

## 40 dB WRD-650 Double Ridge Waveguide Broad-wall Coupler, N Female Coupled Port, 6.5 GHz to 18 GHz in Brass

The FMWRD650CP02-40 is a WRD-650 Directional Broadwall double ridge waveguide coupler with N female coupled port that operates in the frequency range of 6.5 to 18 GHz. This Waveguide component has a maximum VSWR of 1.5:1. 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	6.5		18	GHz
Impedance		50		Ohms
<b>Coupler</b>				
Nominal Coupling Level		40		dB
Directivity	20			dB
Insertion Loss			0.3	dB
Main Line VSWR			1.25:1	
Secondary Line VSWR			1.5:1	
Coupling Flatness			±2	dB
Input Power (CW)			400	Watts
Input Power Peak			3	kWatts

### Mechanical Specifications

<b>Size</b>	
Length	10.63 in [270 mm]
Width	1.38 in [35.05 mm]
Height	1.38 in [35.05 mm]
Weight	2.52 lbs [1.14 kg]

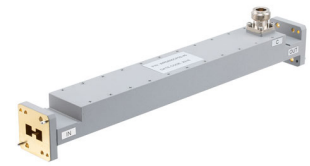
<b>Interface</b>	
Waveguide Size	WRD-650
Flange Type	Cover
RF Connector Type	N Female
Coupler Body Material and Plating	Brass, Gray

### Environmental Specifications

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

### Plotted and Other Data

Notes:



### Features:

- Three Port Broadwall Waveguide Coupler
- 40±2 dB Nominal Coupling Level
- Integrated N Female Connector coupled port
- 6.5 GHz to 18 GHz Frequency Range
- Main Line VSWR < 1.25:1
- Max Power 400W (CW)

### 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](http://www.fairviewmicrowave.com)  
[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

40 dB WRD-650 Double Ridge Waveguide Broadwall Coupler, N Female Coupled Port, 6.5 GHz to 18 GHz in Brass 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 WRD-650 Double Ridge Waveguide Broadwall Coupler, N Female Coupled Port, 6.5 GHz to 18 GHz in Brass FMWRD650CP02-40](https://www.fairviewmicrowave.com/40db-wrd650-waveguide-broadwall-coupler-18ghz-fmwr650cp02-40-p.aspx)

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