

## WR-90 UG-135/U Square Cover Flange to End Launch N Female Waveguide to Coax Adapter Operating from 8.2 GHz to 12.4 GHz

The FMWCA9868 is a waveguide to coaxial adapter operating in the X band with a 8.2 to 12.4 GHz frequency range. This adapter offers a WR-90 waveguide interface size coupled with a precision tolerance UG-135/U Square Cover flange. The FMWCA9868 is constructed of aluminum to ensure durability and repeatable RF performance. The package is REACH and RoHS compliant.

### Configuration

Waveguide Size	WR-90
Flange	UG-135/U Square Cover
RF Connector	N Female
Impedance	50 Ohms
Body Geometry	End Launch

### Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	8.2		12.4	GHz
VSWR			1.25:1	
Insertion Loss		0.25		dB

### Mechanical Specifications

<b>Size</b>	
Length	1.82 in [46.23 mm]
Width	1.63 in [41.4 mm]
Height	1.63 in [41.4 mm]
Weight	0.15 lbs [68.04 g]

#### RF Connector

Connector Type	N Female
Body Material and Plating	Stainless Steel

#### Waveguide Interface

Waveguide Type	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:

- Values at +25 °C, sea level unless stated otherwise



### Features:

- 8.2 to 12.4 GHz Frequency Range
- WR-90 Waveguide Interface
- UG-135/U Flange
- N Female RF Interface
- End Launch

### Applications:

- Test Benches
- Radar
- Satellite
- Microwave Radio Systems
- Military and Space
- Communication Systems

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)

WR-90 UG-135/U Square Cover Flange to End Launch N Female Waveguide to Coax Adapter Operating from 8.2 GHz to 12.4 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.

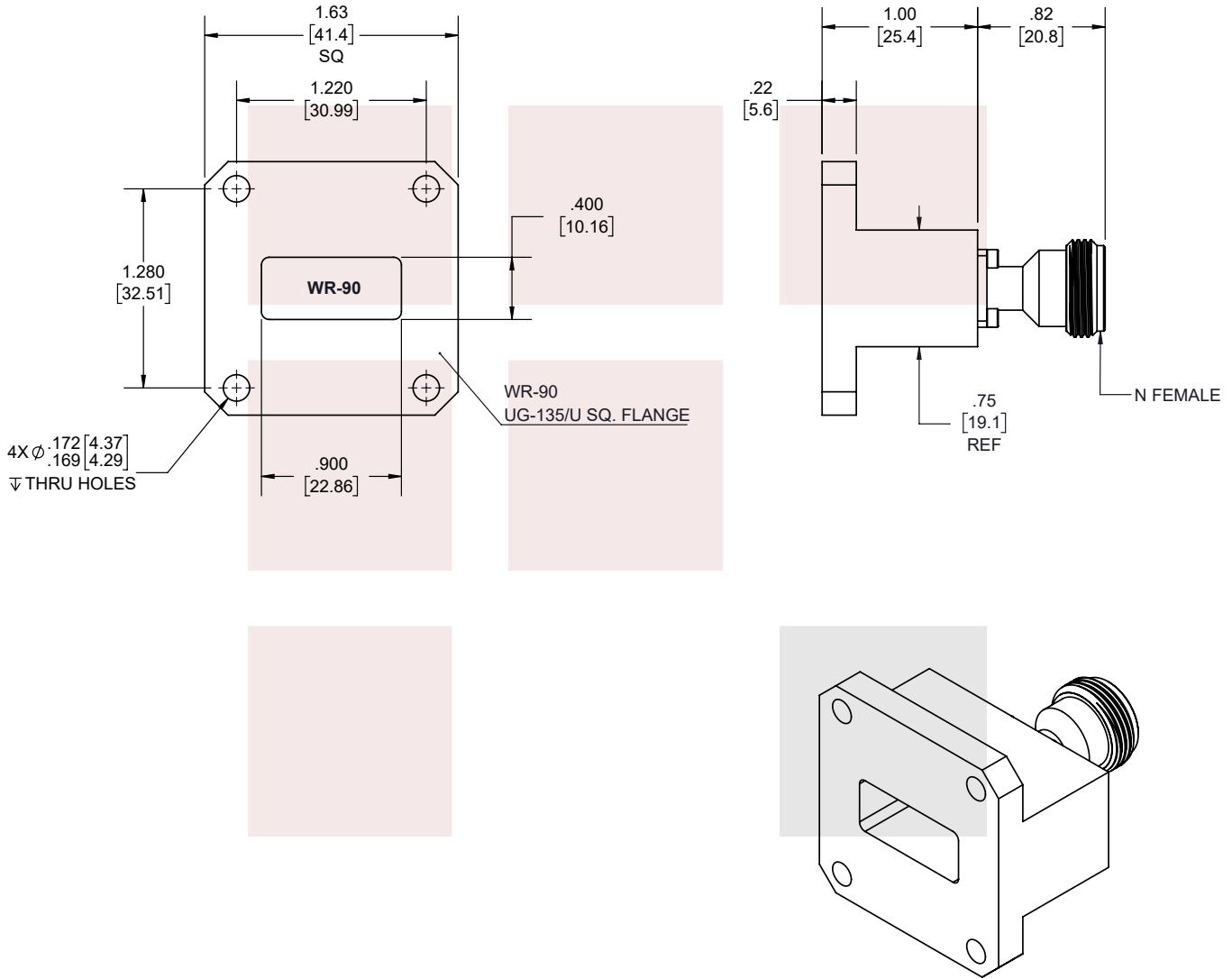
For additional information on this product, please click the following link: [WR-90 UG-135/U Square Cover Flange to End Launch N Female Waveguide to Coax Adapter Operating from 8.2 GHz to 12.4 GHz FMWCA9868](#)

URL: <https://www.fairviewmicrowave.com/wr90-type-n-female-end-launch-waveguide-coax-adapter-ug135-square-fmw-ca9868-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.



REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	PCR PE9868	3/17/2022	S.PONG



THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

TITLE  
WR-90 UG-135/U Square Cover Flange to End Launch N Female Waveguide to Coax Adapter Operating from 8.2 GHz to 12.4 GHz

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

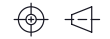
TOLERANCES:

.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



THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF FAIRVIEW MICROWAVE CORPORATION. ALL RIGHTS RESERVED.

SHEET 1 OF 1

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SCALE N/A

SIZE A	CAGE CODE 3FKR5	DRAWN BY K.DANG	ITEM NO. FMWCA9868	REV A
-----------	--------------------	--------------------	-----------------------	----------

T-Rev.D