

698-960 MHz / 1710-2700 MHz / 3400-4200 MHz
Low PIM Rated DAS V-pol Panel Antenna, 5-8.5 dBi,
Wall Mount, Type N Female Connector

FM51FP1013



Features

- Low Passive Intermodulation (PIM) <-153 dBc @ 2x20W
- Vertical Polarization
- Low return loss, stable performance
- Type N Female connector for long lasting consistent results
- Covers 5G, WiFi and LTE frequency bands including extended CBRS

Applications

- Indoor distribution of 5G, LTE, GSM/CDMA
- In-building public or private networks
- LPWAN, LoRA, LTE-M, NB-IoT, IoT, M2M applications
- MIMO DAS (Distributed Antenna Systems)
- Wall Mounts

Description

The wall mount panel FM51FP1013 antenna from Fairview Microwave is a high performance, low PIM rated RF component which operates from 698 to 4200 MHz. The FM51FP1013 antenna is ideal for 5G, LTE, CDMA, LPWAN/IoT/M2M applications including LoRA, LTE-M, NB-IOT and Distributed Antenna System (DAS) Networks. The Multi-Band design of the Fairview Microwave FM51FP1013 antenna can be used for a wide array of in-building wireless applications where wide coverage is desired. Fairview Microwave's FM51FP1013 can be used to distribute Cellular and WiFi signals throughout a building or area.

The Type N connectorized FM51FP1013 antenna with vertical polarization from Fairview Microwave provides Passive Intermodulation (PIM) ratings better than -150 dBc. The key to providing the best performance in telecommunications is to ensure the components used are low PIM rated. The 698-4200 MHz FM51FP1013 with 8.5 dBi max gain helps meet the increasing demand for higher data rates and the ability to provide streaming video for mobile devices.

The Type N connectorized FM51FP1013 antenna from Fairview Microwave excels in large open areas such as indoor courtyards, indoor sporting venues, convention centers and shopping malls. The mounting bracket and hardware are included for easy installation. Fairview Microwave wall mount panel with Type N female purchases will ship the same day. Our FM51FP1013 antenna is part of over one million RF, microwave and millimeter wave components in stock and ready for same-day shipment worldwide.

Configuration

Design	Panel
Application Band	5G LTE GSM/CDMA
Band Type	Wide
Radiation Pattern	Directional
Polarization	Vertical
Connector Type	N Female
Number of Ports	1

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	698		4,200	MHz
Input VSWR			1.8:1	
Impedance		50		Ohms
Gain		5	8.5	dBi
Input Power			50	Watts
Passive Intermodulation		-153		dBc
3rd Order, 2 x 20 W				

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Specifications by Band

Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Range	0.698 to 0.806	0.806 to 0.96	1.71 to 2.17	2.2 to 2.7	3.4 to 4.2	GHz
Gain	5	6	7	7.5	8.5	dBi
Horizontal HPBW	80	80	65	60	55	
Vertical HPBW	73	70	60	60	30	Degrees
Front to Back Ratio	5	8	10	15		dB

Mechanical Specifications

Duplexer Connectors
Radome Material

Pigtail
ABS

Size

Length 7.09 in [180.09 mm]
Width 6.69 in [169.93 mm]
Height 2.36 in [59.94 mm]
Weight 0.88 lbs [399.16 g]

Environmental Specifications

Temperature

Operating Range -55 to +60 deg C
Humidity < 95

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

Plotted and Other Data

Notes:

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Typical Radiation Pattern

Appendix

Electrical Downtilt: Angle in the antenna's elevation pattern in which the maximum gain occurs.

Gain: Antenna's average gain.

Front to Back Ratio @ 180°±30°: Average difference between the antenna's maximum gain and the maximum gain in the antenna's back lobe over ±30° angles.

Cross-polarization Ratio (dB): Typical difference between the co-polarization and cross-polarization gain across the sector's 3 dB Beam Width.

Dedicated to serving the needs of the Wireless Internet Service Provider (WISP) market, KP Performance Antennas offers purpose built products that reliably perform in the field. KP Performance Antennas product line consists of Yagi, Grid, Omni, Dish and other style antennas that operate in the 900 MHz, 2.4 GHz, 3 GHz, and 5 GHz frequencies.

698-960 MHz / 1710-2700 MHz / 3400-4200 MHz Low PIM Rated DAS V-pol Panel Antenna, 5-8.5 dBi, Wall Mount, Type N Female Connector 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: [698-960 MHz / 1710-2700 MHz / 3400-4200 MHz Low PIM Rated DAS V-pol Panel Antenna, 5-8.5 dBi, Wall Mount, Type N Female Connector FM51FP1013](https://www.fairviewmicrowave.com/wide-band-antenna-5-dbi-n-female-fm51fp1013-p.aspx)

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FM51FP1013 CAD Drawing

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