

617-960 MHz / 1710-2700 MHz / 3300-4200 MHz /
4900-6000 MHz Low PIM Rated X-pol 5.5 dBi Panel
Antenna, Wall Mount, 2x4.3-10 Female Connector



FM51FP1015

Features

- Low Passive Intermodulation (PIM) <-153 dBc @ 2x20W
- +/- 45 Slant Polarization
- Low return loss, stable performance
- 2 x 4.3-10 Female connector for long lasting consistent results
- Covers all sub 6 GHz 5G frequency bands including 600 MHz and 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 MIMO panel FM51FP1015 antenna from Fairview Microwave is a high performance, low PIM rated RF component which operates from 617 to 6000 MHz. The FM51FP1015 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 FM51FP1015 antenna can be used for a wide array of in-building wireless applications where wide coverage is desired. Fairview Microwave's FM51FP1015 can be used to distribute Cellular and WiFi signals throughout a building or area.

The 4.3-10 connectorized FM51FP1015 antenna with +/-45 slant 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 617-6000 MHz FM51FP1015 with 7 dBi max gain helps meet the increasing demand for higher data rates and the ability to provide streaming video for mobile devices.

The 4.3-10 connectorized FM51FP1015 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 MIMO panel with 4.3-10 female purchases will ship the same day. Our FM51FP1015 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	±45 Deg. Slant
Connector Type	4.3-10 Female
Interface 2	4.3-10 Female
Number of Ports	2

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	617		6,000	MHz
Input VSWR			2:1	
Gain		5.5	7	dBi
Input Power			50	Watts
Passive Intermodulation 3rd Order, 2 x 20 W		-153		dBc

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Specifications by Band

Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Frequency	0.617 to 0.698	0.698 to 0.96	1.71 to 2.7	3.3 to 4.2	4.9 to 6	GHz
Gain	5.5	6	7	6	6.5	dBi
Horizontal HPBW	80	70	68	55	50	Degrees
Vertical HPBW	70	70	68	50	50	Degrees
Port to Port Isolation	20	20	20	28	30	dB

Mechanical Specifications

Duplexer Connectors
Radome Material

Pigtail
ABS

Size

Length 12.2 in [309.88 mm]
Width 16.54 in [420.12 mm]
Height 3.94 in [100.08 mm]
Weight 2.2 lbs [997.9 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.

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For additional information on this product, please click the following link: [617-960 MHz / 1710-2700 MHz / 3300-4200 MHz / 4900-6000 MHz Low PIM Rated X-pol 5.5 dBi Panel Antenna, Wall Mount, 2x4.3-10 Female Connector FM51FP1015](#)

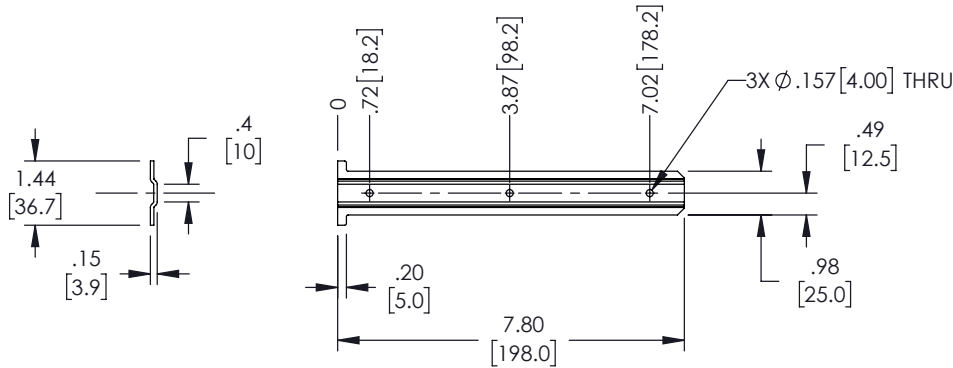
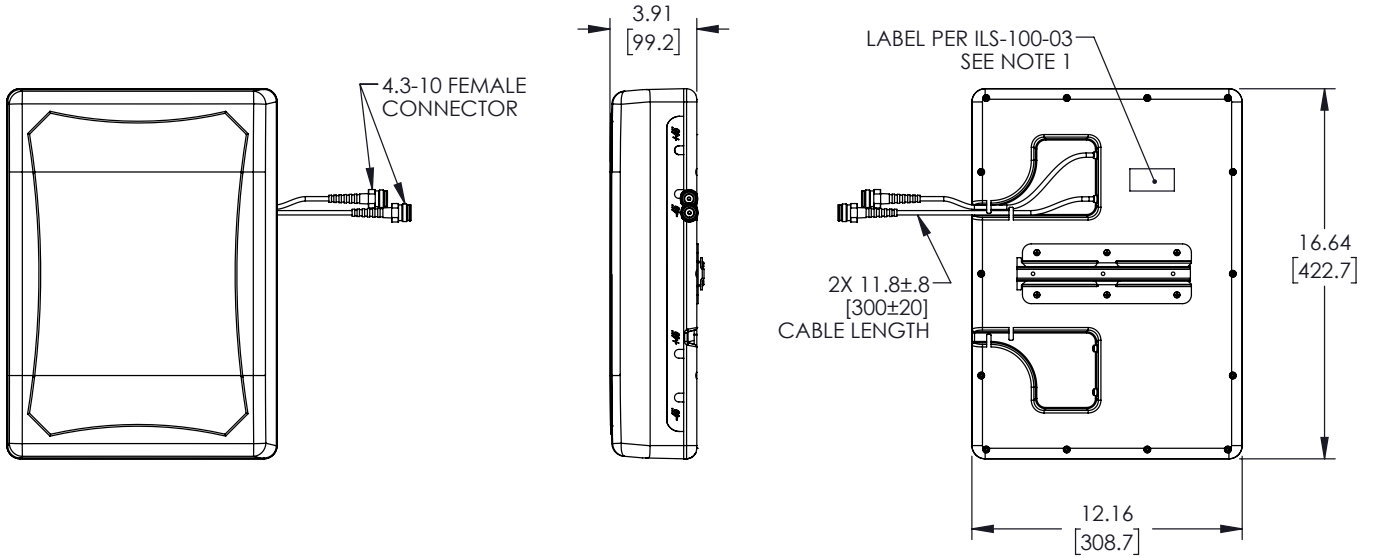
URL: <https://www.fairviewmicrowave.com/product/antennas/mimo-wide-band-antenna-5.5-dbi-4.3-10-female-fm-51fp1015.html>

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FM51FP1015 CAD Drawing

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	04/21/2021	KHIETPAS



SLIDE BRACKET

NOTES:

1. LABEL PER ILS-100-03 (FOR INTERNAL REFERENCE ONLY)
 LABEL LOCATION FOR REFERENCE ONLY.

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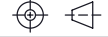
TITLE

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES
 DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES: CABLE LENGTH (L) TOLERANCES:

.X = ±.2 [5.08]	FRACTIONS ± 1/32	L ≤ 12 [305] = +1 [25] / -0
.XX = ±.02 [.51]	ANGLES ± 1°	12 [305] < L ≤ 60 [1524] = +2 [51] / -0
.XXX = ±.005 [.13]		60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
		120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
		300 [7620] < L = +5%L / -0

THIRD-ANGLE PROJECTION



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SHEET 1 OF 1

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SCALE N/A

SIZE A	CAGE CODE 3FKR5	DRAWN BY DZINN	ITEM NO. FM51FP1015	REV A
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