

## 2.4/4.9-5.8 GHz Six Element, Dual Polarized MIMO Flat Panel Antenna

The Fairview Microwave FM51FP1002 Flat Panel Antenna combines six dual band antennas in a single housing. The unit consists of four vertically and two horizontally polarized multi-patch antennas. It is a professional quality antenna designed primarily for MIMO point-to-multipoint and point-to-point applications in the 2.4 GHz and the 4.9-5.8 GHz frequency bands. The unit can be used with APs and Routers with one to six antenna ports.

This antenna incorporates advanced dual polarization technology that allows for the interoperability of two radios to transmit and receive paths. This technology allows for the attenuation of unwanted signals from adjacent channels and/or co-located equipment.

### Configuration

Design	Panel
Gain	9 dBi
Polarization	Vertical/Horizontal
Connector Type	N Female
Interface 2	N Female
Interface 3	N Female
Interface 4	N Female
Number of Ports	6
Lightning Protection	DC Ground

### Electrical Specifications

Description	Min	Typ	Max	Units
Input VSWR			2:1	
Impedance		50		Ohms
Front to Back Ratio		25		dB
Input Power			25	Watts

### Specifications by Frequency

Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Range	2.4-2.5	4.9-5.85				GHz
Gain	9	10				dBi
Horiz. Beam Width	85	50				Degrees
Vert. Beam Width	55	45				Degrees
VSWR	2:1	2:1				
Max Input Power	25	25				Watts

### Mechanical Specifications

Radome Material	ASA
<b>Size</b>	
Length	12.4 in [314.96 mm]
Width	12.4 in [314.96 mm]
Height	1 in [25.4 mm]
Mounting Mast Diameter	0.75 to 2 in [19.05 to 50.80 mm]



### Features:

- Six independent antennas
- MIMO - Multiple-Input and Multiple-Output
- Dual polarity feed system in single enclosure
- Four vertical and two horizontal elements
- UV-resistant radome for all-weather operation

### Applications:

- 2.4/4.9-5.8 GHz Indoor/Outdoor Wireless LAN systems
- Supports IEEE 802.11 a/b/g/n and 802.11ac applications
- MIMO wireless access points and routers
- Homeland Security and Public Safety Band
- Hospitality, Industrial, Municipality

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](http://www.fairviewmicrowave.com)  
[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

Weight 1.96 lbs [889.04 g]

Mechanical Specification Notes:  
Radome material is UV-resistant ASA.

## Environmental Specifications

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

## Plotted and Other Data

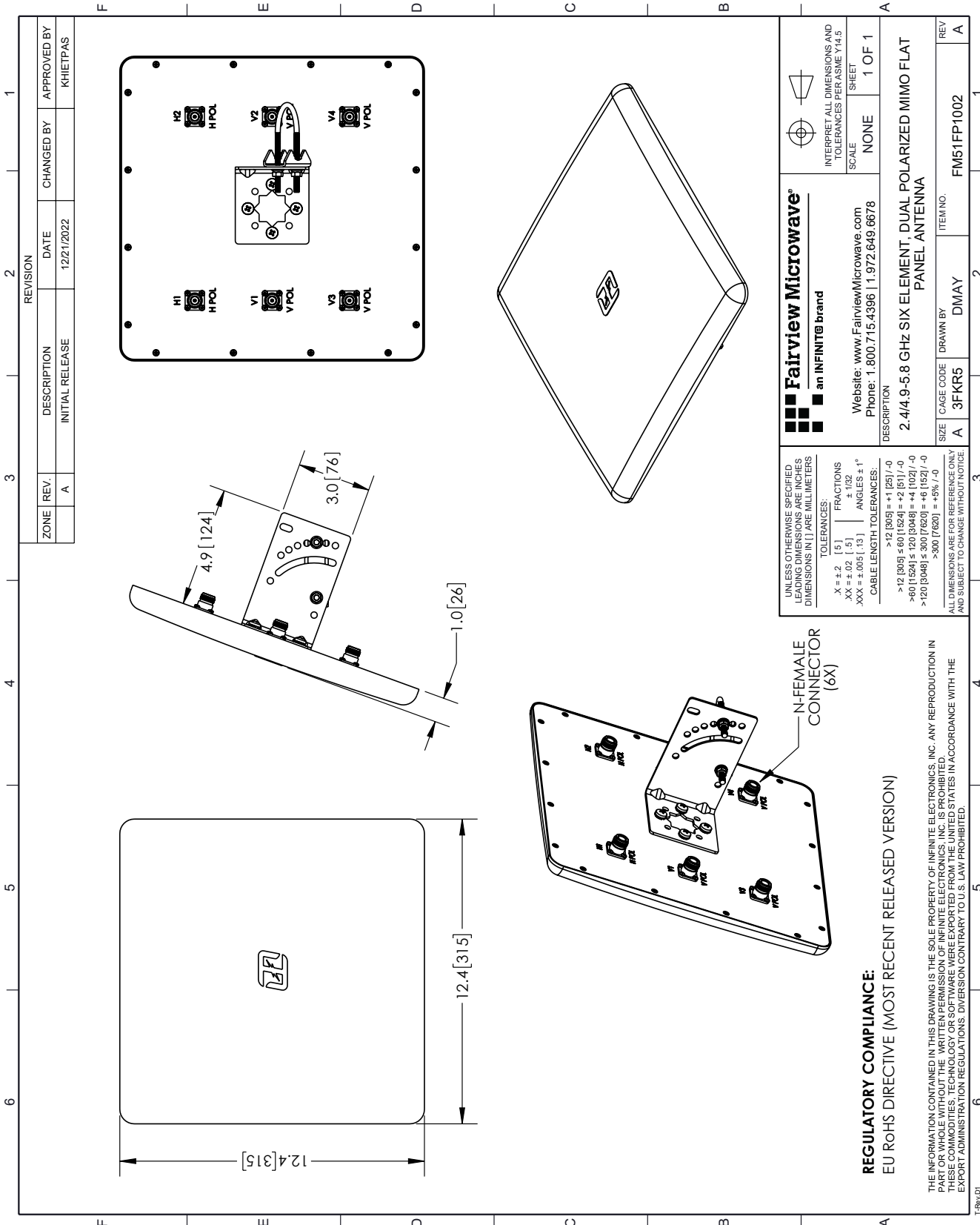
Notes:

2.4/4.9-5.8 GHz Six Element, Dual Polarized MIMO Flat Panel Antenna 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: [2.4/4.9-5.8 GHz Six Element, Dual Polarized MIMO Flat Panel Antenna FM51FP1002](#)

URL: <https://www.fairviewmicrowave.com/multi-antenna-0-dbi-gain-n-fm51fp1002-p.aspx>

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REVISION		APPROVED BY	
ZONE	REV.	DATE	CHANGED BY
	A	12/21/2022	KHETPAS
DESCRIPTION		INITIAL RELEASE	

<p><b>Fairview Microwave</b> an INFINIT<sup>®</sup> brand</p> <p>Website: <a href="http://www.FairviewMicrowave.com">www.FairviewMicrowave.com</a> Phone: 1.800.715.4396   1.972.649.6678</p>	<p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p>
	<p>SCALE: NONE</p> <p>SHEET: 1 OF 1</p>
<p>DESCRIPTION</p> <p>2.4/4.9-5.8 GHZ SIX ELEMENT, DUAL POLARIZED MIMO FLAT PANEL ANTENNA</p>	
<p>SIZE: A</p> <p>CAGE CODE: 3FKR5</p> <p>DRAWN BY: DMAY</p>	<p>ITEM NO.: FM51FP1002</p> <p>REV: A</p>

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES AND DECIMAL DIMENSIONS IN LARGE MILLIMETERS

TOLERANCES:

.X = ±.2 [5]     FRACTIONS ± 1/32  
 .XX = ±.02 [5]     ANGLES ± 1°  
 .XXX = ±.005 [13]

CABLE LENGTH TOLERANCES:

>12 [305] = ±1 [25] / -0  
 >12 [305] ≤ 60 [1524] = +2 [51] / -0  
 >60 [1524] ≤ 120 [3048] = +4 [102] / -0  
 >120 [3048] ≤ 300 [7620] = +6 [152] / -0  
 >300 [7620] = +8% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE.

**REGULATORY COMPLIANCE:**  
EU RoHS Directive (Most Recent Released Version)

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