

4-Way Low PIM RF Power Divider with N Female Connectors, 555 MHz to 6 GHz, 80 Watt Power Rating, IP65 Rated



FMDV1290

Features

- Broadband frequency coverage from 555 MHz to 6 GHz
- 4 Way Power Divider
- Low PIM performance of ≈ -153 dBc (Typical = -160 dBc)
- Tested using two 43 dBm carriers
- Low insertion loss for improved system efficiency
- High port-to-port isolation 18 dB Min
- Excellent VSWR performance 1.2:1 Typ
- 80 watt average input power handling
- IP65 weather-resistant enclosure for outdoor installations
- Wide operating temperature range from -40°C to $+75^{\circ}\text{C}$
- N-Type Female connectors

Applications

- Distributed Antenna Systems (DAS)
- Cellular base stations
- 4G LTE and 5G wireless networks
- Public safety communication systems
- Private LTE and private 5G networks
- In-building wireless coverage
- Wireless infrastructure
- Multi-operator RF distribution systems

Description

The FMDV1290 N-Type Low PIM RF 4 Way Power Divider is designed for broadband wireless communication systems requiring low passive intermodulation and excellent RF performance. Covering a frequency range of 555 MHz to 6 GHz, this power divider provides equal power division with low insertion loss 0.6 dB typ, high port isolation 18 dB Min, and excellent VSWR 1.2:1 Typ across multiple wireless frequency bands. Featuring a Low PIM performance of -153 dBc maximum (-160 dBc typical) when tested with two 43 dBm carriers, the divider is well suited for modern DAS, small cell, cellular infrastructure, public safety, CBRS, and private network deployments. The rugged IP65-rated enclosure, RoHS-compliant construction, and wide operating temperature range make it suitable for demanding indoor and outdoor installations.

Electrical Specifications

Number of Output Ports

4

Description	Min	Typ	Max	Units
Frequency Range	0.555		6	GHz
Impedance		50		Ohms
Input VSWR		1.2:1	1.3:1	
Insertion Loss		0.5	1.1	dB
Isolation	18	22		dB
Nominal Power Splitting		6		dB
Passive Intermodulation 2x43dBm		-160	-153	dBc
Input Power (CW)			80	Watts
Input Power (Peak)			800	Watts

Specifications by Frequency

Description	F1	F2	F3	Units
Frequency Range	0.555-2.7	2.7-3.8	3.8-6	GHz

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Specifications by Frequency

Description	F1	F2	F3	Units
Insertion Loss, Typ	0.5	0.6	1.1	dB

Electrical Specification Notes:

Combiner mode power rating: 1 W CW, 10 W peak

Mechanical Specifications

Size

Length	4.45 in [113.03 mm]
Width	4.06 in [103.12 mm]
Height	0.87 in [22.1 mm]
Weight	1.23 lbs [557.92 g]
Housing Material and Plating	Brass, Copper-Tin-Zinc

Configuration

Input Connector	N Female
Output Connectors	N Female

Environmental Specifications

Temperature

Operating Range	-40 to +75 deg C
Storage Range	-50 to +85 deg C
Humidity	<95%
Shock	IEC 60068-2-27
Vibration	IEC 60068-2-6-Fc
Altitude	<5000m
Thermal Shock	IEC 60068-2-14-Na

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

Plotted and Other Data

Notes:

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Typical Performance Data

4-Way Low PIM RF Power Divider with N Female Connectors, 555 MHz to 6 GHz, 80 Watt Power Rating, IP65 Rated 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: [4-Way Low PIM RF Power Divider with N Female Connectors, 555 MHz to 6 GHz, 80 Watt Power Rating, IP65 Rated FMDV1290](https://www.fairviewmicrowave.com/4-way-power-divider-n-6-ghz-fmdv1290)

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FMDV1290 CAD Drawing

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