

FM51RD1002 DATA SHEET

2.4/4.9/5.8 GHz 3 dBi Multi-band Rubber Duck Antenna - RP-SMA Plug Connector

The Fairview Microwave FM51RD1002 series is a high performance tri-band rubberduck antenna designed to operate from 2.4 GHz to 2.5 GHz, 4.9 GHz to 5.3 GHz and 5.7 GHz to 5.8 GHz which eliminates the need to purchase different antennas for each frequency. The tri-band design of this antenna helps reduce interference and noise since it will reject out-of-band signals between the three bands of this antenna. This omnidirectional "rubber-duck" antenna provides broad coverage and 3 dBi gain.

Measuring 7.79" long, this flexible antenna features a tilt-and-swivel connector which allows them to be used vertically, at a right angle, or any angle inbetween. It is suitable as a replacement RF antenna for many wireless access points and routers that are equipped with similar type antennas. The FM51RD1002 features a Reverse Polarity SMA (RP-SMA) Plug connector.

Application Note: This antenna is not for use with U.S.Robotics® RP-SMA equipped devices.

Configuration

Design
Gain
Polarization
Cable Type
Connector Type
Number of Ports

Rubber Duck 3 to 3 dBi Vertical 195 series SMA Plug Reverse Polarity

Electrical Specifications

| Description | Min | Тур | Max | Units |
|-------------|-----|-----|-----|-------|
| Input VSWR | | | 2:1 | |
| Impedance | | 50 | | Ohms |
| Gain | | 3 | | dBi |
| Input Power | | | 50 | Watts |
| | | | | |

Specifications by Frequency

| Description | Band 1 | Band 2 | Band 3 | Band 4 | Band 5 | Units |
|-------------------|---------|----------|------------|--------|--------|---------|
| Range | 2.4-2.5 | 4.9-5.35 | 5.725-5.85 | | | GHz |
| Gain | 3 | 3 | 3 | | | dBi |
| Horiz. Beam Width | 360 | 360 | | | | Degrees |
| Vert. Beam Width | 70 | 70 | | | | Degrees |
| Max Input Power | 50 | | | | | Watts |

ABS

Mechanical Specifications

Radome Material

 Size

 Length
 7.8 in [198.12 mm]

 Width
 0.52 in [13.21 mm]

 Height
 0.52 in [13.21 mm]

 Weight
 0.032 lbs [14.51 g]

Features:

- Three frequency ranges in one antenna
- Flexible rubber duck design
- Tilt and swivel design
- Reverse Polarity SMA (RP-SMA) Plug connector
- Provides better performance than most stock access point antennas

Applications:

- 2.4 GHz, 4.9 GHz and 5.8 GHz band applications
- IEEE 802.11a/b/g/n and 802.11ac WiFi access points and routers
- 4.9 GHz homeland security, public safety services, fire, police and security applications
- 5.8 GHz wireless video and security systems

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Environmental Specifications Temperature

Operating Range -40 to +60 deg C

Environment UL-94HB

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

2.4/4.9/5.8 GHz 3 dBi Multi-band Rubber Duck Antenna - RP-SMA Plug 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: 2.4/4.9/5.8 GHz 3 dBi Multi-band Rubber Duck Antenna - RP-SMA Plug Connector FM51RD1002

URL: https://www.fairviewmicrowave.com/multi-antenna-3-dbi-gain-sma-fm51rd1002-p.aspx

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