

## WR-42 Waveguide Standard Gain Horn Antenna With UG-597/U Flange, 20 dBi Gain and 18 GHz to 26.5 GHz

The Pro-series WR-42 FM9852B-20 standard gain horn antenna (also known as waveguide horn) from Fairview Microwave has a nominal gain of 20 dBi. The Fairview Microwave 20 dBi WR-42 horn antenna operates from 18 GHz to 26.5 GHz. This WR-42 standard gain horn has a UG-597/U type flange. The WR-42 FM9852B-20 waveguide horn is part of over 40,000 RF, microwave and millimeter wave components available from Fairview Microwave.

Waveguide standard gain horn antennas 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 Pro-series gain horns are US made and TAA compliant. Fairview Microwave's WR-42 standard gain horns are available in 10, 15 and 20 dBi models with pyramidal shape and rectangular input. Pro-series WR-42 standard gain horn antenna can ship the same day to anywhere in the world.

### Configuration

Design	WR-42 Standard Gain Horn
Pattern	Directional
Polarization	Linear

### Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	18		26.5	GHz
Impedance		50		Ohms
Nominal Gain		20		dB
VSWR		1.5:1		

### Mechanical Specifications

<b>Size</b>	
Length	4 in [101.6 mm]
Width/Diameter	1.98 in [50.29 mm]
Height	1.48 in [37.59 mm]

### Waveguide Interface

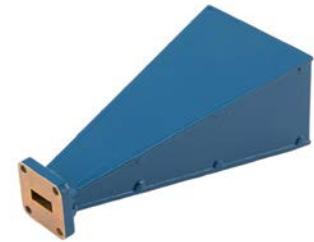
Waveguide Size	WR-42
Flange Type	Square Cover
Flange Designation	UG-597/U
Body Material and Plating	Aluminum

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

### Plotted and Other Data

Notes:



### Features:

- WR-42 Rectangular Waveguide Interface
- 18 GHz to 26.5 GHz
- 20 dBi Nominal Gain
- UG-597/U Cover Flange

### Applications:

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

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WR-42 Waveguide Standard Gain Horn Antenna With UG-597/U Flange, 20 dBi Gain and 18 GHz to 26.5 GHz 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.

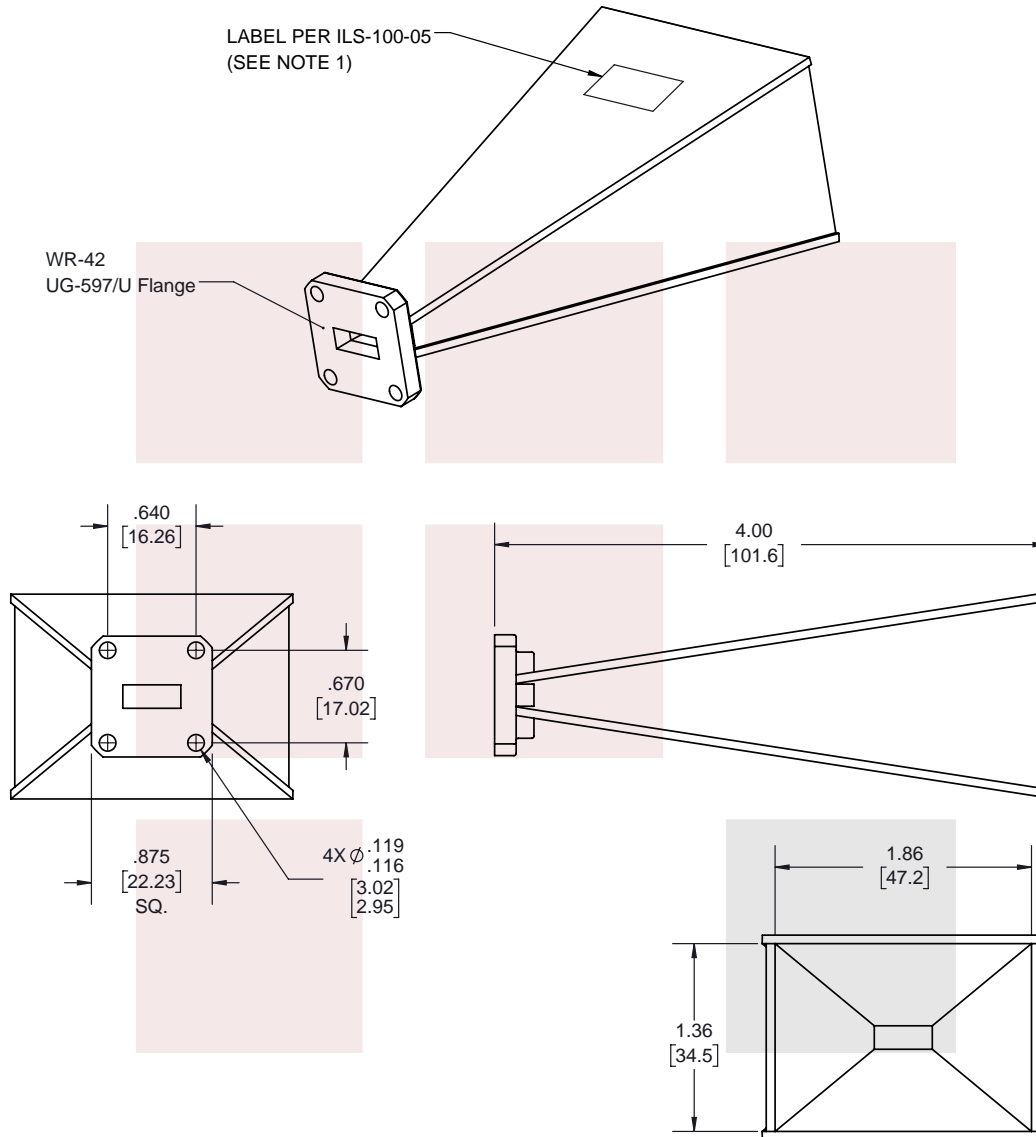
For additional information on this product, please click the following link: [WR-42 Waveguide Standard Gain Horn Antenna With UG-597/U Flange, 20 dBi Gain and 18 GHz to 26.5 GHz FM9852B-20](#)

URL: <https://www.fairviewmicrowave.com/wr-42-waveguide-standard-gain-horn-20-db-ug-597-fm9852b-20-p.aspx>

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	11/03/2020	KHIETPAS



- 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	L ≤ 12 [305] = +1 [25] / -0
.XX = ±.02 [.51]	± 1/32	12 [305] < L ≤ 60 [1524] = +2 [51] / -0
.XXX = ±.005 [.13]	ANGLES ± 1°	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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SHEET 1 OF 1

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SCALE N/A

SIZE A	CAGE CODE 3FKR5	DRAWN BY BPUCHASKI	ITEM NO. FM9852B-20	REV A
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