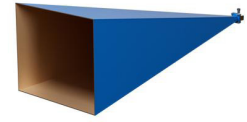


WR-90 Waveguide Standard Gain Horn Antenna  
Operating from 8.2 GHz to 12.4 GHz with a  
Nominal 30 dB Gain N Female Input



**FM9856B/NF-30**

**Features**

- WR-90 Rectangular Waveguide Interface
- 8.2 GHz to 12.4 GHz
- 30 dBi Nominal Gain
- Type N Female Connector

**Applications**

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

**Description**

The Fairview Microwave FM9856B/NF-30 Proline series standard gain horn antenna (also known as waveguide horn) is part of our huge selection of waveguide antennas. This Fairview Microwave standard gain horn antenna is manufactured with a WR-90 input and a Type N waveguide to coaxial transition adapter. Our standard gain horn antenna, WR-90 has a 30 dBi nominal gain. This WR-90 standard gain horn from Fairview Microwave has a female Type N waveguide to coax transition adapter.

The 30 dBi Fairview Microwave WR-90 horn antenna operates from 8.2GHz to 12.4 GHz. Fairview Microwave's Type Nfemale WR-90The 30 dBi Fairview Microwave WR-90 horn antenna operates from 8.2 GHz to 12.4 GHz. Fairview Microwave's Type N female WR-90 standard gain horns are available in 10, 15 and 20 dBi models with pyramidal shape and rectangular input. It is part of over 40,000 RF, microwave and millimeter wave components available at Fairview Microwave.

Waveguide standard gain horn antennas, such as the FM9856B/NF-30, are used in a wide variety of applications due to their high power handling capability, low loss, high directivity, and near constant electrical performance. The WR-90 FM9856B/NF-30 waveguide horn is US made and TAA compliant. Our WR-90 standard gain horn Proline antennas with Type N female interface can ship same day to anywhere in the world.

**Configuration**

Design	WR-90
Pattern	Directional
Coaxial Interface	N Female

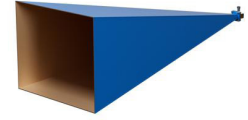
**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	8.2		12.4	GHz
Gain		30		
Horizontal Half Power Beam Width		5		Degrees
Vertical Half Power Beam Width		5		
<b>Waveguide to Coaxial Adapter</b>				
VSWR			1.4:1	

**Mechanical Specifications**

<b>Size</b>	
Length	39.5 in [100.33 cm]
Width	16.19 in [411.23 mm]
Height	12.49 in [317.25 mm]
Weight	0.62 lbs [281.23 g]

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Nominal 30 dB Gain N Female Input



**FM9856B/NF-30**

**RF Connector**

Type	N Female
Contact Material Plating	Stainless Steel

**Waveguide Interface**

Waveguide Size	WR-90
Flange Type	Square Cover
Flange Designation	UG-135/U
Body Material and Plating	Aluminum

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

**Plotted and Other Data**

Notes:

**Typical Performance Data**

WR-90 Waveguide Standard Gain Horn Antenna Operating from 8.2 GHz to 12.4 GHz with a Nominal 30 dB Gain N Female Input 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.

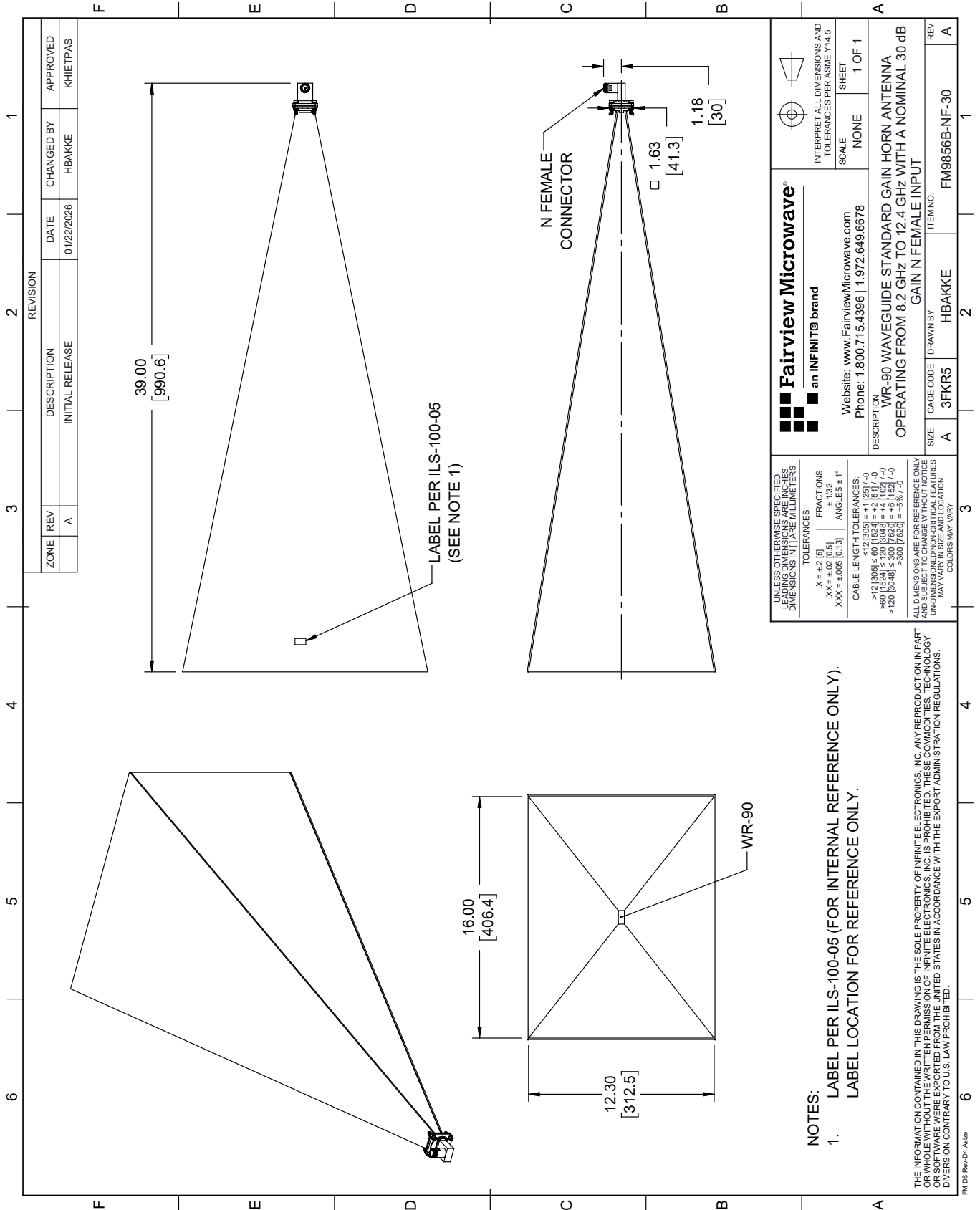
For additional information on this product, please click the following link: [WR-90 Waveguide Standard Gain Horn Antenna Operating from 8.2 GHz to 12.4 GHz with a Nominal 30 dB Gain N Female Input FM9856B/NF-30](#)

URL: <https://www.fairviewmicrowave.com/wr-90-standard-gain-horn-30-db-n-fm9856b-nf-30-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.

# FM9856B/NF-30 CAD Drawing

WR-90 Waveguide Standard Gain Horn Antenna Operating from 8.2 GHz to 12.4 GHz with a Nominal 30 dB Gain N Female Input



REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV	DESCRIPTION	INITIAL RELEASE	
A				KHETTPAS

**Fairview Microwave**  
an INFINIT® brand

Website: [www.FairviewMicrowave.com](http://www.FairviewMicrowave.com)  
Phone: 1.800.715.4396 | 1.972.649.6678

DESCRIPTION: WR-90 WAVEGUIDE STANDARD GAIN HORN ANTENNA OPERATING FROM 8.2 GHz TO 12.4 GHz WITH A NOMINAL 30 dB GAIN N FEMALE INPUT

SCALE: NONE  
SHEET: 1 OF 1

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	3FKR5	HBAKKE	FM9856B-NF-30

REV: A

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

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

CABLE LENGTH TOLERANCES:  
 ≤ 12 [305] ± .005 [±.125] / -0  
 > 12 [305] ≤ 60 [1524] = ±.02 [51] / -0  
 > 60 [1524] ≤ 120 [3048] = ±.04 [102] / -0  
 > 120 [3048] ≤ 300 [7620] = ±.08 [203] / -0  
 > 300 [7620] = ±.08 [203] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. LEADING DIMENSIONS ARE IN MILLIMETERS. DIMENSIONS IN [ ] ARE MILLIMETERS. COLORS MAY VARY.

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

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FM DS Rev-D4 A42b