

10 dB WR-90 Waveguide Broadwall Coupler with UG Cover Flange and N-Type Female Coupled Port from 8.2 GHz to 12.5 GHz in Copper

The FMW90CP001-10 is a WR-90 Directional Broadwall waveguide coupler with N female coupled port that operates in the frequency range of 8.2 to 12.5 GHz. This Waveguide component has a maximum VSWR of 1.25:1. These designs are made of painted copper alloy and incorporate a broad wall configuration that result in a mid-band nominal coupling value of 10, 20, 30, 40 or 50 dB. Common applications for this component would be where power measurements are required within a system for measuring/sampling power or frequency monitoring with minimal signal loss to the main transmission line. Fairview Microwave offers a complete family of waveguide Crossguide and Broadwall couplers that are in-stock and ship same day.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	8.2		12.5	GHz
Coupler				
Nominal Coupling Level		10		dB
Directivity	38			dB
Insertion Loss			0.6	dB
Main Line VSWR			1.1:1	
Secondary Line VSWR			1.25:1	
Coupling Flatness			±0.7	dB
Input Power (CW)			100	Watts
Input Power Peak			2	kWatts

Mechanical Specifications

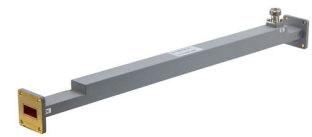
Size	
Length	17.91 in [454.91 mm]
Width	1.63 in [41.4 mm]
Height	1.63 in [41.4 mm]
Weight	1.51 lbs [684.92 g]
Flange Type	UG Cover
Flange Material and Plating	Copper, Passivated
RF Connector Type	N Female
Coupler Body Material and Plating	Copper, Passivated

Environmental Specifications

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

Plotted and Other Data

Notes:



Features:

- Three Port Broadwall Waveguide Coupler
- 10±0.7 dB Nominal Coupling Level
- Integrated N Female Connector coupled port
- 8.2 GHz to 12.5 GHz Frequency Range
- Main Line VSWR < 1.1:1
- Max Power 100W (CW)

Applications:

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

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10 dB WR-90 Waveguide Broadwall Coupler with UG Cover Flange and N-Type Female Coupled Port from 8.2 GHz to 12.5 GHz in Copper 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: [10 dB WR-90 Waveguide Broadwall Coupler with UG Cover Flange and N-Type Female Coupled Port from 8.2 GHz to 12.5 GHz in Copper FMW90CP001-10](#)

URL: <https://www.fairviewmicrowave.com/10db-wr90-waveguide-broadwall-coupler-ug-12.5mhz-fmw90cp001-10-p.aspx>

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