

## RV-M7-V

## M7 VHF Band 5 Watt Data Radio Modem

The M7 VHF data transceiver is a rugged 5 Watt VHF data radio modem with an RS-232 or optional 422/485 serial interface, perfect for SCADA and telemetry applications. Additional options include IP65 ("weatherproof") enclosure and GPS.



## Product Overview

### Long-Range Operation

Operating in the VHF 136-174MHz frequency bands, the RV-M7 radio modem works over 60 miles point-to-point and many miles with omnidirectional antennas. All RV-M7 modems support store-and-forward repeating for wide-area coverage.

### Fast Polling

The M7 transceiver has a 5mS PLL in it, making it one of the fastest telemetry radios available, especially well suited for polled, DNP and MODBUS applications. Its can send up to 50 transmissions per second.

### High Speed and High Efficiency

The RV-M7 operates with user-selectable over-the air data rates of 800 to 19200bps. Faster rates for higher efficiency or lower-speed for increased communication range.

### GPS Option

The optional internal GPS allows the RV-M7 to be a powerful Automatic Vehicle Locating (AVL) system or Time Space Position Information (TSPI) reporting device.

### Fully Programmable

It is configured with a serial connection using industry-standard AT commands. Parameters such as network IDs, unit ID and transmission rate are easily configured. Raveon also provides a PC program called "[Radio Manager](#)" that makes configuring the M7 a snap.

### Digital Base Band

Data rate, modulation, and IF bandwidth are all digitally programmed. Wide (25kHz) and Narrow (12.5kHz) IF bandwidths may be user-configured. The over-the-air data rate may be adjusted to suit a particular application.

### Real-time diagnostics and statistics

Channel performance, RSSI, RF power, packet counters, and radio configuration are easily accessed via the serial port or remotely over-the-air.

### Very Low Power Consumption

The advanced VHF transceiver is integrated with a powerful 32-bit microprocessor-based modem in one easy-to mount package. It has very low power consumption, and sleep modes that allow it to be active and consume almost no power at all.

### Rugged and Weatherproof

The RV-M7 is available with optional IP65-rated "weatherproof" connections and enclosure. All models include protection against damage from over-temperature, high VSWR, and reverse voltage.

### Flexible Addressing and Error Correction

The RV-M7 uses a 16 bit address with a 16 bit network mask, allowing for many devices to be co-located without receiving each other, as well as the creation of sophisticated network topologies.

### For More Information

For more information about this or any other Raveon product, call in the U.S.A. 1-760-457-1620 or visit us at [www.raveon.com](http://www.raveon.com).

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