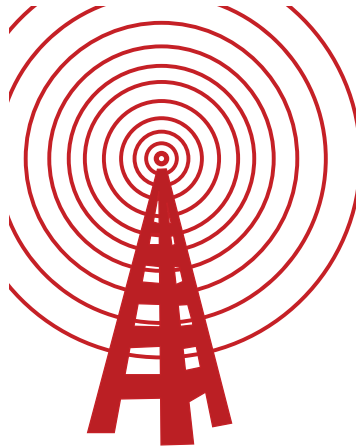


Liberator High Speed Modem



Networking

RadioMobile's Liberator Modem, the next generation of our flagship IQ Modem, is a truly automatic and efficient high-speed networking module providing the data link between a mobile terminal and its control center.

Included as part of our integrated radio transceiver, the Liberator allows end-users to automatically switch between 4800bps, 9600bps, 19.2kbps, and 22kbps on their conventional network while taking advantage of Advanced Forward Error Correction, which increases throughput and ensures data integrity to the intended recipient.

The Liberator Modem is a DSP-based, programmable, intelligent RF modem. With no resident end-user application present, the host MDT application handles all network control functions. This allows programmers greater control and latitude in optimizing the communication process.

With its serial or USB connection, the Liberator looks like any other wireless network device to the end user mobile application.

Features:

- VHF, UHF, 700MHz, 800MHz, and 900MHz
- TCP/IP interface
- 25W – 110W depending on band
- Necessary control signals to the radio for transmit key, channel change, etc.
- DSMA-controlled channel contention
- Flash software configured to intelligent terminal
- Self-calibration and report generation at the host with compatible third party software or RadioMobile's IQ Mobile software
- RadioMobile's patented Automatic Deviation Compensation (ADC) technology

Specifications

- Wide Input Voltage Range of 9-20vdc
- Current drain 150ma at 12v
- Integrated serial ports for GPS, other
- One package, fewer cables, ease of installation
- SW configurable from Host or Auto boot Stand-alone mode
- Modem operational diagnostic built-in to MDT cable connector
- MPT 1327, Map 27
- FCC type accepted
- ISO 9001 built
- Large installed base – proven extremely reliable
- Best performance -112 to -116dbm depending on speed
- FEC – Modified Reed Solomon
- CRC included in formatted data
- Modes: Native, MMP 30, 31, RM, Serial Interface, IP-Capable

- Radio Modulation: Frequency Modulation, 25khz, 12.5khz

Audio Modulation schemes

- 2400 – 4800 Nyquist Filtered Bipolar NFB Modified Reed-Solomon – Single bursts of 56 bits correctable.
- 9600 – 2 level Pulse Amplitude Modulation (PAM) with Spectral Precoding.
- 19.2k –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 zeros and all ones

Sensitivity

- 4800bps – 99% @ -116dbm
- 9600 bps – 99% @ -114dbm
- 19.2-22khz – 99% @ -112dbm
- Static conditions