SRM6030

LONG-RANGE 900 MHz FHSS SERIAL RADIO MODEM



DATA-LINC GROUP

Data-Linc's SRM6030 is a serial radio modem that offers superior reliability, versatility and performance for wireless serial data communications. This latest version offers improved hardware with a faster processor, while maintaining Data-Linc's commitment to backward compatibility with its corresponding legacy versions, such as the acclaimed SRM6000 and its variations.

Like its predecessors, the SRM6030 Serial radio module employs Smart Spectrum[™] FHSS (Frequency Hopping Spread Spectrum) technology in the 900MHz ISM frequency band for robust communications. This allow customers to implement a proprietary wireless network in high RFI/EMI noisy environments, including areas with existing wireless infrastructure, bringing the benefit of exceptional data integrity.

The SRM6030 is software configurable and has a secondary DB9 serial port for independent access to configuration and diagnostics software. For customer convenience and first-line diagnostics, the front panel includes LED status lights that provide direct access to critical information.

As with all members of the SRM Family of licensefree SmartSpectrumTM Radio Modems, the SRM6030 supports both point-to-point and point-to-multipoint network topologies with virtually unlimited number of radios. Each radio can be individually configured as Master, Remote, Repeater and Remote/Repeater, through the included Config-LincTM Software.

The SRM6030 not only provides superior security through AES 256 encryption but also offers a long distance range of 25 miles (40Km) with omni antennas and line-of-sight, farther with Repeaters and/ or high gain antennas.

FEATURES

- 900MHz ISM band, license-free ISM
- Range of up to 25 miles (40Km)*
- Smart Spectrum[™] Technology for maximum data integrity, even in noisy environments
- RS232/485 data port
- AES 256 encryption
- Additional RS232 DB9 port for configuration and diagnostics
- Operates as Master, Remote, Repeater and Remote/Repeater
- User adjustable hop patterns and frequency zones for refined operation of close proximity networks
- Replaces any serial SRM modem
- Supports LincView[™] network diangostics software(included)
- Factory custom-configured for easy installation
- Din rail mount clip (optional)

* with omni antennas and line-of-sight, farther with Repeaters and/or high gain antennas

Applications

- PLCs located on moving machines like stackers, reclaimers, overhead cranes or any other mobile equipment
- SCADA systems for several different industries, such as water/wastewater, power and oil & gas
- Off-shore & underground communications
- Networks on high RFI/EMI environments
- Telemetry

SRM6030 DIMENSIONS

License-free, 900 MHz serial radio modem

Included

CD Config-Linc[™] configuration software Test antenna Power supply User Guide

Transmitter

Rated Range 25+ miles (40+ km), LOS (line-of-sight) with omni directional antennas*
Output Power 1 Watt maximum, 10 programmable steps up to 1 Watt /+30 dBm
Modulation Spread Spectrum, GFSK
Spreading Code Frequency Hopping
Hop Patterns 15 (user selectable)
Occupied Bandwidth 230 KHz

Receiver

 Sensitivity -108 dBm @ 115.2 Kbps for BER10⁴; -103 dBm @ 153.6 Kbps for BER10⁴
 Selectivity 40 dB @ fc ±230 KHz; 60 dB @ fc ±460 KHz
 System Gain 138 dB

RF Data Transmission

Data Throughput 1200 Baud - 115.2 Kbaud Error Detection 32-Bit CRC Data Encryption AES 256-bit

Interface

RS-232/RS-485 Data ports RS-232 Separate diagnostic/configuration port

Antenna

Standard thread SMA female Supplied bench test antenna Nominal Impedance 50 Ω

Power

Input Voltage 10-28 VDC; wall mount 12 VDC /115-230 VAC power supply included Transmit Current 650 mA @ 12 VDC (8 Watts) Receive Current 100 mA @ 12 VDC (1.2 Watts)

Operating Modes

Master, Remote, Repeater, Repeater/Remote

Configuration Software

Config-Linc software included

Diagnostics

RS232 DB9 LincView™ diagnositcs for RF network monitoring
Front panel LEDs Power, RF Carrier, RF Out, RF In,

LAN (Link-Act), Mode LEDs x 4

Operating Environment

Temperature -40° to 167° F (-40° to 75° C) **Humidity** 0 to 95% non-condensing humidity

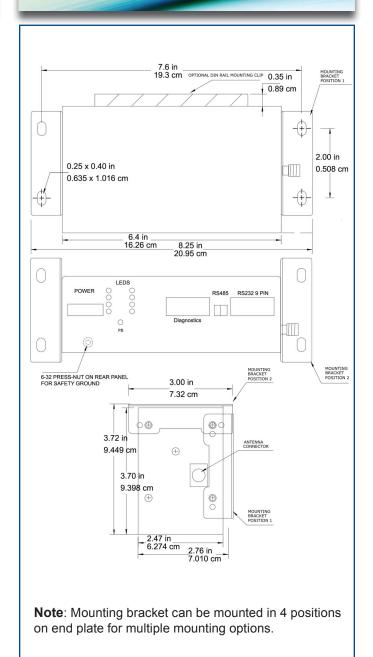
Enclosure

Standard 18 gauge steel

2.47 X 3.70 X 6.4 in. (6.274 X 9.398 X 16.26 cm) Included Optional DIN rail mounting flanges (3) Weight 1.8 lbs (.82kg)

* farther with Repeaters and/or high gain antennas

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