

## N Directional Coupler 30 dB from 300 MHz to 500 MHz Rated to 300 Watts

Directional couplers are indispensable components for isolating, separating and combining signals. For example, they provide a simple way of sampling microwave signals. They also can make accurate attenuator measurements since reflections are eliminated. The FMCP1138-30 is a 30 dB directional coupler that operates from 300 to 500 MHz and can handle up to 300 Watts (CW) with 20 dB directivity minimum and 1.2:1 VSWR maximum. The package interface uses N female connectors.

The FMCP1138-30 is part of Fairview Microwave's family of directional/dual-directional couplers that offer coupling ratios up to 50 dB with excellent performance featuring high directivity, low insertion loss and VSWR. They are available in both narrow and broad bandwidths and can be used in a wide variety of applications including signal sampling, VSWR measurements, power combining and distribution.



### Features:

- Directional Coupler
- N Female Connectorized Design
- 300 to 500 MHz Frequency Range
- Coupling 30 dB
- Directivity > 20 dB
- VSWR < 1.2:1
- Max Power 300 Watts (CW)

### Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	300		500	MHz
Impedance		50		Ohms
Coupling		30		dB
Freq. Sensitivity		±0.5	±0.8	dB
Insertion Loss		0.1	0.2	dB
Directivity	20	22		dB
Main Line VSWR		1.1:1	1.2:1	
Sec. Line VSWR		1.1:1	1.2:1	
Input Power (CW)			300	Watts
Input Power (Peak)			5	kWatts

### Applications:

- Test and Measurement
- Military Communications
- Commercial Communications
- Wireless Communications
- SATCOM

### Mechanical Specifications

<b>Size</b>	
Length	12.012 in [305.1 mm]
Width/Dia.	2.145 in [54.48 mm]
Height	1.092 in [27.74 mm]
Weight	2.15 lbs [975.22 g]
Housing Material and Plating	Aluminum

#### Configuration

Input Connector	N Female
Output Connector	N Female
Coupled Connectors	N Female

### Environmental Specifications

<b>Temperature</b>	
Operating Range	-40 to +85 deg C
Storage Range	-50 to +105 deg C
Humidity	100% RH at 35°C, 95%RH at 40°C
Shock	20G for 11msec half sine wave, 3 axis both directions

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Vibration 25g RMS (15 degrees 2KHz) endurance, 1 hour per axis  
Altitude 30,000 ft.

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

**Plotted and Other Data**

Notes:

N Directional Coupler 30 dB from 300 MHz to 500 MHz Rated to 300 Watts 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: [N Directional Coupler 30 dB from 300 MHz to 500 MHz Rated to 300 Watts FMCP1138-30](#)

URL: <https://www.fairviewmicrowave.com/directional-standard-30-db-300-mhz-to-500-mhz-fmcp1138-30-p.aspx>

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