

WR-51 Waveguide Standard Gain Horn Antenna With Flange, 10 dBi Gain and 15 GHz to 22 GHz

The Pro-series WR-51 FM9853B-10 standard gain horn antenna (also known as waveguide horn) from Fairview Microwave has a nominal gain of 10 dBi. The Fairview Microwave 10 dBi WR-51 horn antenna operates from 15 GHz to 22 GHz. This WR-51 standard gain horn has a square type flange. The WR-51 FM9853B-10 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-51 standard gain horns are available in 10, 15 and 20 dBi models with pyramidal shape and rectangular input. Pro-series WR-51 standard gain horn antenna can ship the same day to anywhere in the world.

Configuration

| | |
|--------------|--------------------------|
| Design | WR-51 Standard Gain Horn |
| Pattern | Directional |
| Polarization | Linear |

Electrical Specifications

| Description | Min | Typ | Max | Units |
|-----------------|-----|-------|-----|-------|
| Frequency Range | 15 | | 22 | GHz |
| Impedance | | 50 | | Ohms |
| Nominal Gain | | 10 | | dB |
| VSWR | | 1.5:1 | | |

Mechanical Specifications

| | |
|----------------|---------------------|
| Size | |
| Length | 1.42 in [36.07 mm] |
| Width/Diameter | 1.312 in [33.32 mm] |
| Height | 1.312 in [33.32 mm] |

Waveguide Interface

| | |
|---------------------------|--------------|
| Waveguide Size | WR-51 |
| Flange Type | Square Cover |
| Body Material and Plating | Aluminum |



Features:

- WR-51 Rectangular Waveguide Interface
- 15 GHz to 22 GHz
- 10 dBi Nominal Gain
- square Cover Flange

Applications:

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

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

Plotted and Other Data

Notes:

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WR-51 Waveguide Standard Gain Horn Antenna With Flange, 10 dBi Gain and 15 GHz to 22 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.

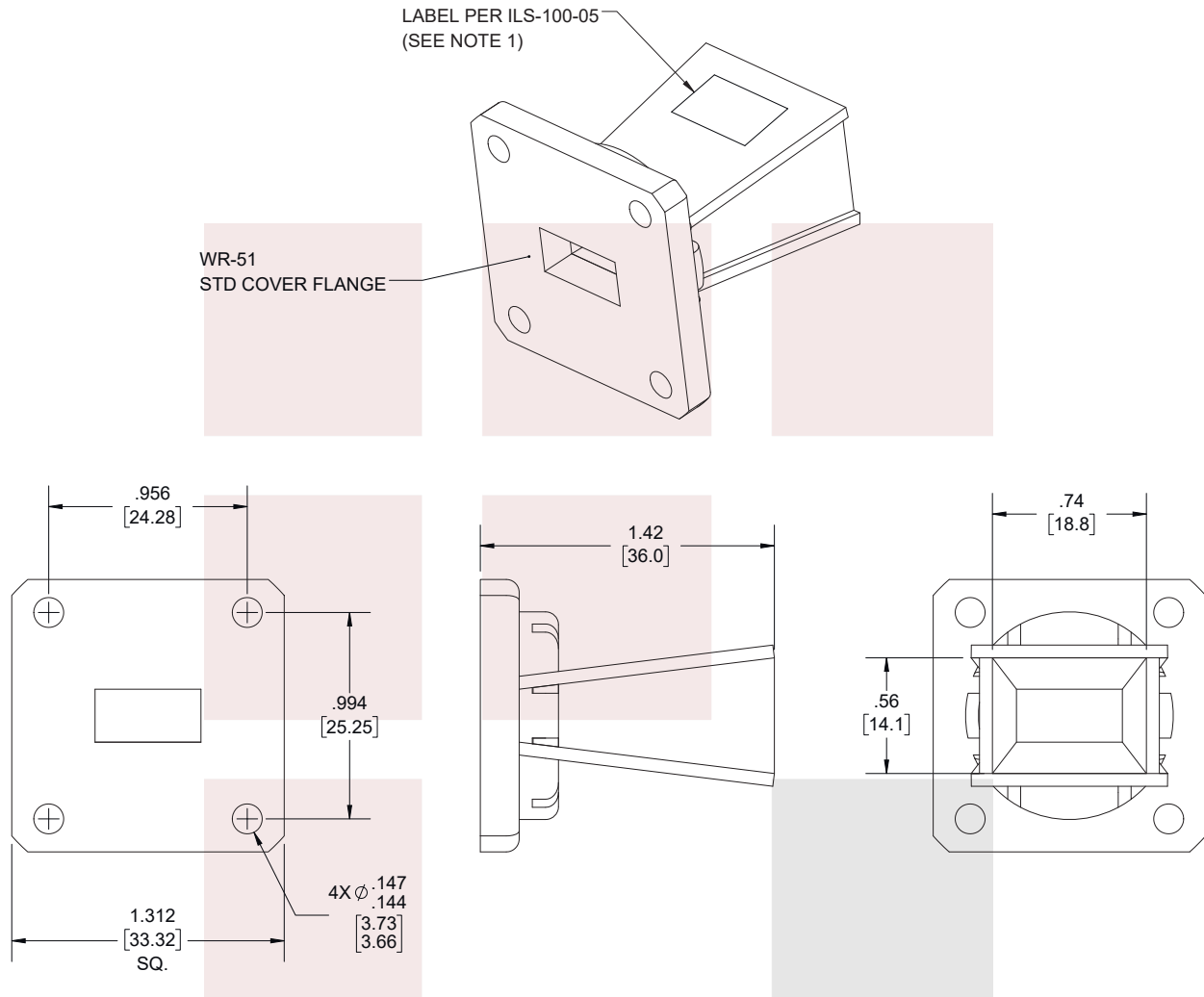
For additional information on this product, please click the following link: [WR-51 Waveguide Standard Gain Horn Antenna With Flange, 10 dBi Gain and 15 GHz to 22 GHz FM9853B-10](#)

URL: <https://www.fairviewmicrowave.com/wr-51-waveguide-standard-gain-horn-10-db-fm9853b-10-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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Flange, 10 dBi Gain and 15 GHz to 22 GHz

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

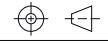
TOLERANCES:

.X = ±.2 [5.08] FRACTIONS
.XX = ±.02 [.51] ± 1/32
XXX = ±.005 [.13] ANGLES ± 1°

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305] = +1 [25] / -0
12 [305] < L ≤ 60 [1524] = +2 [51] / -0
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

SCALE N/A

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|-----------|--------------------|-----------------------|------------------------|----------|
| SIZE A | CAGE CODE 3FKR5 | DRAWN BY BPUCHASKI | ITEM NO. FM9853B-10 | REV A |
|-----------|--------------------|-----------------------|------------------------|----------|

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