



Multi-Speed Data Transceiver IQ Modem RM 2212



Integrated RF - Transceiver

Micro-multiport controller

Integrated GPS - option

Multispeed: 4.8kb, 9.6kb, 19.2kb, 22kb

Speeds up to 48kb capable

Modes: mmp 30, 31, RM, serial interface, IP

Built-in GPS receiver (as option)

VHF, UHF, 700, 800 900 MHz

Industry competitive performance

Variable power; options up to 35 Watt UHF
and 800 Mhz - 50 Watt up to 110 Watt VHF



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The IQ Modem 2212 Transceiver is the central component of RM mobile private or conventional data system.

It consists of a modem which Modulators and De-Modulates signals to and from the RF basic transceiver. Modem packetizes the data for transmission as well as provides special "digital signal processing" DSP to improve the ability of the transmitted signal to overcome noise and fading common to the mobile environment. It also contains a Micro Controller which allows multiple communication ports for GPS if requested, computer terminals or other data collection devices.

The modem can be programmed for a range of over-the-air data speeds of 4.8kb to 22kb and higher. For wide band systems, 22kb is typically preferred and 12kb for narrow band systems. The interface to the modem is serial.

Features

- Wide input voltage range 9-20vdc
- Current drain 150ma idle and 8A transmit at 12v
- Integrated serial ports for GPS, other
- One package, less cables, ease of installation
- SW configurable from host; or auto boot, standalone mode
- Modem operational diagnostic built into MDT cable connector
- FCC type accepted
- ISO 9001, built
- Large installed base
- Extremely reliable
- Best performance: 12 to -116dbm depending on speed
- FEC - modified Reed-Solomon
- CRC included in formatted data
- Radio modulation - frequency modulation, 25khz, 12.5khz
- Audio modulation schemes:

2400-4800 Nyquist filter bipolar NFB modified Reed-Solomon - Single bursts of 56 bits correctable

9600 - 2 level pulse amplitude modulation, PAM, with spectral precoding

19.2-22khz - 4 level FSK interleaved modified Reed-Solomon - Single bursts of 96 bits correctable

Address capacity:

4800-bps; 4096

9600-bps; 1,048,576

Dynamic group ID; 6 maximum + all call ID of zeroes and all ones

Sensitivity:

4800bps - 99% @ -114dbm

9600bps - 99% @ -112dbm

19.2-22khz - 99% @ -108dbm

Mobile Data Hardware Solutions



- Competitive pricing
- Public/private network compatibility
- Ruggedized design for in-vehicle use

Mobile Data Software Solutions



- CAD and mobile software
- Customized layouts and interfaces
- Network efficiency independent