

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

The FMWRD650CP02-10 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		10		dB
Directivity	30			dB
Insertion Loss			0.8	dB
Main Line VSWR			1.25:1	
Secondary Line VSWR			1.5:1	
Coupling Flatness			±2	dB
Input Power (CW)			200	Watts
Input Power Peak			3	kWatts

### Mechanical Specifications

<b>Size</b>	
Length	18.9 in [480.06 mm]
Width	1.38 in [35.05 mm]
Height	1.38 in [35.05 mm]
Weight	4.33 lbs [1.96 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
- 10±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 200W (CW)

### Applications:

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

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For additional information on this product, please click the following link: [10 dB WRD-650 Double Ridge Waveguide Broadwall Coupler, N Female Coupled Port, 6.5 GHz to 18 GHz in Brass FMWRD650CP02-10](https://www.fairviewmicrowave.com/10db-wrd650-waveguide-broadwall-coupler-18ghz-fmwr650cp02-10-p.aspx)

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