

WR-51 Waveguide Antenna, 15 GHz to 22 GHz Frequency Range, 20 dBi Gain, Integrated Cage-Style Mount

FM1WAN051-20



Features

- WR-51 Rectangular Waveguide Interface
- 15 GHz to 22 GHz
- 20 dBi Nominal Gain
- None Cover Flange
- Ku Band
- Ruggedized Aluminum Cage-Style Mount
- Integrates with Positioning Systems

Applications

- Antenna Measurements
- Wireless Communication
- Laboratory Use
- Microwave Radio Systems

Description

The FM1WAN051-20 Ku Band standard gain horn antenna (also known as waveguide horn) from Fairview Microwave has a nominal gain of 20 dBi. This WR-51 standard gain horn has an integrated cage-style mount. The mount is a ruggedized aluminum mounting solution that integrates with test and measurement positioning systems, ensuring precise alignment and protection of the antenna. The Fairview Microwave 20 dBi WR-51 horn antenna operates from 15 GHz to 22 GHz. The WR-51 FM1WAN051-20 waveguide horn is powder coated Aluminum for added protection and corrosion resistance. It is part of over 40,000 RF, microwave and millimeter wave components available from Fairview Microwave.

Waveguide standard gain horn antennas are used in a wide variety of applications due to their high power handling capability, low loss, high directivity, and near constant electrical performance. Fairview Microwave's WR-51 standard gain horns are available in 10, 15 and 20 dBi models with pyramidal shape and rectangular input. Our WR-28 standard gain horn antennas can ship worldwide the same day as it is purchased as with our other available RF parts.

Configuration

Design	WR-51
Polarization	Linear

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	15		22	GHz
Waveguide Standard Gain Horn				
VSWR		1.3:1		
Gain		20		
Horizontal Half Power Beam Width		17.5		Degrees
Vertical Half Power Beam Width		17.3		Degrees

Mechanical Specifications

Size	
Length	14.772 in [375.21 mm]
Width	7 in [177.8 mm]
Height	6.7 in [170.18 mm]
Weight	1.058 lbs [479.9 g]

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RF Connector

Waveguide Interface

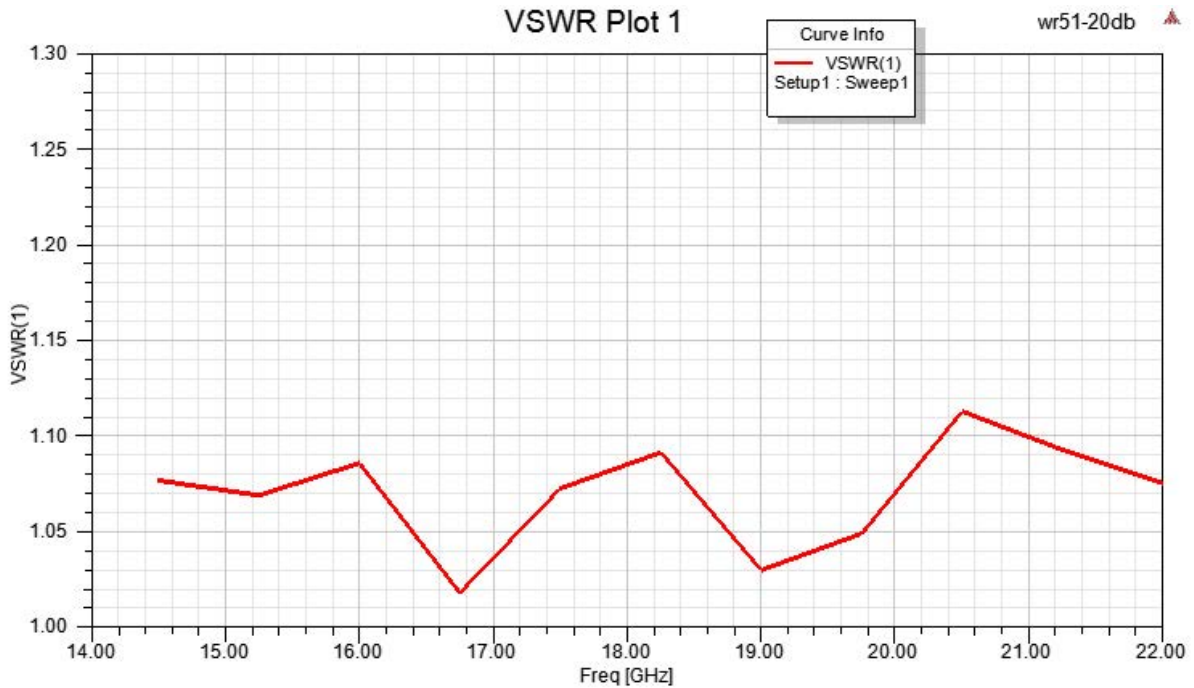
Waveguide Size	WR-51
Flange Type	Square Cover
Flange Designation	None
Body Material and Plating	Aluminum

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

Plotted and Other Data

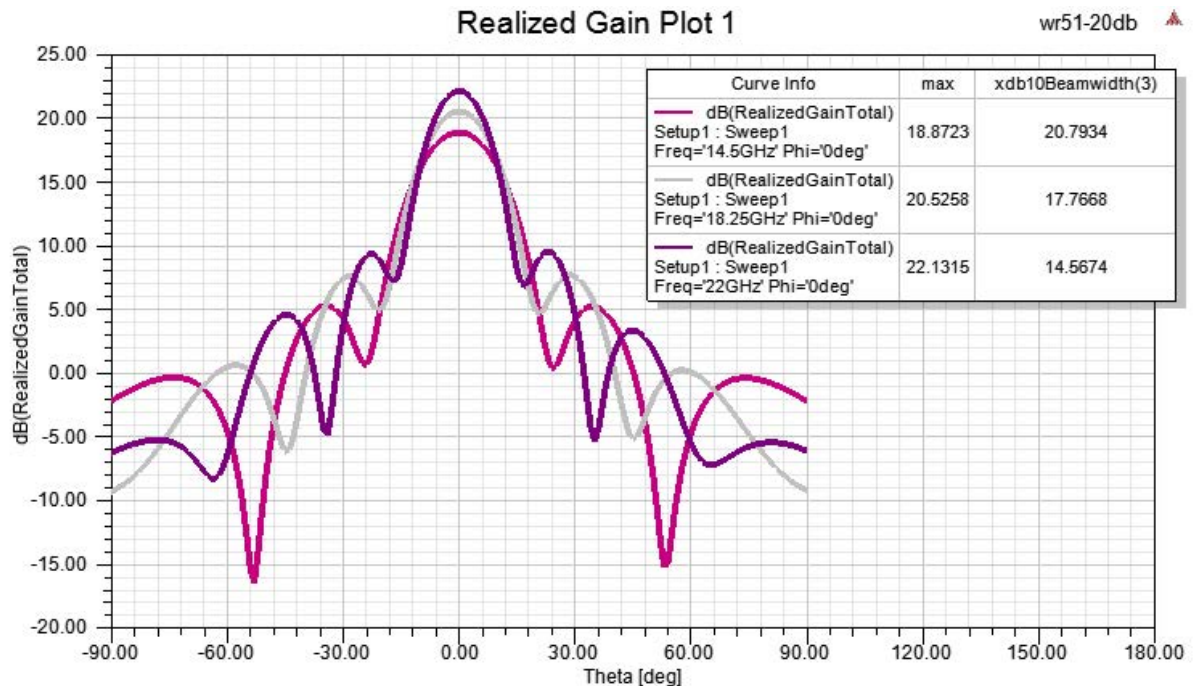
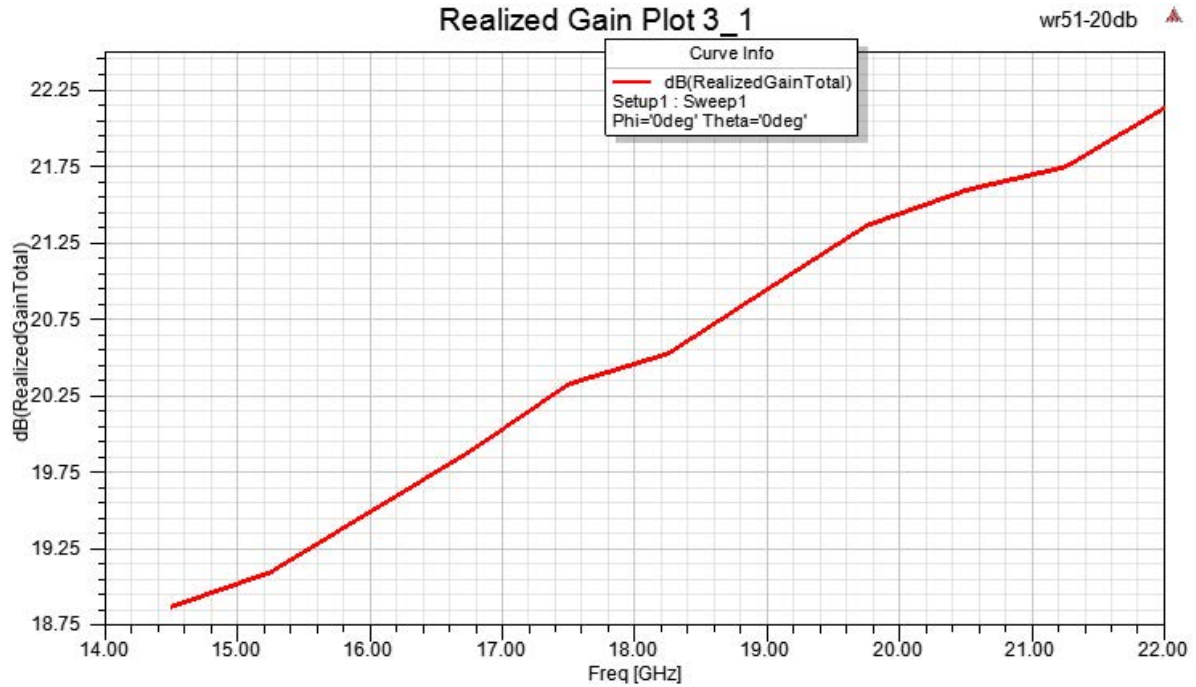
Notes:

Typical Performance Data



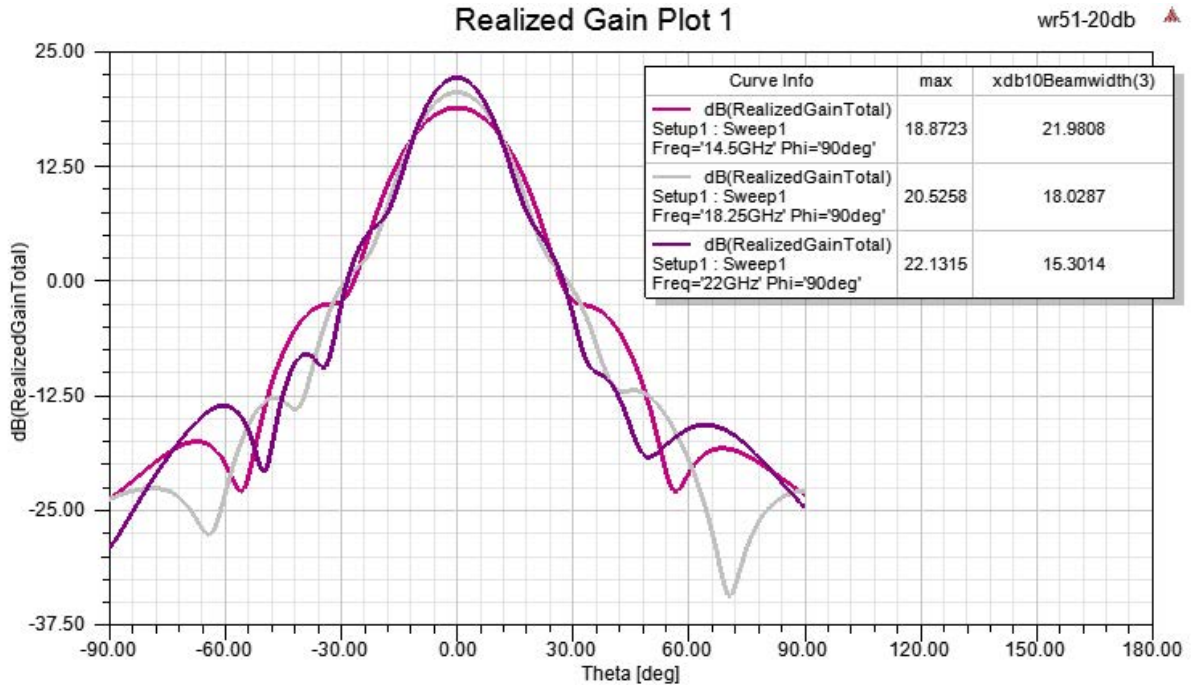
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WR-51 Waveguide Antenna, 15 GHz to 22 GHz Frequency Range, 20 dBi Gain, Integrated Cage-Style Mount from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [WR-51 Waveguide Antenna, 15 GHz to 22 GHz Frequency Range, 20 dBi Gain, Integrated Cage-Style Mount FM1WAN051-20](#)

URL: <https://www.fairviewmicrowave.com/wr-51-standard-gain-horn-20-db-fm1wan051-20-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.

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