

SRM6320

HYBRID ETHERNET-SERIAL MODEM— 2.4 GHz ISM BAND

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Data-Linc Group's SRM6320 wireless Ethernet-serial modem replaces the SRM6310E and provides users an advanced, state-of-the-art blending of Data-Linc's successful SRM6100 serial and SRM6310E Ethernet modems. The SRM6320 offers Ethernet to serial, EtherNet/IP to DF1 and modbus TCP/IP to modbus RTU connectivity for hybrid integration of serial and Ethernet devices. Only one modem is required for this integration which reduces cost and increases efficiency. The accompanying, *SetLinc*[™] software makes SRM6320 configuration easy and intuitive.

The SRM6320 meets or exceeds the prior technology. Its updated features and cutting-edge auxiliary microprocessor add a broad range of enhanced, user-friendly features and capabilities. The SRM6320's backward compatibility with the SRM6300E and SRM6310E Ethernet modems allows it to be used as a replacement. It can be used as a serial tunnel Master with SRM6100 modems with series 3.xx radio firmware.

Modem setup and configuration have been simplified by Data-Linc's proprietary *SetLinc* software. Configuration via the Ethernet or the serial port (RS232) provides versatility. To further simplify installation and increase user confidence, the SRM6320 is "ping-able." Radio network communication can be readily determined by pinging the Master or the Remote— an invaluable troubleshooting feature for determining if the communication link is functioning.

Additional advantages of the SRM6320 include Ethernet bridging, selectable MAC (Media Access Control) address filtering and dual Ethernet/CAT5 connectors for straight or crossover cables. The radio network forms an Ethernet bridge between Master radio Ethernet devices and one or more Remote radio Ethernet devices. RF network performance is improved by a switchable MAC Filter in each radio

SRM6320 FEATURES

- **Hybrid wireless modem— Ethernet with serial tunneling (DF1, Modbus RTU etc.)**
- **EtherNet/IP to DF1 bridging**
- **Modbus TCP/IP to modbus RTU bridging**
- **Legacy 2.4 GHz SRM compatibility— single, "spare" backup**
- **Field firmware upgradable**
- **Web or *SetLinc*[™] software configurable via Ethernet or serial links**
- **Serial port—RS232**
- **Pingable — user assignable IP address**
- **Compatible with *LincView*[™] OPC RF network diagnostic software**

that learns MAC addresses of Ethernet devices connected to its wired side and only forwards packets across the RF link of devices not on the wired side.

Like the prior SRM Family 2.4 GHz modems, the 10+ miles (16 km)* range offers superior reliability and performance in the license-free band. The SRM6320 utilizes the same high performance, ultra-reliable Smart Spectrum[™] technology that ensures exceptional data integrity— even in high noise environments. It continues the SRM Family tradition of allowing each modem to be configured for Master, Remote, Repeater or Repeater/Remote mode. The SRM6320's compact design with optional DIN rail clip, allows easy mounting. The front panel power and data connectors give the user immediate connectivity and front-located LED status lights provide direct visual access to critical diagnostic information.

* Greater range in optimal conditions with clear line-of-sight, Repeaters and/or higher gain antennas.

SRM6320 SPECIFICATIONS

License-free 2.4 GHz Wireless Hybrid Modem Frequency Hopping Spread Spectrum

Included

CD. *SetLinc™* configuration software, *LincView™* OPC RF network management software, User Manual, Quick start guide.

Antenna. Test antenna

Cable. CAT5 (7')

Power. Wall mount supply 115 VAC input. 12 VDC output

Operating Modes

Point-to-point and multipoint mode

Master, Repeater, Remote or Repeater/Remote

Interfaces

Ethernet.

One 10baseT (UTP)— straight and crossover CAT5s

Serial data port.

Serial-Linc RS232/RS485 screw terminal

Serial data tunneling via UDP or TCP/IP

Diagnostics port.

RS232

Operational ranges

System gain. 134 dB

Distance. 10 miles (16 km) with omni antennas (with line-of-sight)

Transmitter

RF Output Power. 500 mW maximum, (10 programmable steps)

Modulation. Frequency Hopping Spread Spectrum, GFSK

RF Data Rate. 144Kbps - 188 Kbps

Hop Patterns. 15 (user selectable)

Occupied Bandwidth. 230KHz

Error Correction. 32 bit CRC

RF Encryption. Substitution Dynamic Key

Receiver

Sensitivity. -107 dBm @ 10^{-4} raw BER

Selectivity. 40 dB @ $fc \pm 230$ KHz and 60dB @ $fc \pm 460$ KHz

Maximum data throughput. 115Kbps point-to-point mode assuming 75% frequency availability

Antenna Interface

Standard. SMA connector

Optional. External omni directional or yagi

FCC power limit. 4 Watts EIRP (36dB) max at antenna

Impedance. 50 Ohms

Configuration

SetLinc™ software or web browser

DC Power Requirements

8 Watts transmit peak

2 Watts receiving

10 to 28 VDC via screw terminal

Diagnostics

Front panel LEDs. Power, RF Link, RF Out, RF In, LAN Link, LAN Activity, Mode setup enabled status

LincView™ OPC. Diagnostic software for real-time RF network monitoring; via Ethernet (UDP) or serial Diagnostic port

Operating Environment

Temperature. -40 to 167 F (-40 to 75 C)

Humidity. 0 to 95% non-condensing

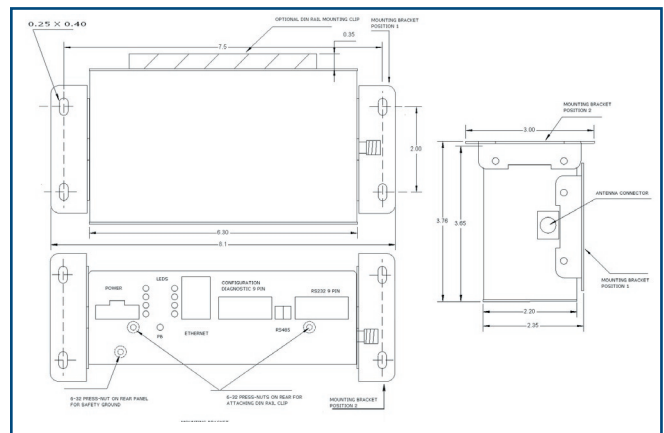
Enclosure

Standard. NEMA 1, 18 gauge steel; 2.35 X 3.75 X 8.1 in. (6 X 9.5 X 20.6 cm) using mounting brackets

Optional. 2.35 X 3.76 X 6.3 in. (6 X 9.5 X 16 cm) using DIN rail mounting

Weight. 1.8 lb (0.82 kg)

SRM6320 DIMENSIONS



INCLUDED SOFTWARE



Data-Linc's proprietary *SetLinc™* software, that is included with the SRM6220/6320 modems, simplifies modem setup and configuration—executed via the Ethernet or the serial port (RS232).

Data-Linc Group's *LincView™* OPC Software provides an optional RF network diagnostics management tool



for any of the wireless stand-alone modems in the SRM Family. *LincView* OPC offers complete system network monitoring and maintenance from your Master location. Key parameters at a remote location can be monitored or changed with a few simple keystrokes. This allows technicians to track the actual data path to the Master, view every SRM network link in miles or kilometers and monitor key parameters such as signal or noise level, voltage and much more. *LincView* OPC even provides visual trend analysis of packet errors, supply voltage levels and radio temperature.

ALLIANCE PARTNERS



Collaborative Automation



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