

617-960 MHz / 1350-2700 MHz / 3300-3800 MHz / 4900-6000 MHz Low PIM Rated HH-pol MIMO Omni Antenna, Low Profile, 2 x Type N Female Connector

The MIMO ceiling mount omnidirectional FM51218 antenna from Fairview Microwave is a high performance, low PIM rated RF component which operates from 617 to 6000 MHz. The FM51218 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 FM51218 antenna can be used for a wide array of in-building wireless applications where wide coverage is desired. Fairview Microwave's FM51218 can be used to distribute Cellular and WiFi signals throughout a building or area.

The Type N connectorized FM51218 antenna with 2xhorizontal 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 FM51218 with 6 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 FM51218 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 MIMO ceiling mount omnidirectional with Type N female purchases will ship the same day. Our FM51218 antenna is part of over one million RF, microwave and millimeter wave components in stock and ready for same-day shipment worldwide.

Configuration

Design	Ceiling
Frequency Range	617 to 6000 MHz
Gain	2.2 to 6 dBi
Polarization	Linear/Horizontal
Connector Type	N Female
Interface 2	N Female
Number of Ports	2

Electrical Specifications

Description	Min	Typ	Max	Units
Impedance		50		Ohms
Gain		1.5		dBi
Gain			6	dBi
Input Power			50	Watts
VSWR			1.8:1	
Passive Intermodulation 3rd Order, 2 x 20 W		-153		dBc

Specifications by Frequency

Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Range	0.617-0.96	1.35-1.55	1.69-2.7	3.3-3.8	4.9-6	GHz
Port to Port Isolation	16	18	20	30	30	dB
Gain	2.2	3.5	4.5	6	6	dBi



Features:

- Low Passive Intermodulation (PIM) < -153 dBc @ 2x20W
- 2 x Horizontal Polarization for MIMO
- Low Profile 3/4" thick antenna
- Two N Female connector with 12 inch pigtails
- 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)
- Discrete Ceiling Mounts

Fairview Microwave
 301 Leora Ln., Suite 100
 Lewisville, TX 75056
 Tel: 1-800-715-4396 / (972) 649-6678
 Fax: (972) 649-6689
www.fairviewmicrowave.com
sales@fairviewmicrowave.com

VSWR 1.8:1 1.8:1 1.8:1 1.8:1 1.8:1

Mechanical Specifications

Radome Material ABS

Size

Length 10.47 in [265.94 mm]
Width 10.47 in [265.94 mm]
Height 0.71 in [18.03 mm]
Weight 1.1 lbs [498.95 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

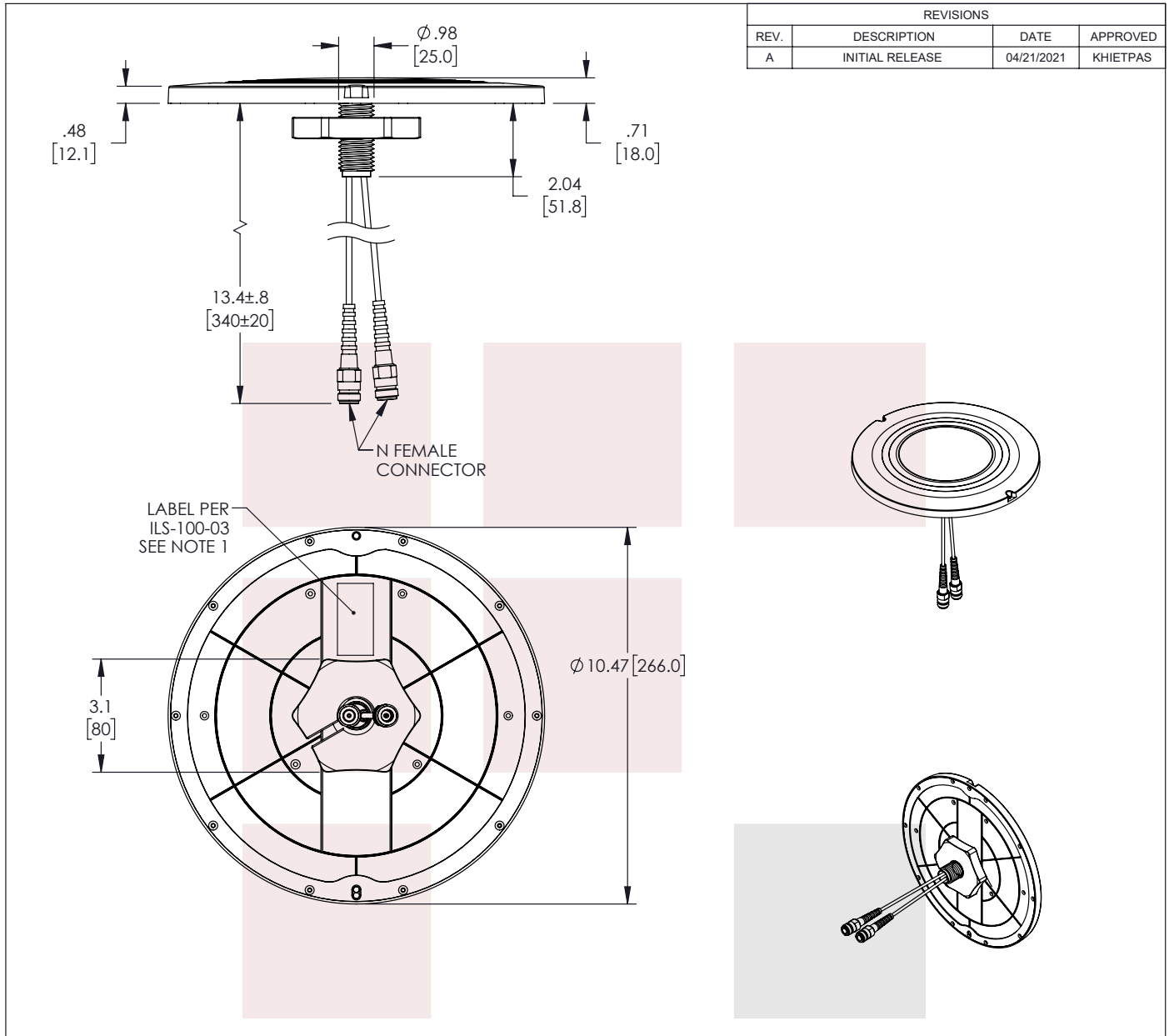
Notes:

617-960 MHz / 1350-2700 MHz / 3300-3800 MHz / 4900-6000 MHz Low PIM Rated HH-pol MIMO Omni Antenna, Low Profile, 2 x 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: [617-960 MHz / 1350-2700 MHz / 3300-3800 MHz / 4900-6000 MHz Low PIM Rated HH-pol MIMO Omni Antenna, Low Profile, 2 x Type N Female Connector FM51218](#)

URL: <https://www.fairviewmicrowave.com/617-mhz-6000-mhz-indoor-5g-mimo-omni-antenna-1.5-6-dbi-low-pim-low-profile-hh-polarization-n-female-connector-hg65806dpcupr-nf-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.



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

NOTES:

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

THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

<p>Fairview Microwave an INFINIT[®] brand</p>	<p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS</p> <p>TOLERANCES:</p> <table border="0"> <tr> <td>.X = ±.2 [5.08]</td> <td>FRACTIONS</td> <td>L ≤ 12 [305] = +1 [25] / -0</td> </tr> <tr> <td>.XX = ±.02 [.51]</td> <td>± 1/32</td> <td>12 [305] < L ≤ 60 [1524] = +2 [51] / -0</td> </tr> <tr> <td>.XXX = ±.005 [.13]</td> <td>ANGLES ± 1°</td> <td>60 [1524] < L ≤ 120 [3048] = +4 [102] / -0</td> </tr> <tr> <td></td> <td></td> <td>120 [3048] < L ≤ 300 [7620] = +6 [152] / -0</td> </tr> <tr> <td></td> <td></td> <td>300 [7620] < L = +5%L / -0</td> </tr> </table>		.X = ±.2 [5.08]	FRACTIONS	L ≤ 12 [305] = +1 [25] / -0	.XX = ±.02 [.51]	± 1/32	12 [305] < L ≤ 60 [1524] = +2 [51] / -0	.XXX = ±.005 [.13]	ANGLES ± 1°	60 [1524] < L ≤ 120 [3048] = +4 [102] / -0			120 [3048] < L ≤ 300 [7620] = +6 [152] / -0			300 [7620] < L = +5%L / -0	<p>THIRD-ANGLE PROJECTION</p> <p>THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF FAIRVIEW MICROWAVE CORPORATION. ALL RIGHTS RESERVED.</p>
	.X = ±.2 [5.08]	FRACTIONS	L ≤ 12 [305] = +1 [25] / -0															
.XX = ±.02 [.51]	± 1/32	12 [305] < L ≤ 60 [1524] = +2 [51] / -0																
.XXX = ±.005 [.13]	ANGLES ± 1°	60 [1524] < L ≤ 120 [3048] = +4 [102] / -0																
		120 [3048] < L ≤ 300 [7620] = +6 [152] / -0																
		300 [7620] < L = +5%L / -0																
<p>TITLE</p> <p>617-960 MHz / 1350-2700 MHz / 3300-3800 MHz / 4900-6000 MHz Low PIM Rated HH-pol MIMO Omni Antenna, Low Profile, 2 x Type N Female Connector</p>	<p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p>		<p>SHEET 1 OF 1</p> <p>SCALE N/A</p>															
<p>SIZE A</p> <p>CAGE CODE 3FKR5</p>	<p>DRAWN BY DZINN</p>	<p>ITEM NO. FM51218</p>	<p>REV A</p>															

T-Rev.D