waveguide antennas with SMA Female interface is part of over 40,000 RF, microwave and millimeter wave components from Pasternack available worldwide and ship same day.

Configuration

Design	WR-159
Coaxial Interface	SMA Female

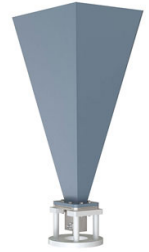
Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	4.9		7.05	GHz
Gain		20		
Horizontal Half Power Beam Width		17.5		Degrees
Vertical Half Power Beam Width		17.3		Degrees
Waveguide to Coaxial Adapter				
VSWR			1.3:1	

Mechanical Specifications

Size	
Length	13.1 in [332.74 mm]
Width	6.42 in [163.07 mm]
Height	15.05 in [382.27 mm]
Weight	1.99 lbs [902.65 g]

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RF Connector

Type SMA Female

Waveguide Interface

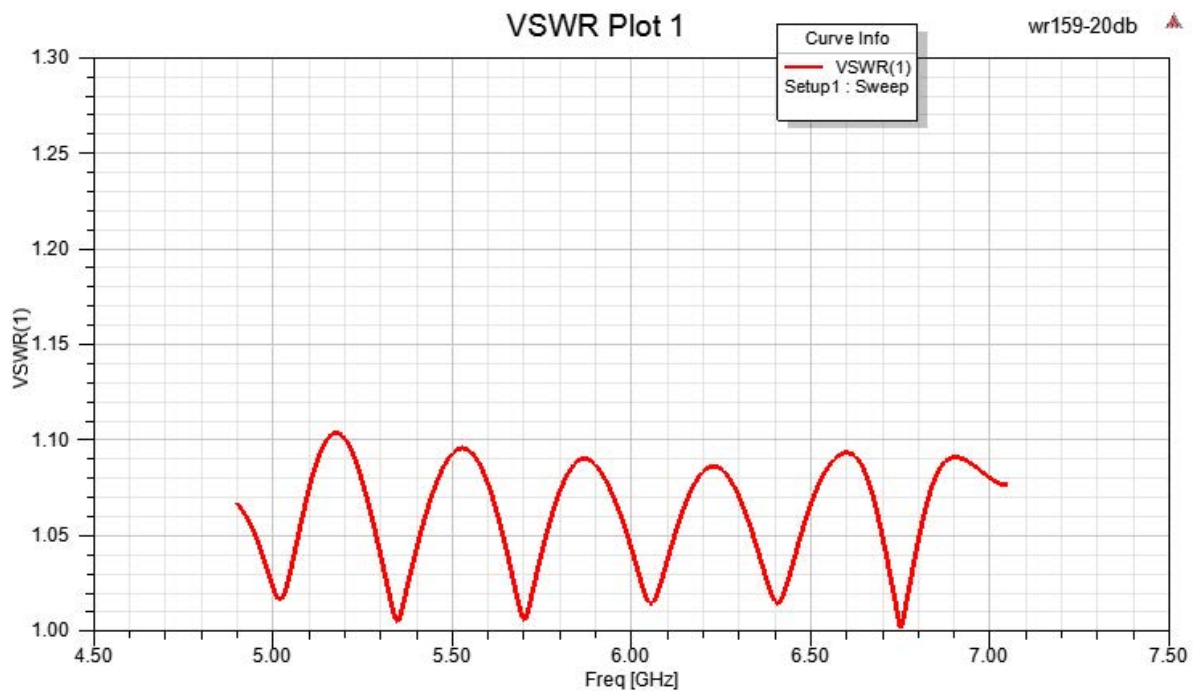
Waveguide Size WR-159

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

Plotted and Other Data

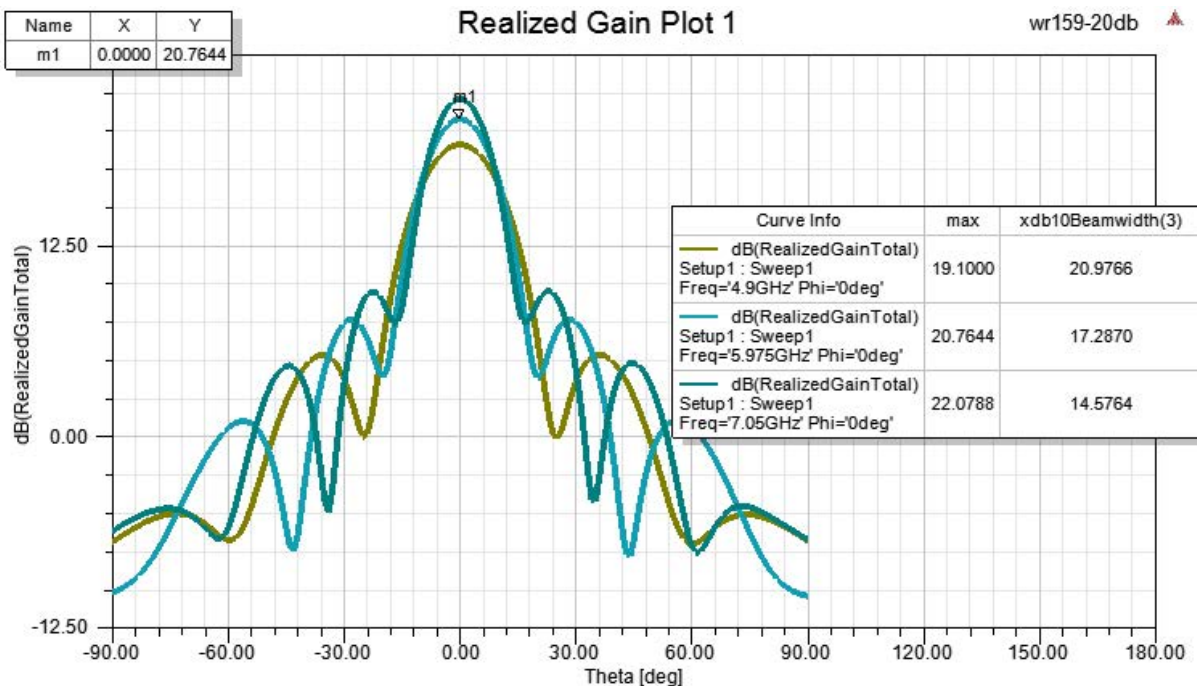
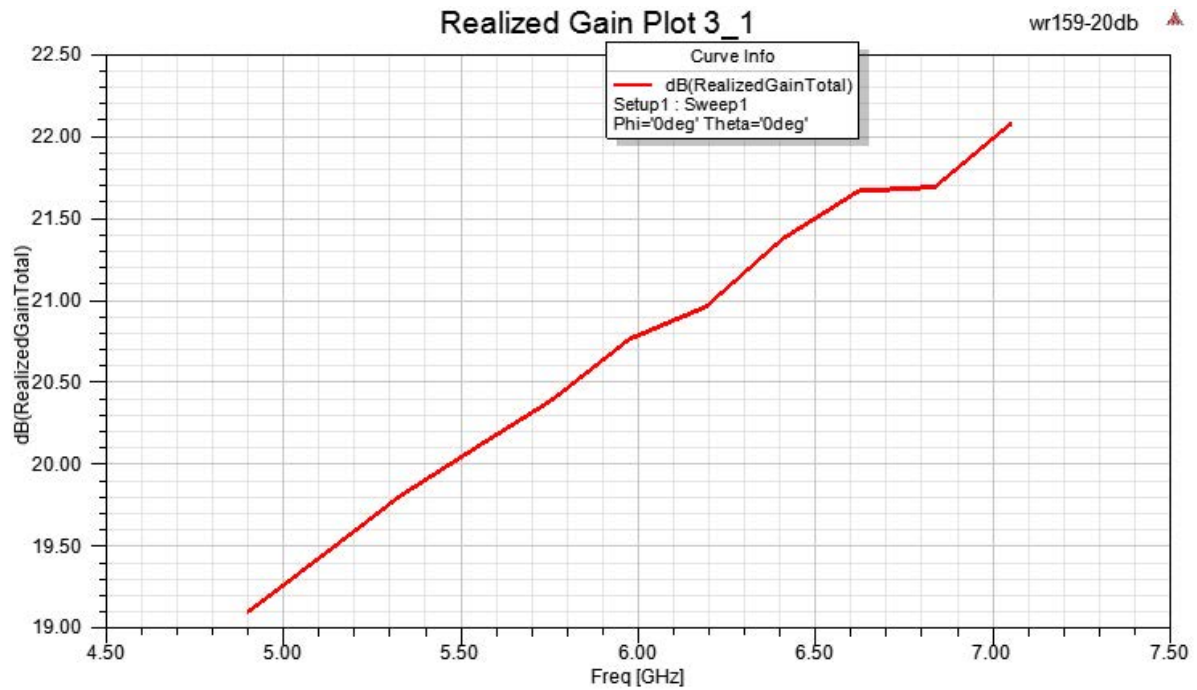
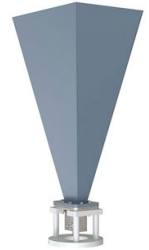
Notes:

Typical Performance Data



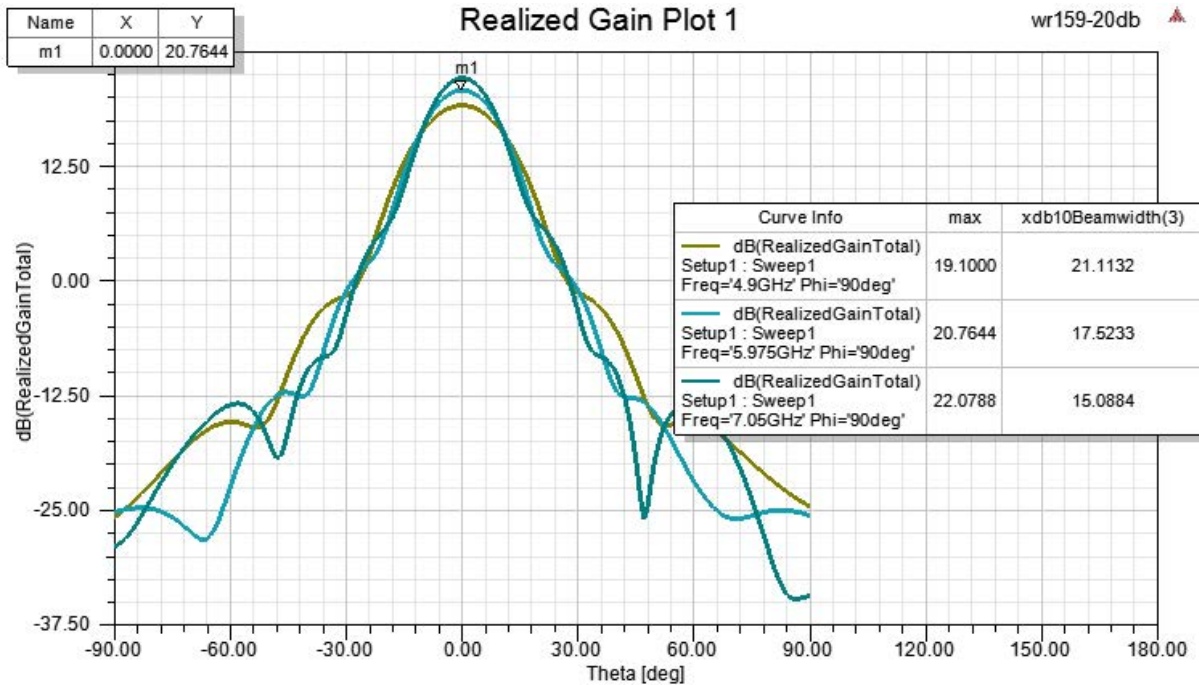
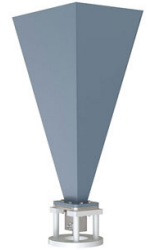
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WR-159 Standard Gain Horn with 20 dBi gain, SMA Female Connector, Integrated Cage-Style Mount from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-159 Standard Gain Horn with 20 dBi gain, SMA Female Connector, Integrated Cage-Style Mount PE1WAN159-20SF](#)

URL: <https://www.pasternack.com/wr-159-waveguide-standard-gain-horn-antenna-20-dbi-sma-pe1wan159-20sf-p.aspx>

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PE1WAN159-20SF CAD Drawing

WR-159 Standard Gain Horn with 20 dBi gain, SMA Female Connector, Integrated Cage-Style Mount

