

# 1.8 dBi, VHF Rubber Duck Antenna, 142-154 MHz, MOTO Connector, Vertical Polarization

### **FMANRBD1003**

### **Features**

- 142 MHz to 154 MHz, 1.8 dBi Gain
- MOTO connector
- · Heliflex whip antenna
- · Plug and play

### **Applications**

- PtP or PtMP applications
- · Trunking for two-way radio comms
- · VHF applications
- · Public Safety / Emergency services

- · 10W power handling
- VSWR < 3:1</li>
- · Vertical polarization
- · Marine / Rail road communications
- · P-25 applications exclusively supported
- Land mobile radio (LMR)
- · Fixed and mobile services

### **Description**

The FMANRBD1003 rubber duck antenna from Fairview is part of our extensive line of directional antennas that we offer with global same-day shipping from our facilities certified to ISO 9001:2015. Fairview's high-quality single-band rubber duck antenna has a 1.8 dBi nominal gain and can be procured with no order limit. This rubber duck single-band 1.8 dBi antenna has a frequency range of 142 MHz to 154 MHz.

We lead the industry in supplying products like this 142 MHz to 154 MHz single-band antenna, along with other RF, microwave, and millimeter wave components. This rubber duck antenna from Fairview uses a MOTO connector and has a maximum input power of 10 watts. Use our single-band rubber duck antenna with vertical polarization for fixed and mobile services, public safety or emergency services, trunking for two-way radio communications, marine or rail road communications, land mobile radio (LMR), PtP or PtMP, and P-25 applications.

Fairview's rubber duck antenna with 1.8 dBi gain has a MOTO-type connector. This MOTO-series connectorized omnidirectional antenna is 0.5 inches tall, 0.5 inches wide, and 4.33 inches long. The FMANRBD1003 VHF antenna has 360-degrees of horizontal and 90-degrees of vertical HPBW. Our high-quality antenna has a maximum input VSWR (voltage standing wave ratio) of 3:1.

Fairview's 50 Ohms impedance antenna can operate at temperatures ranging from -40 °C to 60 °C. This single-band rubber duck antenna is offered with expert technical support, PDF datasheets, and CAD drawings with dimensions and specifications. Order your 1.8 dBi VHF rubber duck antennas now and enjoy our international or domestic same-day shipping.

### Configuration

Design
Band Type
Radiation Pattern
Polarization
Connector Type

Rubber Duck Single

Omni Directional

Vertical MOTO

### **Electrical Specifications**

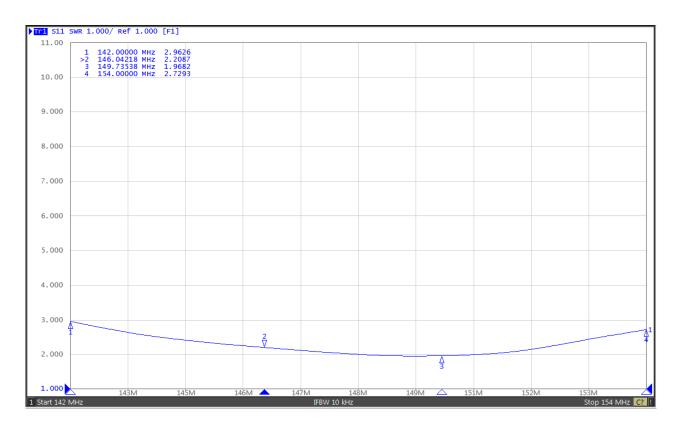
Description	Minimum	Typical	Maximum	Units
Frequency Range	142		152	MHz
Input VSWR			3:1	
Impedance		50		Ohms
Gain		1.8		dBi
Horizontal (Azimuth) HPBW		360		Degrees
Vertical (Elevation) HPBW		90		Degrees
Input Power			10	Watts



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### FMANRBD1003

### VSWR plot:



### **Mechanical Specifications**

Size Length Width Height Weight

4.33 in [109.98 mm] 0.5 in [12.7 mm] 0.5 in [12.7 mm] 1.27 lbs [576.06 g]

### **Environmental Specifications**

**Temperature** Operating Range

-40 to +60 deg C





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### FMANRBD1003

Compliance Certifications (see product page for current document)

**Plotted and Other Data** 

Notes:

**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.

1.8 dBi, VHF Rubber Duck Antenna, 142-154 MHz, MOTO Connector, Vertical Polarization 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: 1.8 dBi, VHF Rubber Duck Antenna, 142-154 MHz, MOTO Connector, Vertical Polarization FMANRBD1003

URL: https://www.fairviewmicrowave.com/1.8-dbi-rubber-duck-antenna-142-152-mhz-invalid-alias-lookup-for-moto-connector-fmanrbd1003-p.aspx

The information contained within 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 impliment 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 liability arising out of the use of any part or document.

# FMANRBD1003 CAD Drawing

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