

WR-22 Waveguide Probe Antenna Operating from 33 GHz to 50 GHz, 6.5 dBi Nominal Gain, UG-383/U Flange

The FMWPR022-7 from Fairview Microwave is a waveguide probe antenna, often known as a waveguide horn, and is just one of several waveguide components we provide. This horn antenna is manufactured with a WR-22 waveguide size. Our WR-22 probe antenna is constructed with a UG-383/U flange and built to precise RF/microwave/millimeter waveguide horn antenna design specifications.

Fairview Microwave's WR-22 waveguide antenna with UG-383/U flange has a 6.5 dBi nominal gain and is currently available for purchase. Our WR-22 6.5 dBi gain probe antenna has a minimum frequency of 33 GHz and a maximum frequency of 50 GHz. This waveguide WR-22 probe horn antenna has a typical vertical beam width of 60 degrees and a horizontal beam width of 115 degrees at 3 dB.

The FMWPR022-7 waveguide horn antenna with linear polarization has a typical VSWR of 1.5:1 and is suitable for test and measurement industries. This high-quality 6.5 dBi gain WR-22 probe antenna has a copper body with gold plating. The waveguide horn with a UG-383/U flange can operate at temperatures ranging from -40 to 85 degrees C.

In the given datasheet specifications, you can find more information about this WR-22 probe waveguide horn with a 33–50 GHz frequency range. This waveguide probe antenna is part of over one million RF, microwave, and millimeter wave components in stock. Our part number FMWPR022-7 probe antenna is ready for same-day purchase and shipping worldwide. Fairview Microwave also stocks a wide array of other waveguide products that ship the same day from our warehouse for all your RF/microwave and millimeter waveguide component needs.

Configuration

Design	WR-22 Probe
Polarization	Linear

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	33		50	GHz
Nominal Gain		6.5		dBi
Horizontal 3dB Beam Width		115		Deg
Vertical 3dB Beam Width		60		Deg
VSWR		1.5:1		

Mechanical Specifications

Size	
Length	2.2 in [55.88 mm]
Width/Diameter	1.125 in [28.58 mm]
Height	1.215 in [30.86 mm]
Weight	0.003 lbs [1.36 g]

Waveguide Interface

Waveguide Size	WR-22
Flange Designation	UG-383/U
Body Material and Plating	Copper, Gold



Features:

- WR-22 rectangular waveguide interface
- Precisely machined
- Gold plated copper Body
- Linear polarization
- 33 GHz to 50 GHz, gain 6.5 dBi
- UG-383/U round cover flange
- Min. VSWR < 1.5 :1
- Excellent repeatability

Applications:

- Antenna measurements
- Microwave radio systems
- Wireless communications
- Radome, automotive, satellite antenna testing
- Laboratory use
- Near-field measurements

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Environmental Specifications

Temperature

Operating Range -40 to 85 deg C

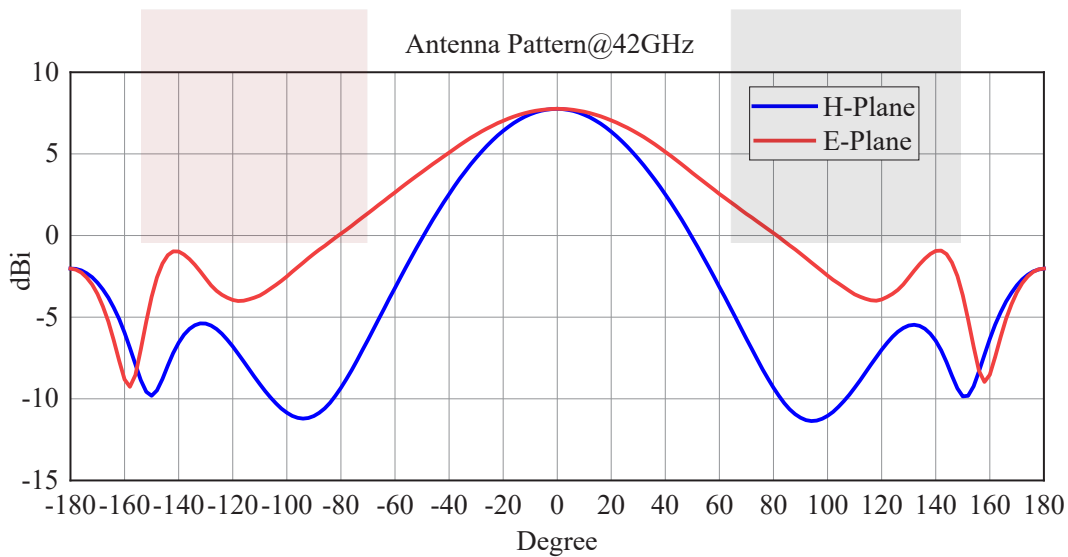
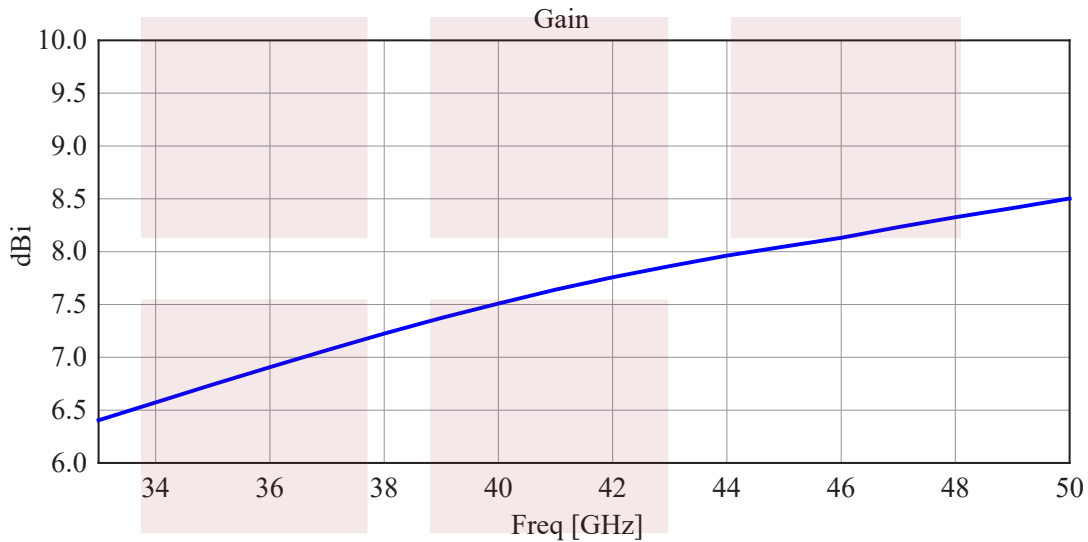
Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

Typical Performance Data

Gain:



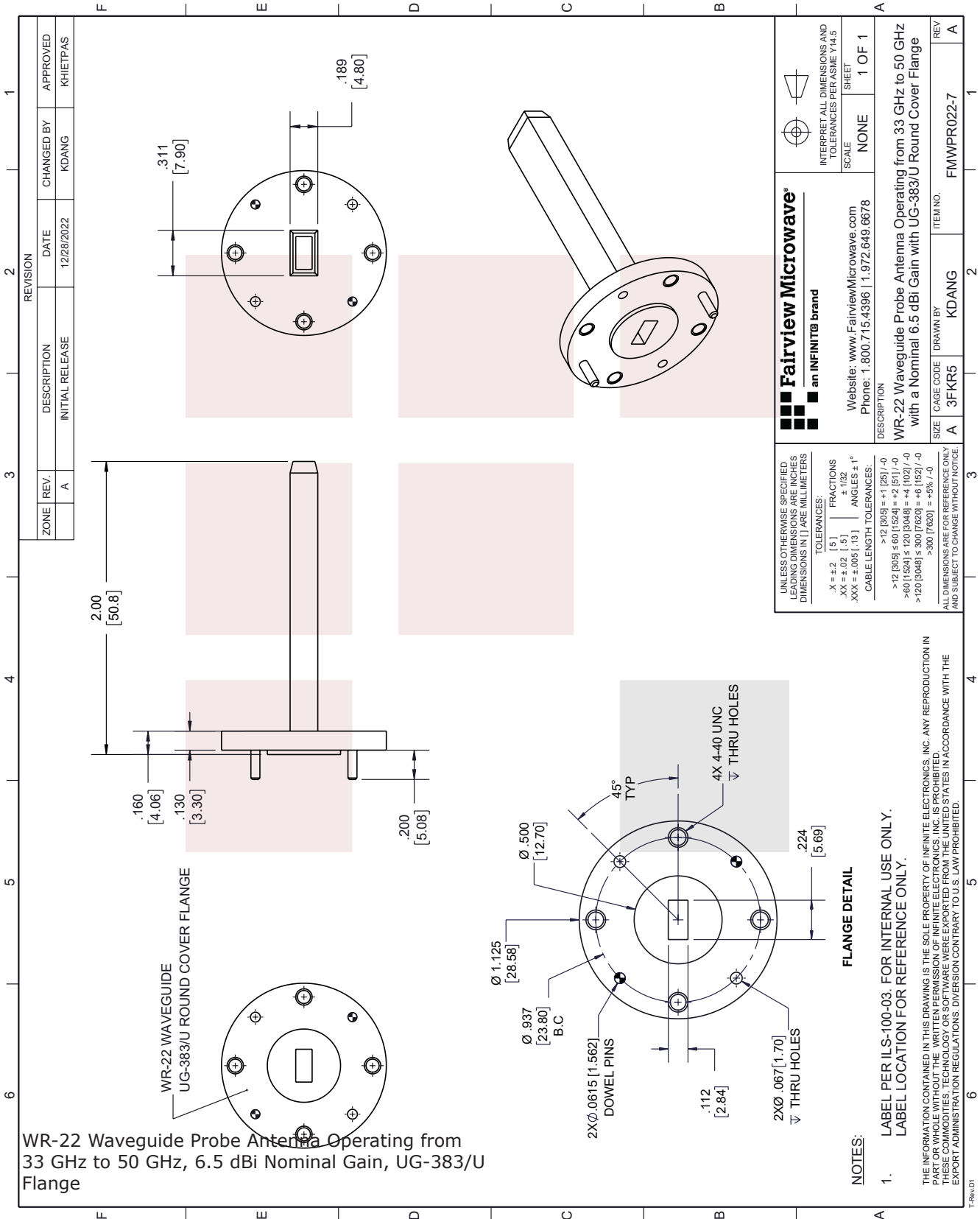
WR-22 Waveguide Probe Antenna Operating from 33 GHz to 50 GHz, 6.5 dBi Nominal Gain, UG-383/U Flange from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [WR-22 Waveguide Probe Antenna Operating from 33 GHz to 50 GHz, 6.5 dBi Nominal Gain, UG-383/U Flange FMWPR022-7](#)

URL: <https://www.fairviewmicrowave.com/wr-22-waveguide-standard-gain-horn-6.5-dbi-ug-383-fmwpr022-7-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.





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<p>Fairview Microwave an INFINIT[®] brand</p> <p>Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678</p>	<p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p> <p>SCALE: NONE</p> <p>SHEET: 1 OF 1</p>												
<p>UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED. DIMENSIONS IN LARGE MILLIMETERS.</p> <p>TOLERANCES:</p> <p>.X = ±.2 [5] FRACTIONS ±.005 [0.13] ANGLES ± 1°</p> <p>.XX = ±.02 [0.51] .XXX = ±.005 [0.13]</p> <p>CABLE LENGTH TOLERANCES:</p> <p>>12 [305] ≤ 60 [1524] = +1 [25] / -0</p> <p>>60 [1524] ≤ 120 [3048] = +4 [102] / -0</p> <p>>120 [3048] ≤ 300 [7620] = +6 [152] / -0</p> <p>>300 [7620] = +5% / -0</p>	<p>DESCRIPTION</p> <p>WR-22 Waveguide Probe Antenna Operating from 33 GHz to 50 GHz with a Nominal 6.5 dBi Gain with UG-383/U Round Cover Flange</p>												
<p>REVISION</p> <table border="1"> <tr> <th>ZONE</th> <th>REV.</th> <th>DESCRIPTION</th> <th>DATE</th> <th>CHANGED BY</th> <th>APPROVED</th> </tr> <tr> <td></td> <td>A</td> <td>INITIAL RELEASE</td> <td>12/28/2022</td> <td>KDANG</td> <td>KHIETPAS</td> </tr> </table>	ZONE	REV.	DESCRIPTION	DATE	CHANGED BY	APPROVED		A	INITIAL RELEASE	12/28/2022	KDANG	KHIETPAS	<p>ITEM NO. FMWPR022-7</p> <p>REV A</p>
ZONE	REV.	DESCRIPTION	DATE	CHANGED BY	APPROVED								
	A	INITIAL RELEASE	12/28/2022	KDANG	KHIETPAS								

FLANGE DETAIL

- NOTES:
1. LABEL PER ILS-100-03. FOR INTERNAL USE ONLY. LABEL LOCATION FOR REFERENCE ONLY.

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