

## WR-90 Standard Gain Horn with 20 dBi gain, Type N Female connector, Integrated Cage-Style Mount

### FM1WAN090-20NF



#### Features

- 8.2 GHz to 12.4 GHz
- WR-90 Waveguide Band
- 20 dBi Nominal Gain
- N Female 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 FM1WAN090-20NF 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 N Female waveguide to coaxial adapter and operates from 8.2 GHz to 12.4 GHz.

Our FM1WAN090-20NF 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 N Female 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 FM1WAN090-20NF 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 N 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-90    |
| Coaxial Interface | N Female |

#### 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      | 1.31255 lbs [595.36 g] |

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**RF Connector**

Type N Female

**Waveguide Interface**

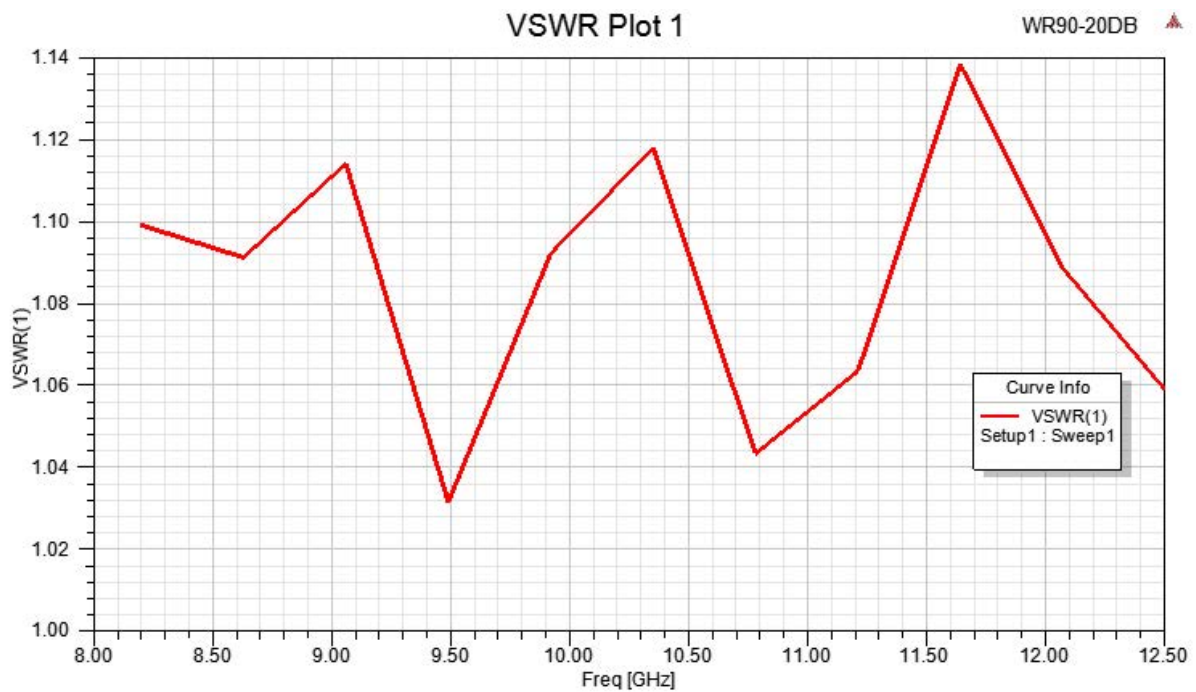
Waveguide Size WR-90

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

**Plotted and Other Data**

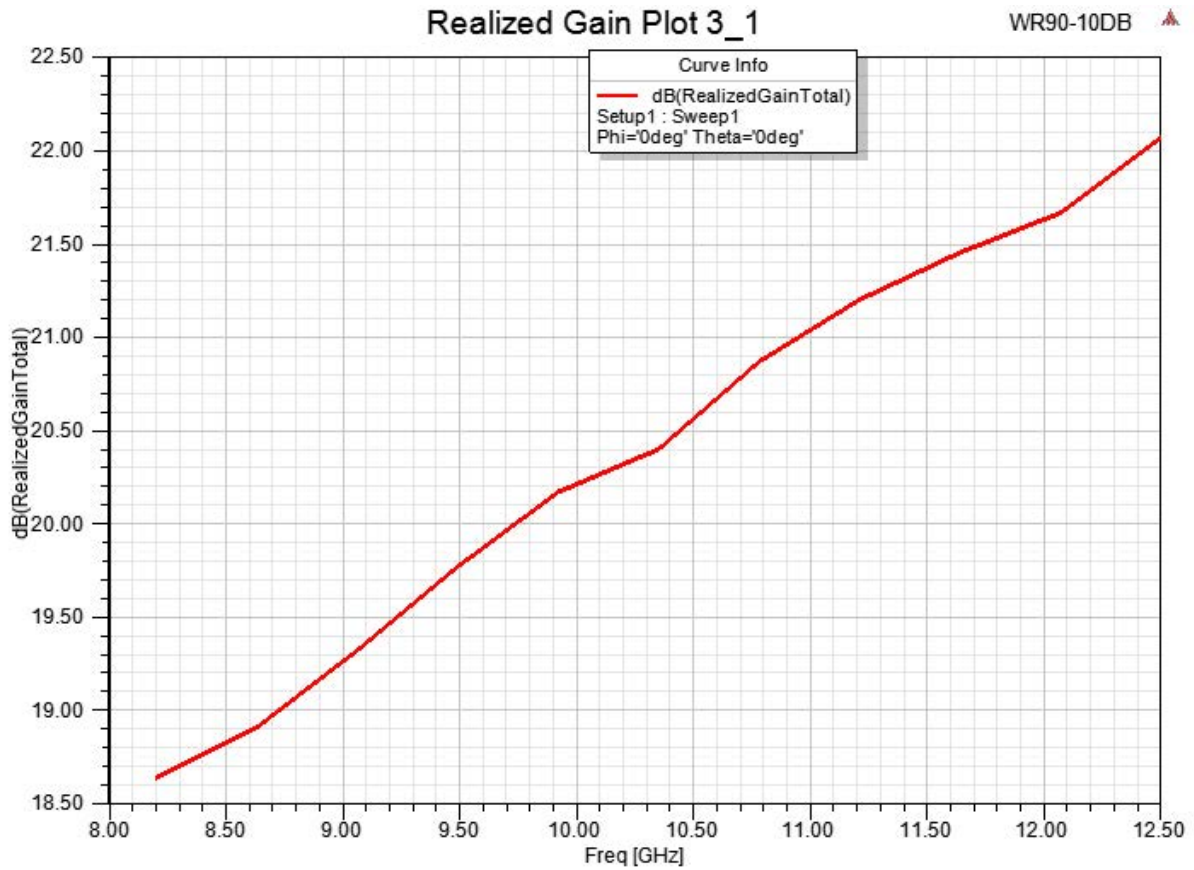
Notes:

**Typical Performance Data**



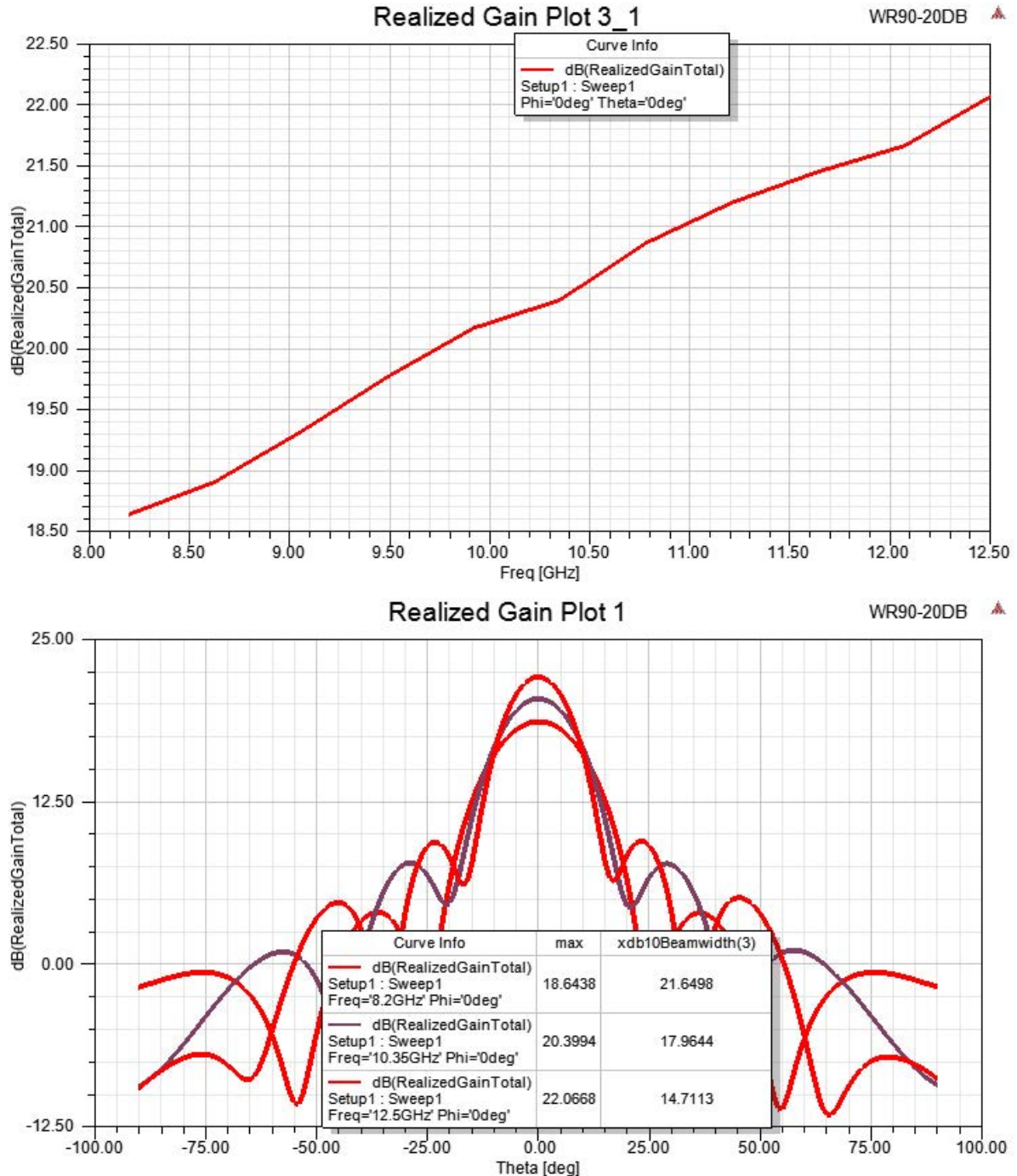
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WR-90 Standard Gain Horn with 20 dBi gain, Type N Female connector, Integrated Cage-Style Mount from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 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, Type N Female connector, Integrated Cage-Style Mount FM1WAN090-20NF](https://www.fairviewmicrowave.com/wr-90-standard-gain-horn-with-20-dbi-gain-type-n-female-connector-integrated-cage-style-mount-fm1wan090-20nf-p.aspx)

URL: <https://www.fairviewmicrowave.com/wr-90-standard-gain-horn-with-20-dbi-gain-type-n-female-connector-integrated-cage-style-mount-fm1wan090-20nf-p.aspx>

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FM1WAN090-20NF CAD Drawing

WR-90 Standard Gain Horn with 20 dBi gain, Type N Female connector, Integrated Cage-Style Mount

