WR-42 Standard Gain Horn with 20 dBi gain, SMA Female connector, with Pre-Installed L Mount

# FM2WAN042-20SF

## **Features**

- 18 GHz to 26.5 GHz
- WR-42 Waveguide Band
- 20 dBi Nominal Gain

## **Applications**

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

### Description

- SMA Female Connector
- Pre-Installed L Mount
- Integrates with Positioning Systems
- · Radome Testing
- Automotive Antenna Test Solutions
- Radar Cross Section
- Satellite Antenna Testing

The FM2WAN042-20SF standard gain horn antenna with pre-installed L mount (also known as waveguide horn) from Fairview Microwave is part of our comprehensive selection of waveguide antennas. This standard gain horn is mated with a WR-42 to SMA female waveguide to coaxial adapter and operates from 18 GHz to 26.5 GHz.

Our FM2WAN042-20SF standard gain horn antenna with pre-installed L 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 female to WR-42 standard gain horns are available in 10, 15 and 20 dBi models with pyramidal shape and connectorized input.

Waveguide antennas, such as the FM2WAN042-20SF 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-42 waveguide antennas with SMA female 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-42
Coaxial Interface	SMA Female

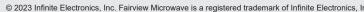
## **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	18		26.5	GHz
Gain		20		
Horizontal Half Power Beam Width		17.5		Degrees
Vertical Half Power Beam Width		17.3		
Waveguide to Coaxial Adapter				
VSWR			1.3:1	

#### **Mechanical Specifications**

Size	
Length	9.671 in [245.64 mm]
Width	6.774 in [172.06 mm]
Height	4.674 in [118.72 mm]
Weight	0.7844 lbs [355.8 g]





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# **RF Connector**

Waveguide Interface Waveguide Size

**FM2WAN042-20SF** 

WR-42

**SMA** Female

Compliance Certifications (see product page for current document)

WR-42 Standard Gain Horn with 20 dBi gain, SMA

Female connector, with Pre-Installed L Mount

## **Plotted and Other Data**

Notes:

Type

## **Typical Performance Data**

VSWR Plot 1 wr42-20db A Curve Info 1.30 VSWR(1) Setup1 : Sweep 1.25 1.20 (1) 1.15 1.10 1.05 1.00 20.00 22.50 17.50 25.00 27.50 Freq [GHz]

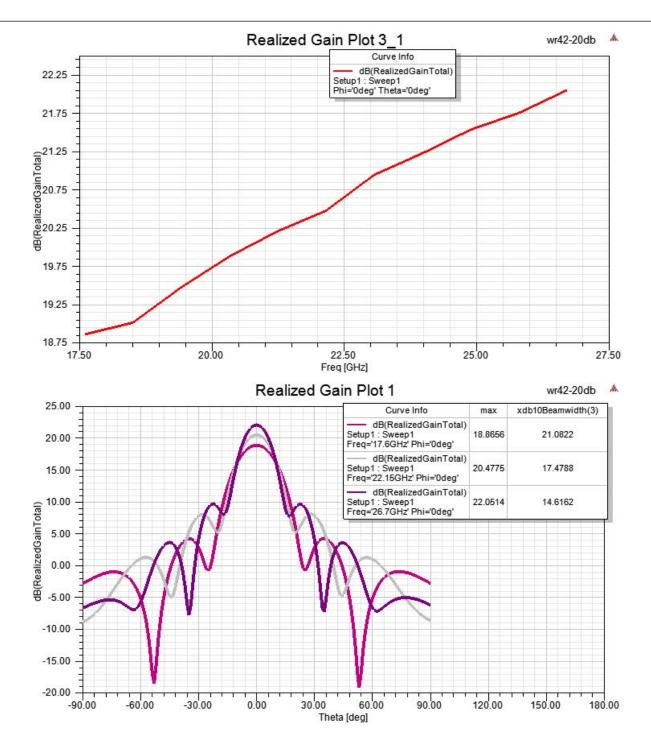






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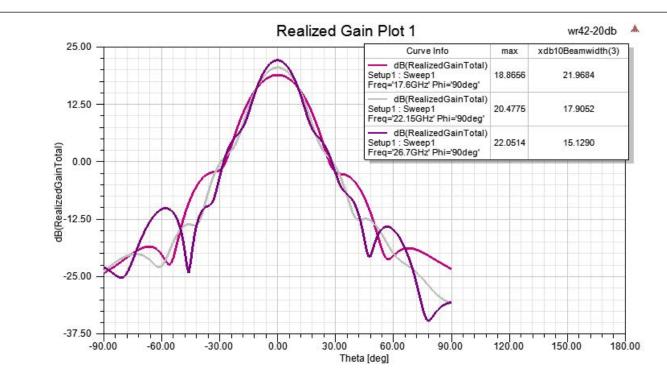




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WR-42 Standard Gain Horn with 20 dBi gain, SMA Female connector, with Pre-Installed L Mount from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: WR-42 Standard Gain Horn with 20 dBi gain, SMA Female connector, with Pre-Installed L Mount FM2WAN042-20SF

URL: https://www.fairviewmicrowave.com/wr-42-standard-gain-horn-20-dbi-sma-fm2wan042-20sf-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 impliment 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.

# FM2WAN042-20SF CAD Drawing

WR-42 Standard Gain Horn with 20 dBi gain, SMA Female connector, with Pre-Installed L Mount

