

40 dB WR-90 Waveguide Crossguide Coupler with UG Cover Flange and N Female Coupled Port from 8.2 GHz to 12.5 GHz in Aluminum

The FMWCP1084N-40 is a 40 dB WR-90 three port crossguide coupler with integrated N Female connector for the coupled port. This coupler can be mounted directly into the waveguide signal path, connected via coax to allow signal sampling /monitoring. The coupler has a typical VSWR of 1.1:1 and are made of Aluminum with UG Cover flanges. The FMWCP1084N-40 is part of a family of cross guide couplers offered by Fairview Microwave with coupling values ranging from 20 to 50 dB.



Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	8.2		12.5	GHz
Coupler				
Nominal Coupling Level		40		dB
Coupling Accuracy			±1.5	dB
Directivity	18			dB
Insertion Loss		0.1		dB
Main Line VSWR			1.1:1	
Secondary Line VSWR			1.25:1	
Input Power (CW)			600	Watts
Input Power Peak			200	kWatts

Mechanical Specifications

Size	
Length	3.346 in [84.99 mm]
Width	2.756 in [70 mm]
Height	2.45 in [62.23 mm]
Weight	0.441 lbs [200.03 g]
Interface	
Waveguide Size	WR-90
Flange Type	UG Cover
RF Connector Type	N Female
Coupler Body Material and Plating	Aluminum, Chromate

Environmental Specifications

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

Plotted and Other Data

Notes:

Features:

- Three Port Crossguide Waveguide Coupler
- 40±1.5 dB Nominal Coupling Level
- Integrated N Female Connector for the coupled port
- 8.2 GHz to 12.5 GHz Frequency Range
- Low VSWR < 1.25:1

Applications:

- Test Benches
- Radar
- Satellite
- Microwave Radio
- Attenuation Measurements
- Power Measurements
- Source Leveling

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
sales@fairviewmicrowave.com

40 dB WR-90 Waveguide Crossguide Coupler with UG Cover Flange and N Female Coupled Port from 8.2 GHz to 12.5 GHz in Aluminum 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: [40 dB WR-90 Waveguide Crossguide Coupler with UG Cover Flange and N Female Coupled Port from 8.2 GHz to 12.5 GHz in Aluminum FMWCP1084N-40](#)

URL: <https://www.fairviewmicrowave.com/40-db-wr-90-waveguide-crossguide-coupler-fmwcp1084N-40-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.



