

WR-112 Standard Gain Horn with 10 dBi gain, End Launch SMA Female Connector, Integrated Cage-Style Mount



FM1WAN112-10ELSF

Features

- 7.05 GHz to 10 GHz
- WR-112 Waveguide Band
- 10 dBi Nominal Gain
- SMA Female End Launch Connector
- Ruggedized Aluminum Cage-Style Mount

Applications

- Antenna Measurements
- Wireless Communication
- Laboratory Use
- Microwave Radio Systems
- Radome Testing
- Automotive Antenna Test Solutions
- Radar Cross Section
- Satellite Antenna Testing

Description

The FM1WAN112-10ELSF standard gain horn antenna (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-112 to SMA Female End Launch waveguide to coaxial adapter and operates from 7.05 GHz to 10 GHz.

Our FM1WAN112-10ELSF 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 Female End Launch to WR-112 standard gain horns are available in 10, 15 and 20 dBi models with pyramidal shape and connectorized input.

Waveguide antennas, such as the FM1WAN112-10ELSF 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-112 waveguide antennas with SMA Female End Launch 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-112
Coaxial Interface	SMA Female

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	7.05		10	GHz
Gain		10		
Horizontal Half Power Beam Width		52.1		Degrees
Vertical Half Power Beam Width		51.6		Degrees
Waveguide to Coaxial Adapter				
VSWR			1.4:1	

Mechanical Specifications

Size	
Length	6.83 in [173.48 mm]
Width	4.33 in [109.98 mm]
Height	3.15 in [80.01 mm]
Weight	1.2895 lbs [584.91 g]

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RF Connector

Type	SMA Female
Specification	End Launch

Waveguide Interface

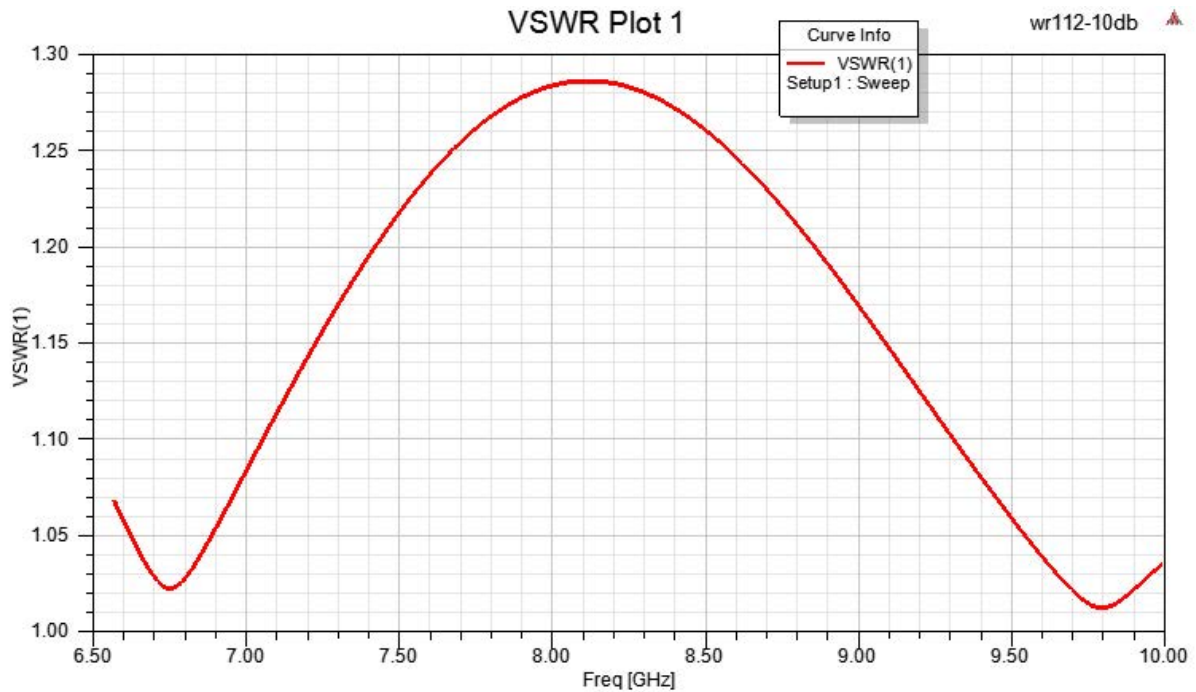
Waveguide Size	WR-112
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Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

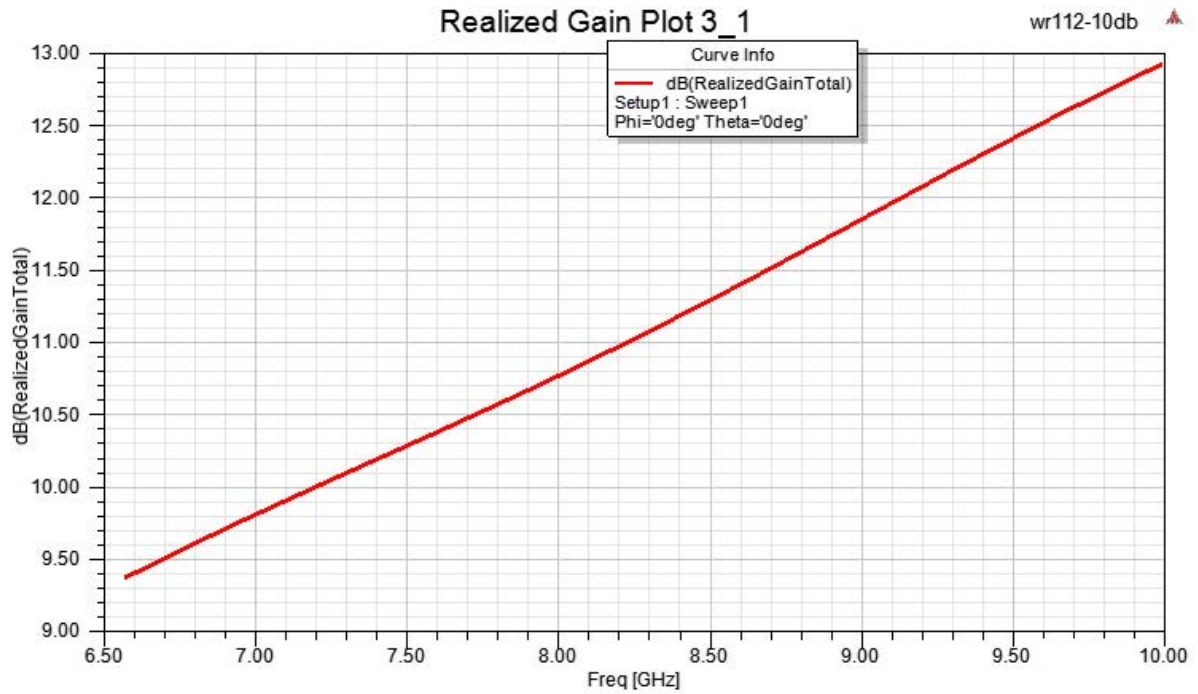
Typical Performance Data



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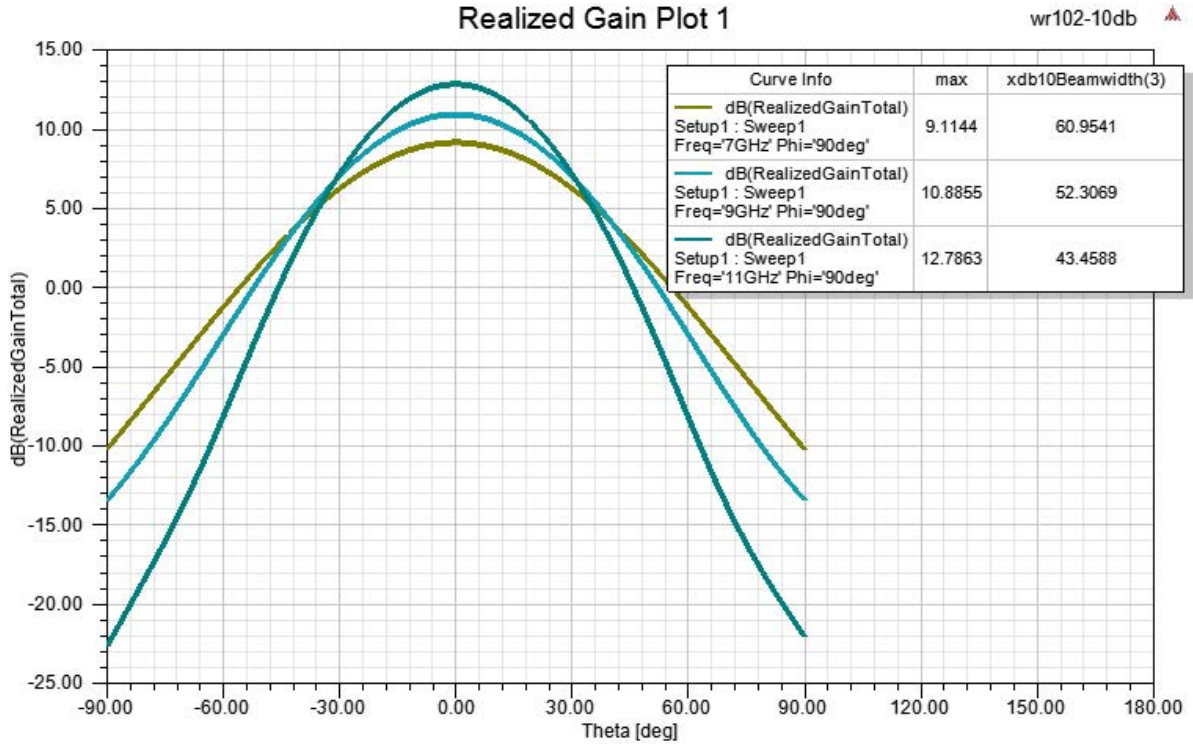
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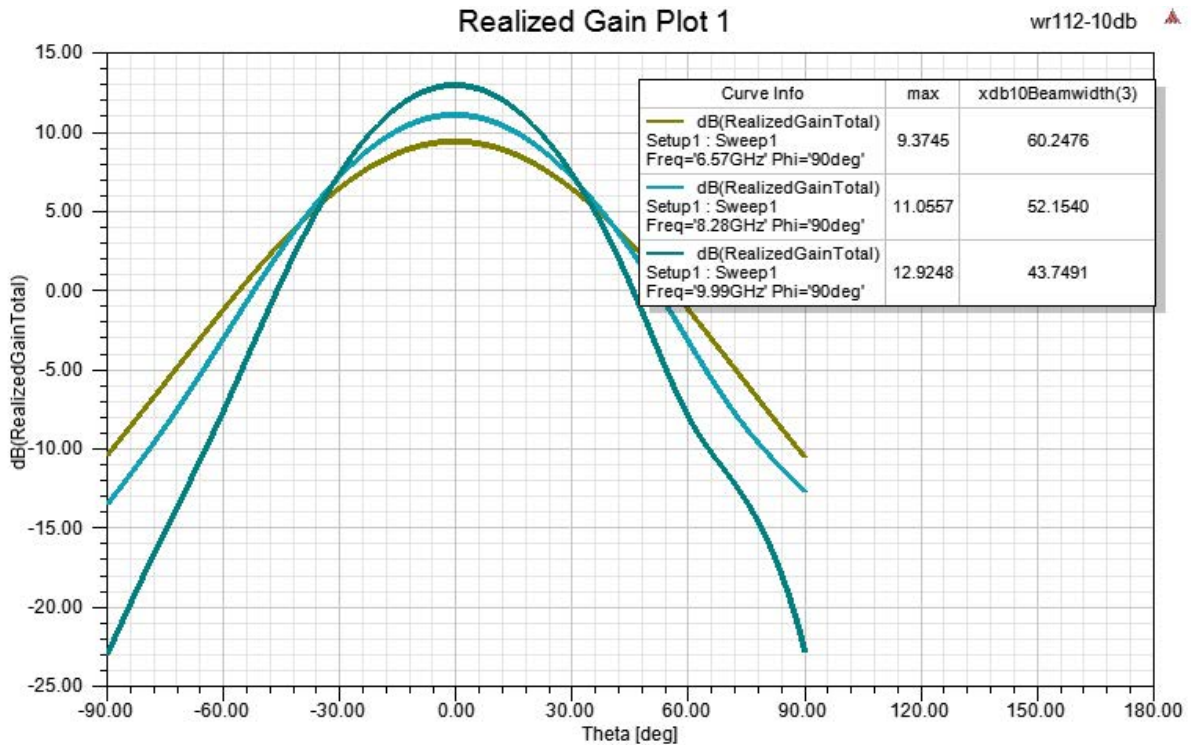
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FM1WAN112-10ELSF



WR-112 Standard Gain Horn with 10 dBi gain, End Launch SMA 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.

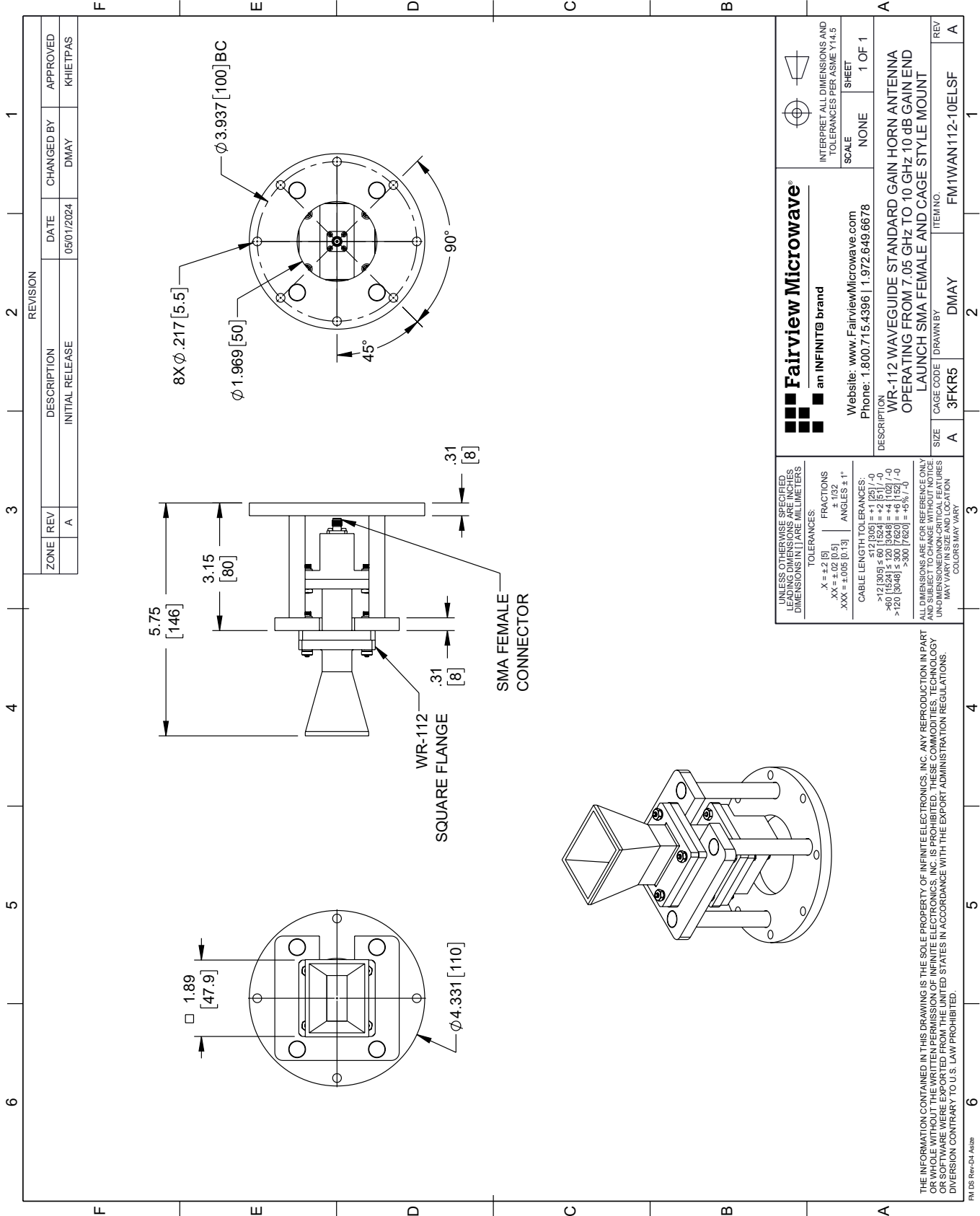
For additional information on this product, please click the following link: [WR-112 Standard Gain Horn with 10 dBi gain, End Launch SMA Female Connector, Integrated Cage-Style Mount FM1WAN112-10ELSF](#)

URL: <https://www.fairviewmicrowave.com/wr-112-standard-gain-horn-10-dbi-sma-fm1wan112-10elsf-p.aspx>

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FM1WAN112-10ELSF CAD Drawing

WR-112 Standard Gain Horn with 10 dBi gain, End Launch SMA Female Connector, Integrated Cage-Style Mount



REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV	DESCRIPTION	INITIAL RELEASE	
	A			

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SCALE: NONE
SHEET: 1 OF 1

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

DESCRIPTION: WR-112 WAVEGUIDE STANDARD GAIN HORN ANTENNA OPERATING FROM 7.05 GHz TO 10 GHz 10 dB GAIN END LAUNCH SMA FEMALE AND CAGE STYLE MOUNT

SIZE: A
CAGE CODE: 3FKR5
DRAWN BY: DMAY
ITEM NO.: FM1WAN112-10ELSF

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS.

TOLERANCES:
 .X = ±.2 [5] FRACTIONS ± 1/32
 .XX = ±.02 [0.5] ANGLES ± 1°
 .XXX = ±.005 [0.13]

CABLE LENGTH TOLERANCES:
 <12 [305] ≤ 60 [1524] = ±.1 [25] / -0
 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0
 >120 [3048] ≤ 300 [7620] = ±.6 [152] / -0
 >300 [7620] = ±.6 [152] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. DIMENSIONS OF UNDESIGNATED FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

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FM DS Rev-D4 Alt2b