

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

### FM1WAN090-20SM



#### Features

- 8.2 GHz to 12.4 GHz
- WR-90 Waveguide Band
- 20 dBi Nominal Gain
- SMA Male 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 FM1WAN090-20SM standard gain horn antenna with integrated cage-style mount (also known as waveguide horn) from Fairview Microwave 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 Male waveguide to coaxial adapter and operates from 8.2 GHz to 12.4 GHz.

Our FM1WAN090-20SM 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. Fairview Microwave's SMA Male 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 FM1WAN090-20SM 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 Male interface is part of over 40,000 RF, microwave and millimeter wave components from Fairview Microwave available worldwide and ship same day.

#### Configuration

Design	WR-90
Coaxial Interface	SMA Male

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	8.2		12.4	GHz
<b>Waveguide Standard Gain Horn</b>		20		
Gain				
Horizontal Half Power Beam Width		17.5		Degrees
Vertical Half Power Beam Width		17.3		Degrees

#### Mechanical Specifications

<b>Size</b>	
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]

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### RF Connector

Type SMA Male

### Waveguide Interface

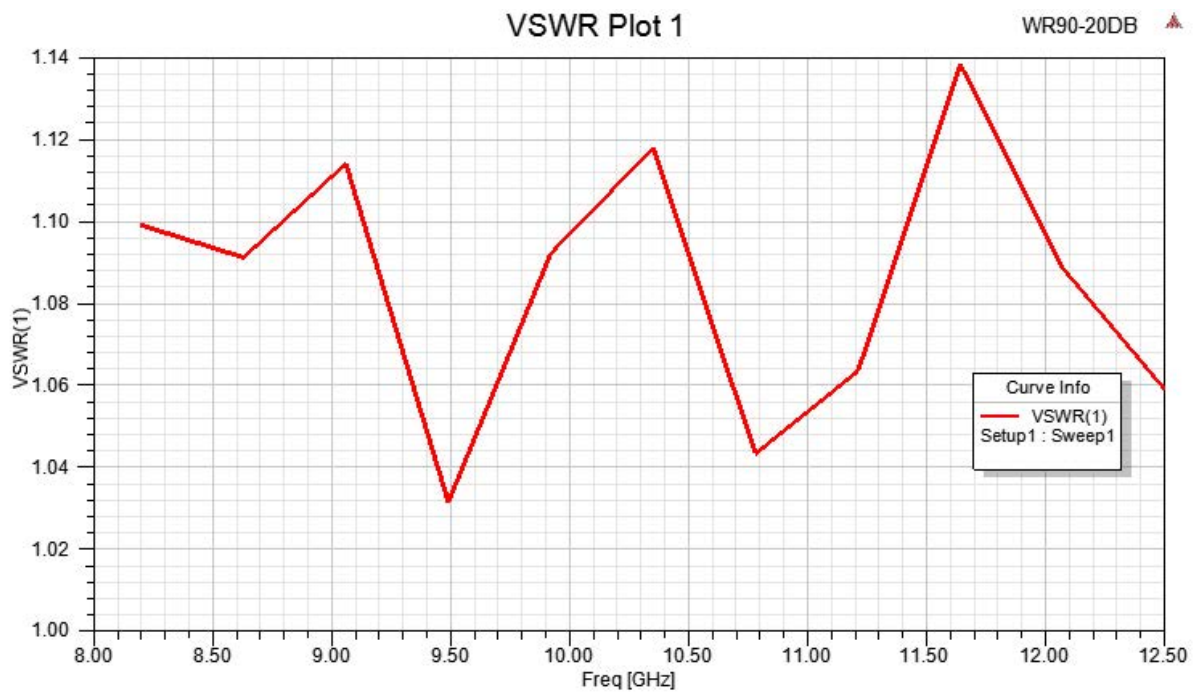
Waveguide Size WR-90

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

### Plotted and Other Data

Notes:

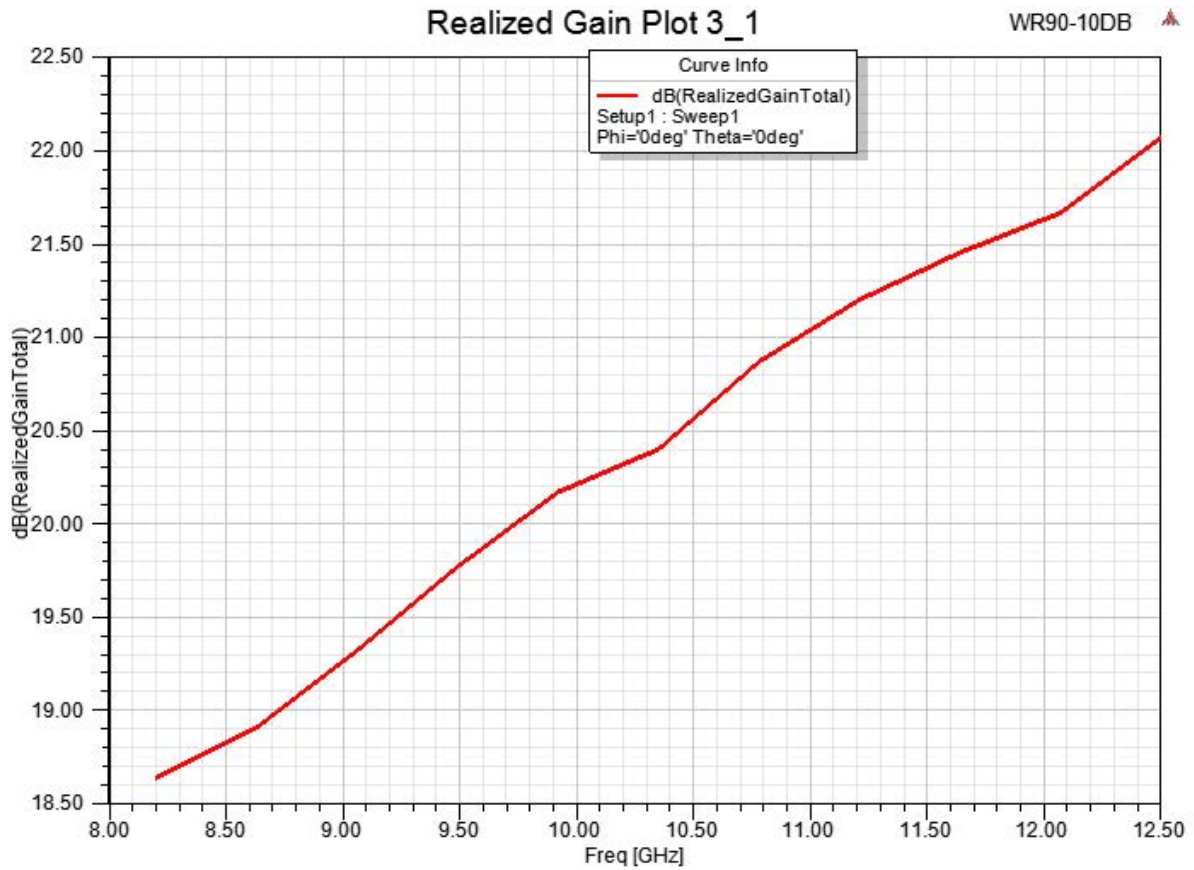
### Typical Performance Data



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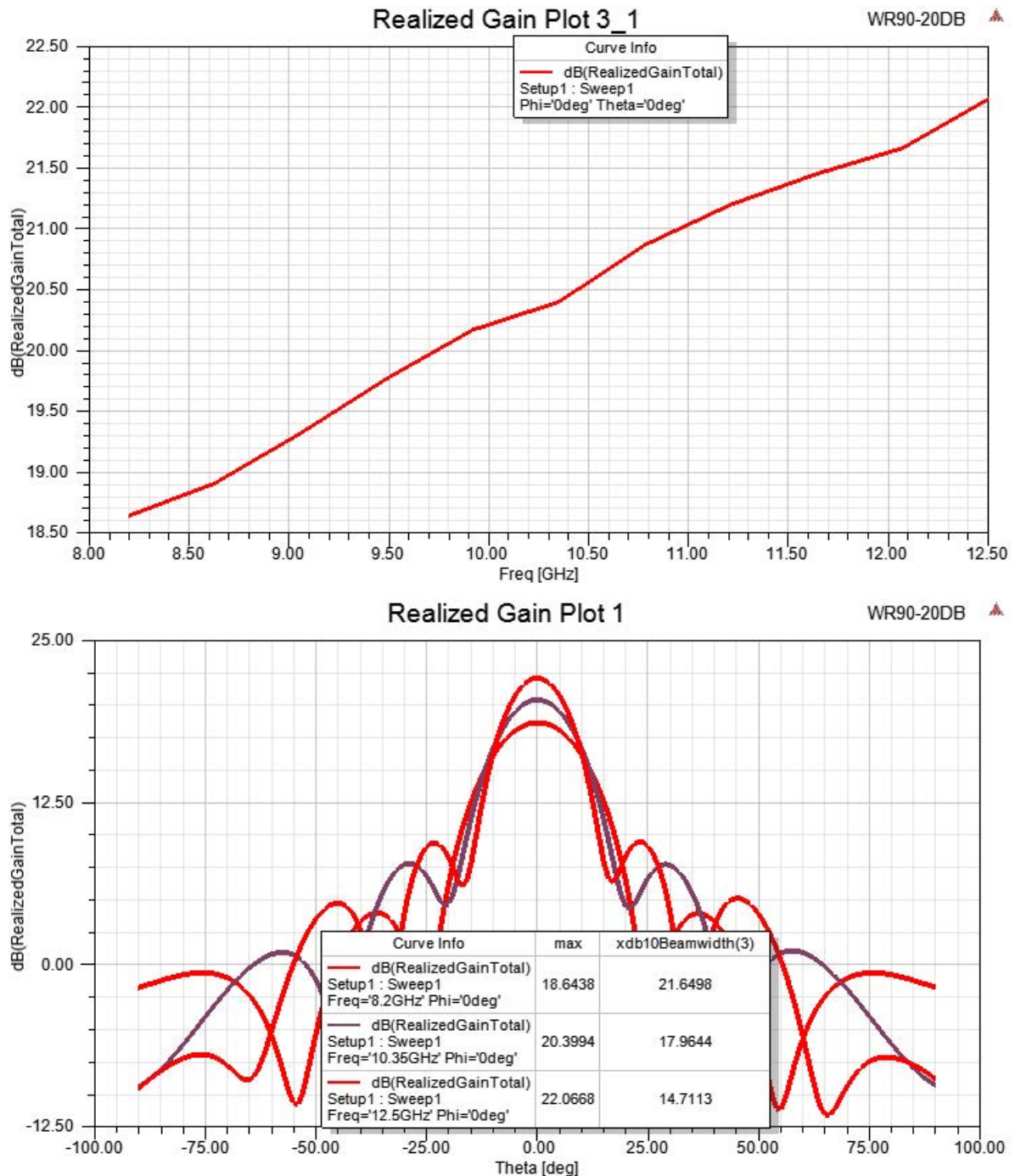


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### FM1WAN090-20SM



WR-90 Standard Gain Horn with 20 dBi gain, SMA Male connector, Integrated Cage-Style Mount from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [WR-90 Standard Gain Horn with 20 dBi gain, SMA Male connector, Integrated Cage-Style Mount FM1WAN090-20SM](https://www.fairviewmicrowave.com/wr-90-standard-gain-horn-with-20-dbi-gain-sma-male-connector-integrated-cage-style-mount-fm1wan090-20sm-p.aspx)

URL: <https://www.fairviewmicrowave.com/wr-90-standard-gain-horn-with-20-dbi-gain-sma-male-connector-integrated-cage-style-mount-fm1wan090-20sm-p.aspx>

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FM1WAN090-20SM CAD Drawing

WR-90 Standard Gain Horn with 20 dBi gain, SMA Male connector, Integrated Cage-Style Mount

