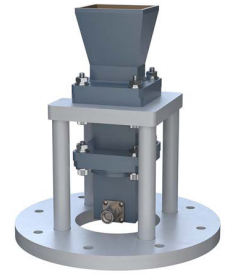


WR-90 Standard Gain Horn with 10 dBi gain, SMA Male connector, Integrated Cage-Style Mount

FM1WAN090-10SM



Features

- 8.2 GHz to 12.4 GHz
- WR-90 Waveguide Band
- 10 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 FM1WAN090-10SM 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 FM1WAN090-10SM standard gain horn antenna with integrated cage-style mount has a nominal gain of 10 dBi with a Horizontal and Vertical HPBW (Half Power Beam Width) of 52.1 dB and 51.6 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 FM1WAN090-10SM 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

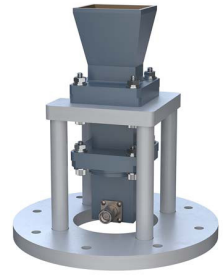
Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	8.2		12.4	GHz
Waveguide Standard Gain Horn		10		
Gain				
Horizontal Half Power Beam Width		52.1		Degrees
Vertical Half Power Beam Width		51.6		Degrees

Mechanical Specifications

Size	
Length	4.724 in [119.99 mm]
Width	4.724 in [119.99 mm]
Height	5.2 in [132.08 mm]
Weight	0.78355 lbs [355.41 g]

WR-90 Standard Gain Horn with 10 dBi gain, SMA Male connector, Integrated Cage-Style Mount



FM1WAN090-10SM

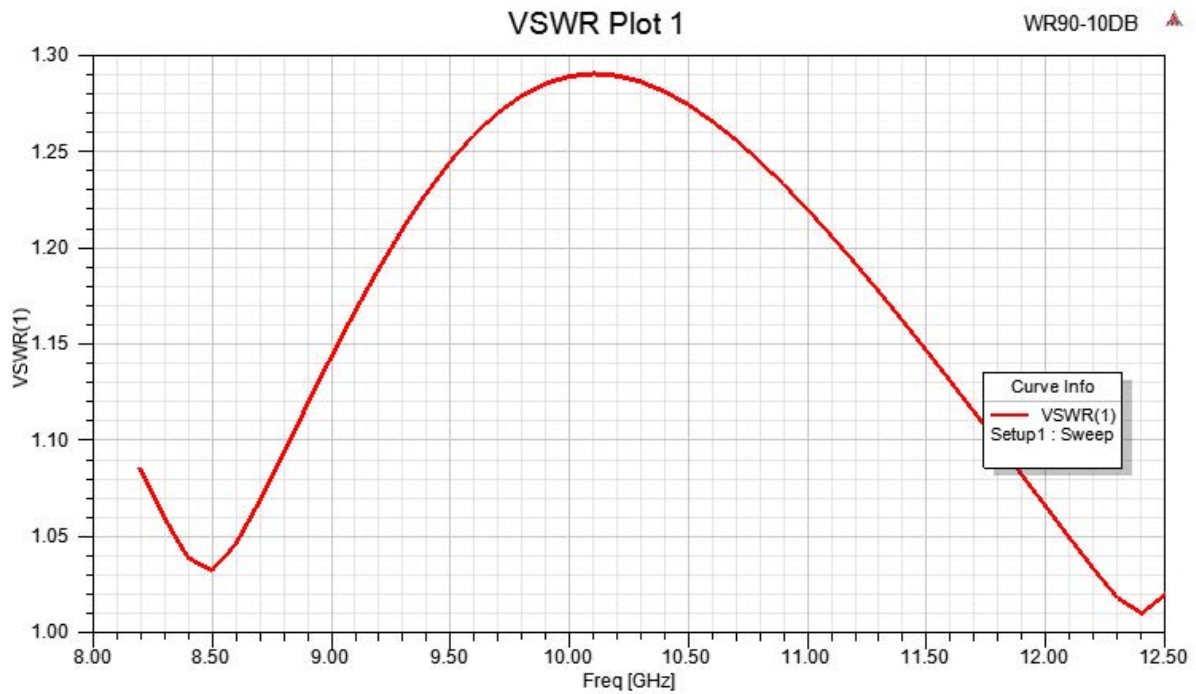
RF Connector	
Type	SMA Male
Waveguide Interface	
Waveguide Size	WR-90

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

Plotted and Other Data

Notes:

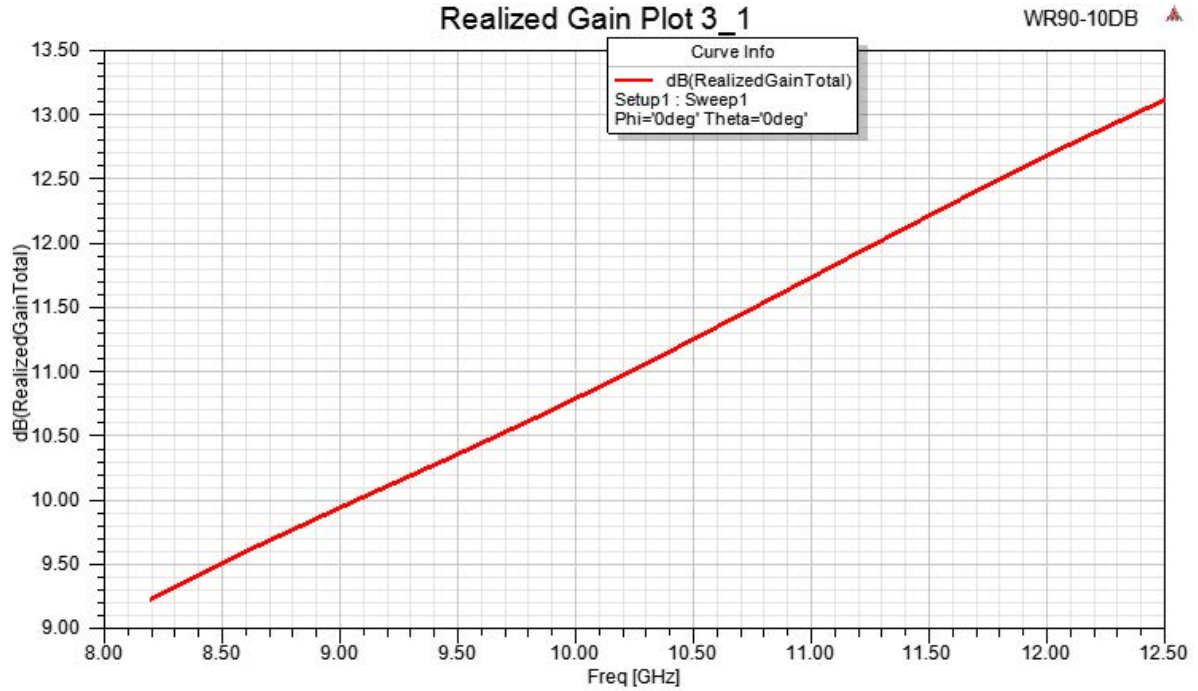
Typical Performance Data



WR-90 Standard Gain Horn with 10 dBi gain, SMA
Male connector, Integrated Cage-Style Mount



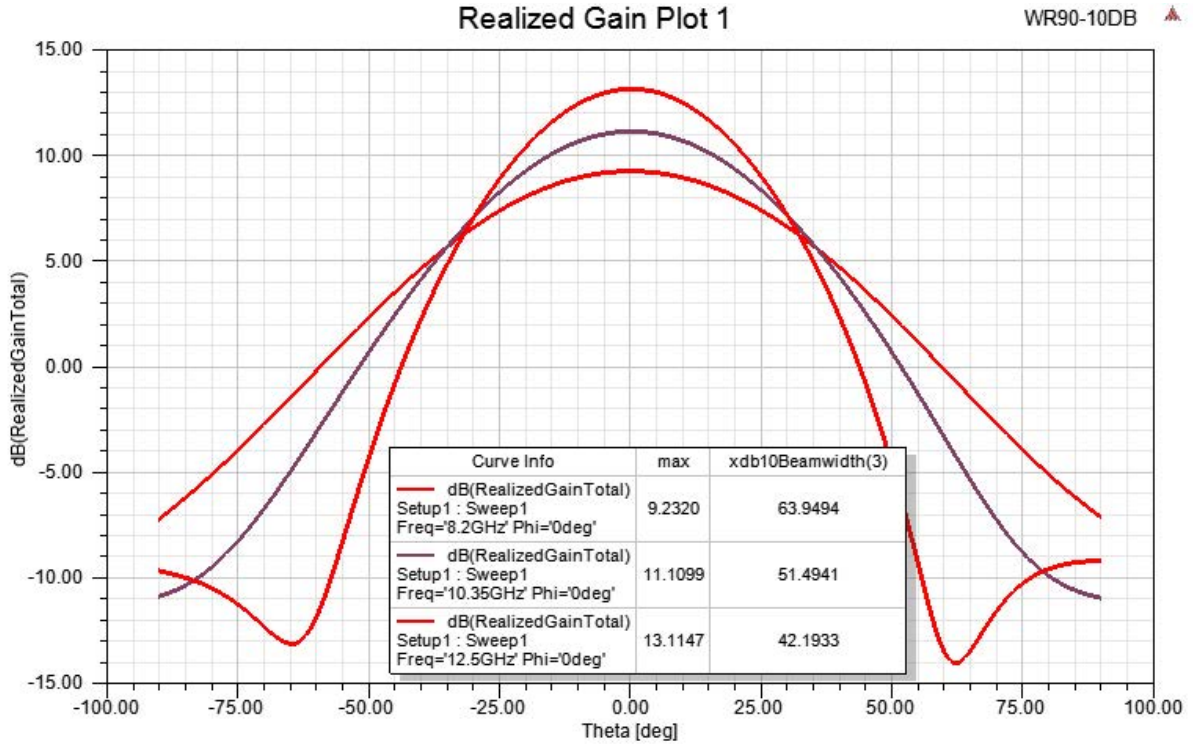
FM1WAN090-10SM



WR-90 Standard Gain Horn with 10 dBi gain, SMA Male connector, Integrated Cage-Style Mount



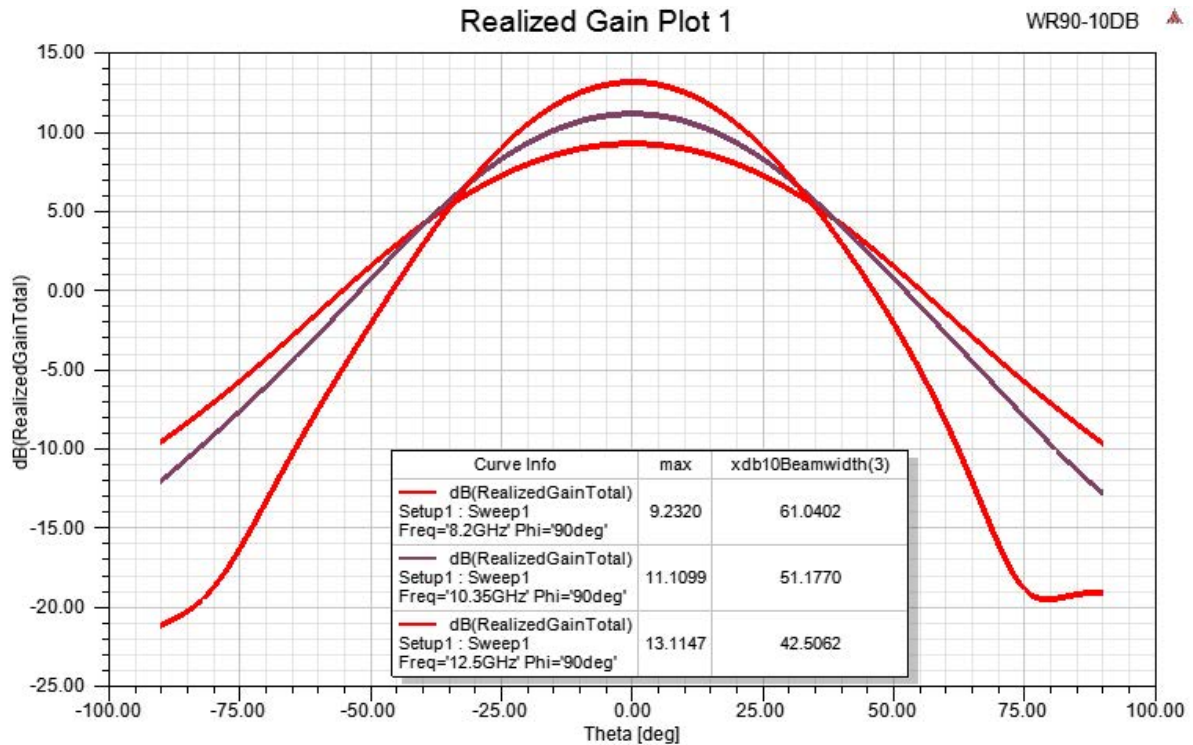
FM1WAN090-10SM



WR-90 Standard Gain Horn with 10 dBi gain, SMA Male connector, Integrated Cage-Style Mount



FM1WAN090-10SM



WR-90 Standard Gain Horn with 10 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 10 dBi gain, SMA Male connector, Integrated Cage-Style Mount FM1WAN090-10SM](#)

URL: <https://www.fairviewmicrowave.com/wr-90-standard-gain-horn-with-10-dbi-gain-sma-male-connector-integrated-cage-style-mount-fm1wan090-10sm-p.aspx>

The information contained within 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. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume liability arising out of the use of any part or document.

FM1WAN090-10SM CAD Drawing

WR-90 Standard Gain Horn with 10 dBi gain, SMA Male connector, Integrated Cage-Style Mount

