

MM2 Series

900 MHz 5 Watt Radio



FREEWAVE

Contact us for product details and pricing

NavtechGPS

+1-703-256-8900 or 800-628-0885

info@NavtechGPS.com

www.NavtechGPS.com

KEY FEATURES

Output: 5 Watt RF output power

Improved Low Signal Performance:
RISC based signal demodulation with matched filter

Versatility: A single radio can operate as a Gateway, Endpoint, Repeater, or Endpoint/ Repeater.

Unparalleled Signal Performance:
RF front end with multistage SAW filtering has unmatched combination of overload immunity and sensitivity

Selectable Speeds: 115.2 kbps and 153.6 kbps

Secure: Proprietary Spread Spectrum Technology prevents detection and unauthorized access

Size & Performance: Smallest data radio with the highest performance available

Reliable: 100% tested for performance from -40°C to +85°C

Options: TDMA, Super Epoch TDMA, AES Encryption

OVERVIEW

The MM2-9X5W 900 MHz 5 Watt radio has been designed to provide the performance, reliability, and quality that our customers have come to know and expect. The small form factor MM2-9X5W is ideal for applications where space is a premium.

The small form factor MM2-9X5W has all of the functionality of the MM2 series of radios and larger form factor FGR and FGR2 series of radios including: TDMA, Super Epoch TDMA, and AES encryption.

All radios are designed, manufactured and tested in Boulder, CO.

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TECHNICAL SPECIFICATIONS

TRANSMITTER

Frequency Range	902 to 928 MHz
RF Data Rate	153 kbps and 115 kbps, user-selectable
Output Power	5 W
Data Link Range	90 miles
Modulation	2 level GFSK
Occupied Bandwidth	230 kHz
Hopping Channels	50 to 112, user-selectable
Hopping Bands	7, user-selectable
Hopping Patterns	15 per band, 105 total, user-selectable
Frequency Zones	16 zones
RF Connector	MMCX

RECEIVER

Sensitivity	-108 dBm @ 115.2 for BER 10 ⁻⁴ -103 dBm @ 153.6 kbps BER 10 ⁻⁴
IF Selectivity	20 dB at fc +/- 230 kHz 40 dB at fc +/- 460 kHz
Dynamic Range	+10 dBm 3rd order intercept point at input connector

GENERAL INFORMATION

Operating Temperature	-40°C to +85°C
Humidity	0 to 95%, non-condensing
Dimensions	2.3 L x 2 W x 0.79 H (in)
Weight	34 g

DATA TRANSMISSION

Error Detection	32 bit CRC, retransmit on error
Data Throughput	115.2 kbps and 153.6 kbps
Data Encryption	FHSS technology
Options	AES 128/192/256-bit encryption TDMA Super Epoch TDMA
Data Interface	1200 bps to 230.4 kbps

POWER REQUIREMENTS

Operating Voltage	+5 VDC (4.9 to 5.5VDC) Both voltages are required
+5 VDC Typical Current	Transmit: 590 mA Receive: 160 mA Idle: 90 mA
+12 VDC Typical Current	Transmit: 1410 mA Receive: 0 mA Idle: 0 mA

INFORMATION TO ORDER

Model Number	Description
MM2-9X5W	Board Level, 5W
MM2-9X5W-CC	Conformal Coated MM2-9X5W



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