

## WR-102 Standard Gain Horn with 10 dBi gain, SMA Female connector

The FMWAN102-10SF standard gain horn antenna (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-102 to SMA Female waveguide to coaxial adapter and operates from 7 GHz to 11 GHz.

Our FMWAN102-10SF standard gain horn antenna 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 to WR-102 standard gain horns are available in 10, 15 and 20 dBi models with pyramidal shape and connectorized input.

Waveguide antennas, such as the FMWAN102-10SF 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-102 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-102 Standard Gain Horn  
Coaxial Interface SMA Female

### Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	7		11	GHz
<b>Waveguide Standard Gain Horn</b>				
Gain		10		dBi
Horizontal 3dB Beam Width		52.1		Degrees
Vertical 3dB Beam Width		51.6		Degrees
<b>Waveguide to Coaxial Adapter</b>				
Input VSWR			1.25:1	

### Mechanical Specifications

**Size**  
 Length 4.835 in 122.81 mm  
 Width/Diameter 1.685 in 42.8 mm  
 Height 1.685 in 42.8 mm  
 Weight 0.391 lbs 177.35 g

**RF Connector**  
 Type SMA Female

**Waveguide Interface**  
 Waveguide Size WR-102

### Environmental Specifications

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

### Plotted and Other Data

Notes:



### Features:

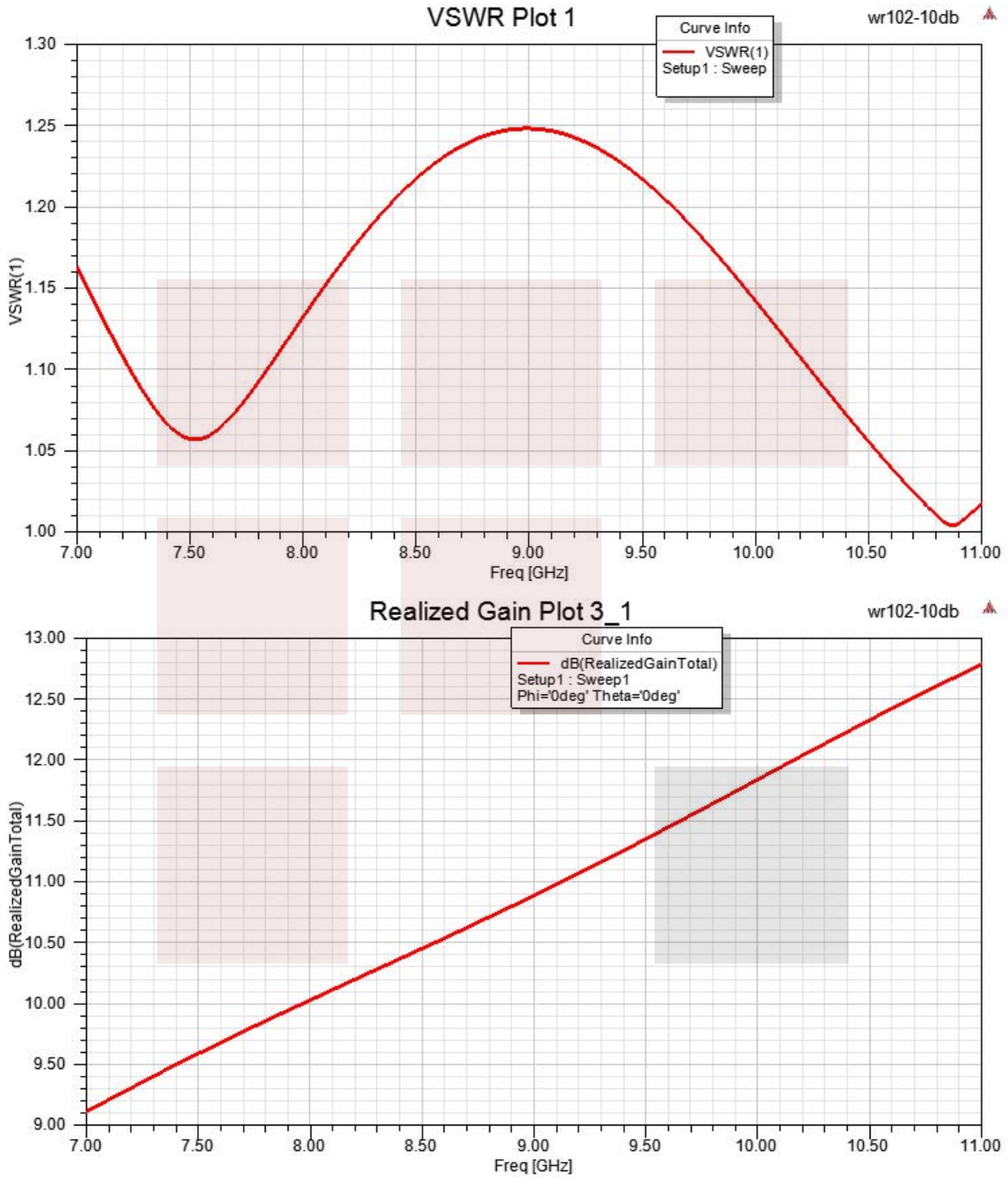
- 7 GHz to 11 GHz
- WR-102 Waveguide Band
- 10 dBi Nominal Gain
- SMA Female Connector

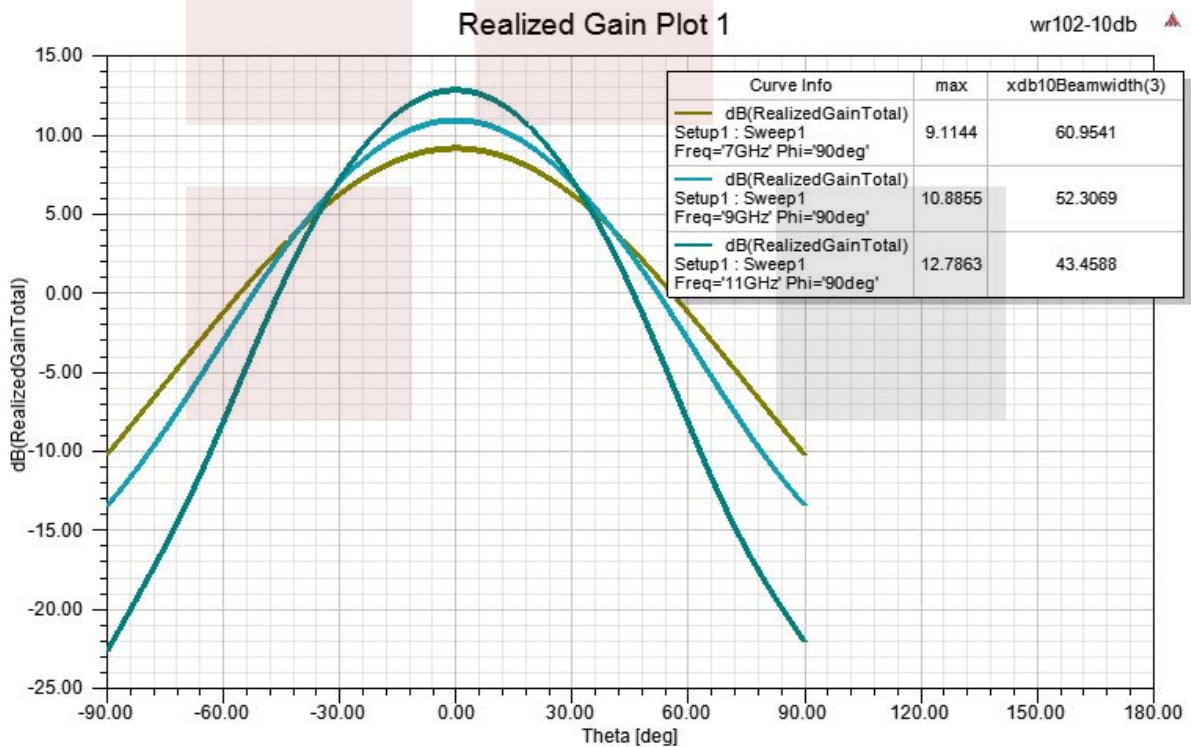
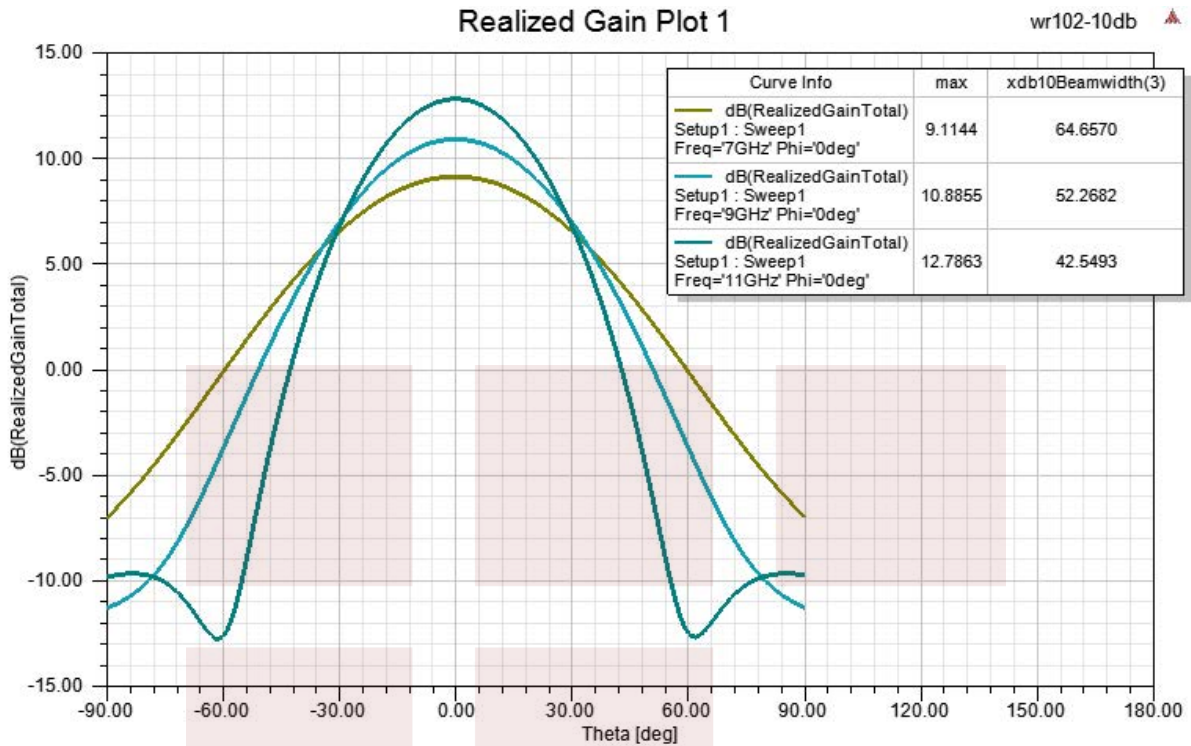
### Applications:

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

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**Typical Performance Data**





WR-102 Standard Gain Horn with 10 dBi gain, SMA Female connector 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.

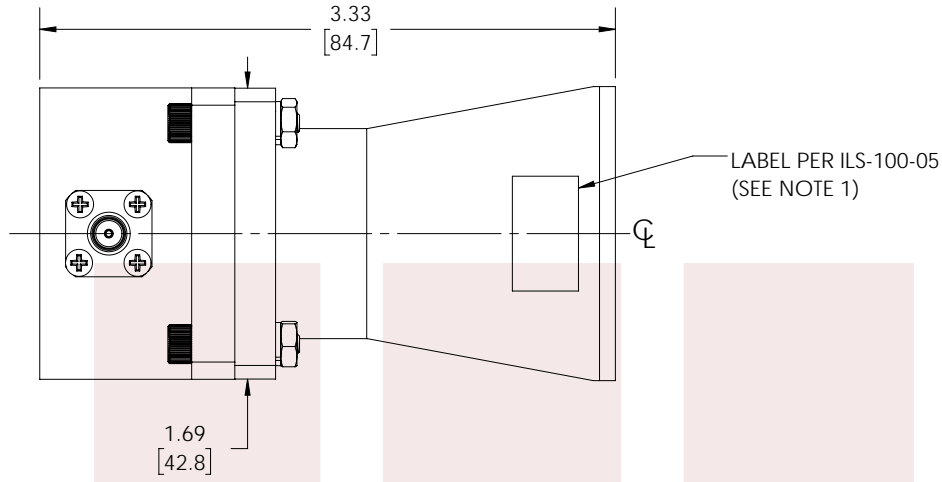
For additional information on this product, please click the following link: [WR-102 Standard Gain Horn with 10 dBi gain, SMA Female connector FMWAN102-10SF](#)

URL:

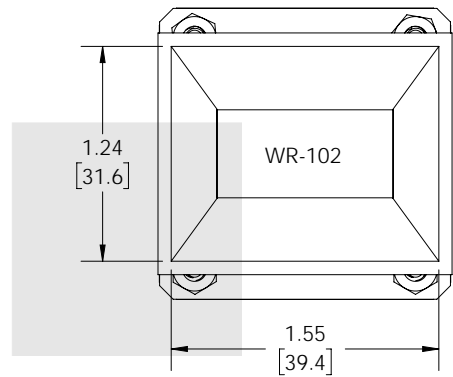
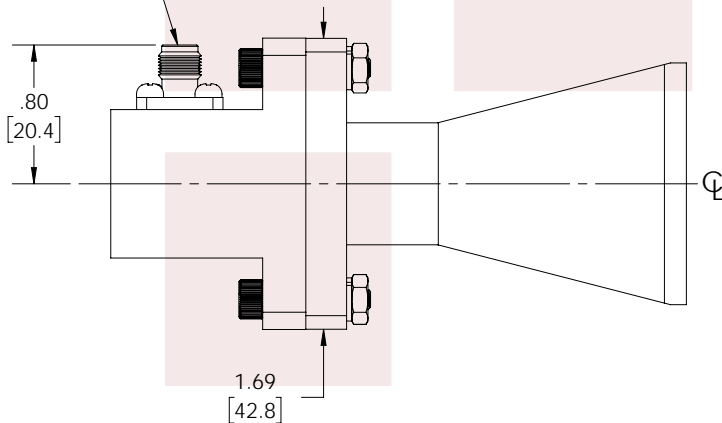
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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	01/11/2022	KHIETPAS



SMA FEMALE CONNECTOR



- NOTES:**  
1. LABEL PER ILS-100-05 (FOR INTERNAL REFERENCE ONLY)  
LABEL LOCATION FOR REFERENCE ONLY

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TITLE

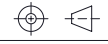
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UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES  
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES: CABLE LENGTH (L) TOLERANCES:

.X = ±.2 [5.08]	FRACTIONS ± 1/32	L ≤ 12 [305] = +1 [25] / -0
.XX = ±.02 [.51]	ANGLES ± 1°	12 [305] < L ≤ 60 [1524] = +2 [51] / -0
.XXX = ±.005 [.13]		60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
		120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
		300 [7620] < L = +5%L / -0

THIRD-ANGLE PROJECTION



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ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SCALE N/A

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	3FKR5	BPUCHASKI	FMWAN102-10SF	A

T-Rev.D