

## Conical Gain Horn Waveguide Antenna, WR-8, 100 GHz to 112 GHz, UG-387/U-Mod Round Cover Flange, 20 dBi Nominal Gain

Waveguide conical 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 across a broad bandwidth. Fairview Microwave's FMWAN1059 WR-8 waveguide conical gain horn antenna operating from 100 GHz to 112 GHz with a nominal 20 dBi gain is part of our full line of RF components available for same-day shipping. This Fairview Microwave circular horn antenna has a gold plated brass body and a precision tolerance UG-387/U-Mod round cover flange. The FMWAN1059 WR-8 waveguide conical gain horn antenna offers low gain variation across its operating frequency range.

### Configuration

|              |                        |
|--------------|------------------------|
| Design       | WR-8 Conical Gain Horn |
| Pattern      | Directional            |
| Polarization | Linear                 |

### Electrical Specifications

| Description               | Min | Typ    | Max | Units |
|---------------------------|-----|--------|-----|-------|
| Frequency Range           | 100 |        | 112 | GHz   |
| Nominal Gain              |     | 20     |     | dBi   |
| Horizontal 3dB Beam Width |     | 20     |     | Deg   |
| Vertical 3dB Beam Width   |     | 16     |     | Deg   |
| VSWR                      |     | 1.15:1 |     |       |

### Mechanical Specifications

|                |                    |
|----------------|--------------------|
| <b>Size</b>    |                    |
| Length         | 1.66 in [42.16 mm] |
| Width/Diameter | 0.75 in [19.05 mm] |
| Height         | 0.75 in [19.05 mm] |
| Weight         | 0.05 lbs [22.68 g] |

### Waveguide Interface

|                           |              |
|---------------------------|--------------|
| Waveguide Size            | WR-8         |
| Flange Type               | Round Cover  |
| Flange Designation        | UG-387/U-Mod |
| Body Material and Plating | Brass, Gold  |



### Features:

- Circular Waveguide Interface
- 100 GHz to 112 GHz
- 20 dBi Nominal Gain
- UG-387/U-Mod Round Cover Flange

### Applications:

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

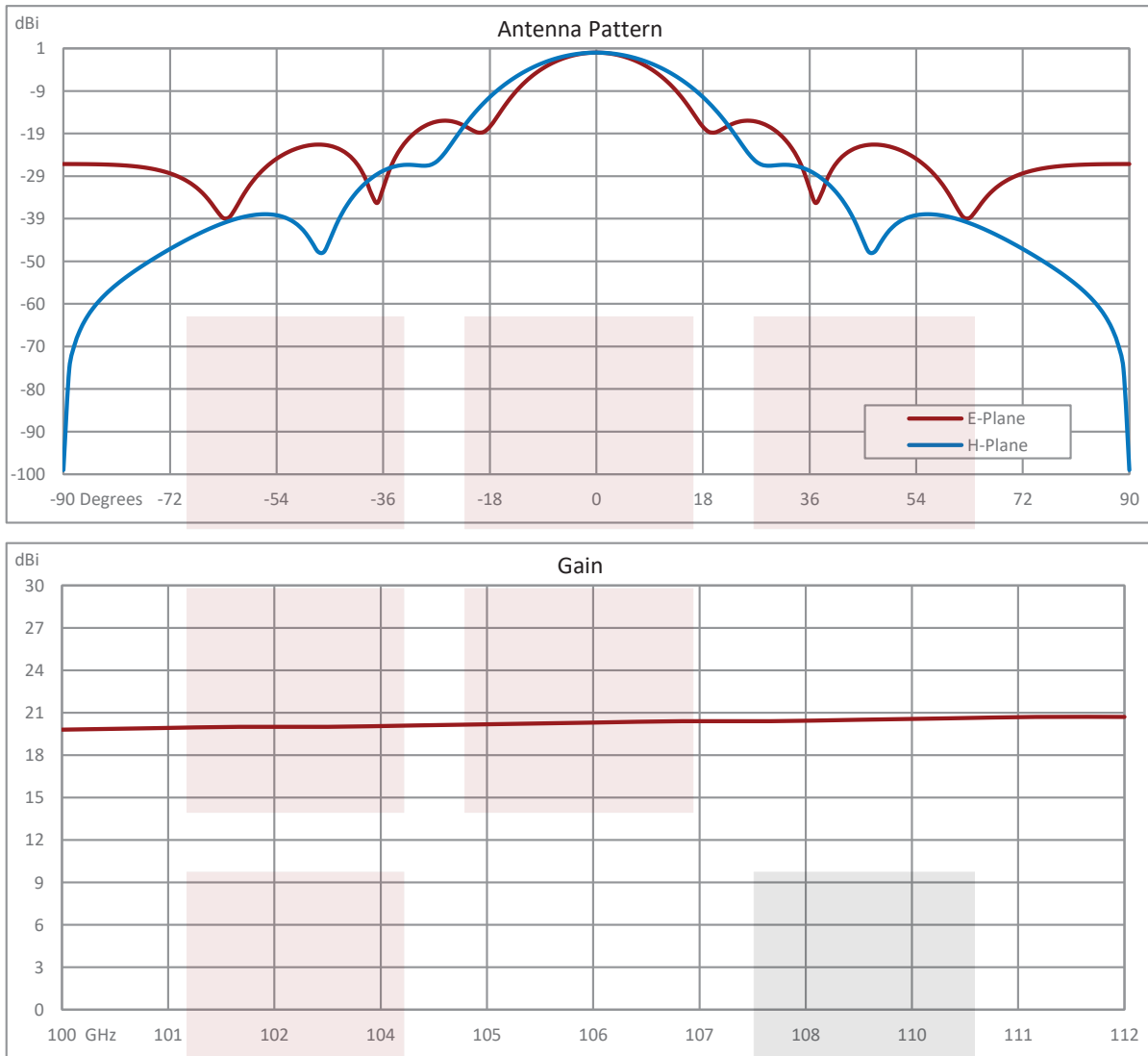
z  
**Compliance Certifications** (see [product page](#) for current document)

### Plotted and Other Data

Notes:

Fairview Microwave  
301 Leora Ln., Suite 100  
Lewisville, TX 75056  
Tel: 1-800-715-4396 / (972) 649-6678  
Fax: (972) 649-6689  
[www.fairviewmicrowave.com](http://www.fairviewmicrowave.com)  
[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

**Typical Performance Data**

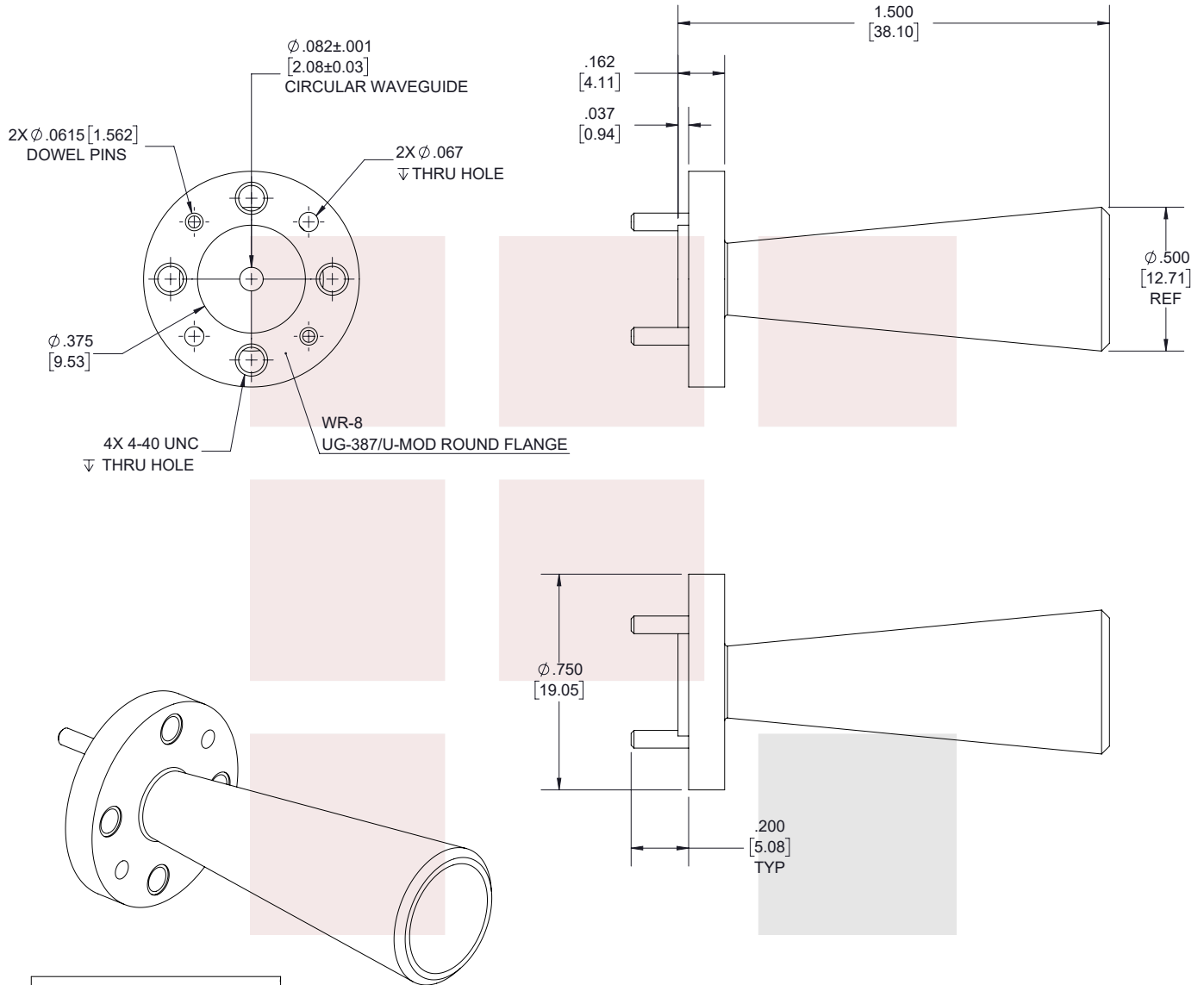


Conical Gain Horn Waveguide Antenna, WR-8, 100 GHz to 112 GHz, UG-387/U-Mod Round Cover Flange, 20 dBi Nominal Gain from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Conical Gain Horn Waveguide Antenna, WR-8, 100 GHz to 112 GHz, UG-387/U-Mod Round Cover Flange, 20 dBi Nominal Gain FMWAN1059](https://www.fairviewmicrowave.com/wr-8-waveguide-standard-gain-horn-20-dbi-ug-387-mod-fmwan1059-p.aspx)

URL: <https://www.fairviewmicrowave.com/wr-8-waveguide-standard-gain-horn-20-dbi-ug-387-mod-fmwan1059-p.aspx>

The information contained in 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 any liability arising out of the use of any part or documentation.



| STANDARD TOLERANCES |        |
|---------------------|--------|
| .X                  | ±0.2   |
| .XX                 | ±0.01  |
| .XXX                | ±0.005 |

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

|  |   |  |                           |                 |              |           |      |
|--|---|--|---------------------------|-----------------|--------------|-----------|------|
| <p><b>Fairview Microwave</b><br/>RF COMPONENTS ON DEMAND. <i>Done!</i></p>   | NOTES:<br>1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.<br>2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.<br>3. DIMENSIONS ARE IN INCHES [mm]. |  |                           |                 |              |           |      |
|  | DWG NO<br><b>FMWAN1059</b>  |  | CAGE CODE<br><b>3FKR5</b> |                 |              |           |      |
| TITLE<br>Conical Gain Horn Waveguide Antenna, WR-8, 100 GHz to 112 GHz, UG-387/U-Mod Round Cover Flange, 20 dBi Nominal Gain |   |  | CAD FILE<br>02/22/19      | SHEET<br>1 OF 1 | SCALE<br>N/A | SIZE<br>A | 7361 |