DATA COMM FOR BUSINESS

# SSE-R Serial Data Encrypter

DESCRIPTION

The SSE-R is an industrial rated serial data encryption device featuring two serial ports; Com1 is clear text, Com2 is the encrypted data link. The SSE-R uses AES 256-bit encryption, 128-bit block size. AES is the US Government standard. The SSE-R is designed for use in serial applications where normal block encryption devices may not work. A fixed key design and self-synchronizing cipher eliminates the need for negotiation between the SSE devices and allows for use over unidirectional connections.

The SSE-R provides an encrypted link between host and remote user sites. The two RS232 serial ports operate at asynchronous speeds as low as 300 bps and as high as 57.6 Kbps. The SSE-R serial interfaces can be configured as RS232, or RS422/RS485 4-wire.

The SSE-R may be used point-to-point, linking two separate remote sites with radios, leased lines or dial connections, one port used for the connection, the other port for the user equipment. The SSE-R can also be used on point-to-multipoint links, such as SCADA polling applications. The SSR-R can be used in unidirectional broadcast applications, both point-to-point or point-to-multipoint. The SSE-R is especially attractive for use over multipoint radios where data privacy is desired.

The SSE-R is straight-forward, easy to configure and maintain. Units may be configured via a serial port, or using the Ethernet port, via telnet or a web browser. The SSE-R is feature rich but simple to set up and operate.

The SSE-R supports 7 or 8 bit user data. The link between the SSE-R devices must be 8-data bit, i.e. 8 data bits, no parity, start and stop bit.
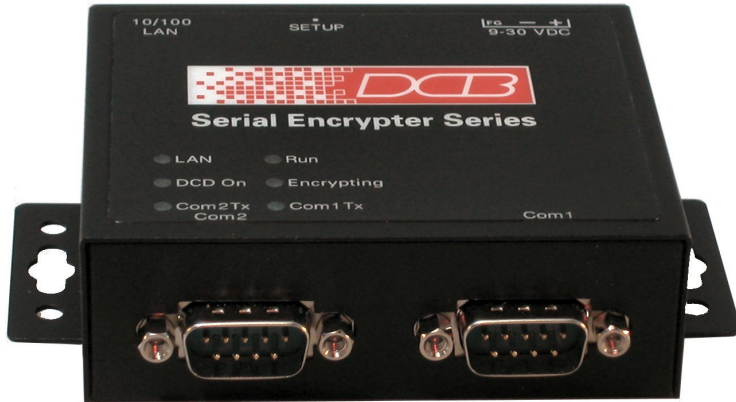
FEATURES

- AES 128, 192, or 256 bit encryption
- NIST-CFB8
- Industrial rated temperature from -40 to +75 C
- Two asynchronous serial ports
- RS232 or RS422/RS485 4-wire
- RoHS compliant
- Ports speeds to 56.7 Kbps
- Point-to-point and point-to-multipoint
- Use for streaming or polling data
- Easy to setup and maintain
- Configuration via serial or ethernet port
- Use with modems, DSUs, radios
- Compact size; stand-alone or rack mounting
- AC and DC power supply
- User name and password option for config access
- ROHS

Need a Special Option?
Custom Defaults?
Unique Application?
OEM Version?

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SPECIFICATIONS

General
- Two asynchronous serial ports: configurable for RS232, RS422/RS485 4-wire
- DE-9P (PC-9 pin) connectors, DTE interface
- Speeds to 57.6 Kbps, full or half duplex
- Can be configured via RS232 serial port
- Ethernet port for telnet or web browser management
- Delivered with RS232 9-pin to 9-pin adapters and cable for setup or connection to PCs or other devices with 9-pin DTE interfaces

Protocol Features
- 128, 192 or 256 bit AES encryption
- 8-bit Cipher Feedback Mode for non-error corrected links
- Fixed key operation, ANSI X9.31 psuedo random number generator
- Non-proprietary algorithm: Single SSE can be terminated by any AES-CFB8 application meeting NIST guidelines

Indicators
LAN status, DCD, Run/Power, Encrypting, Tx Data on Com 1 & 2

Controls
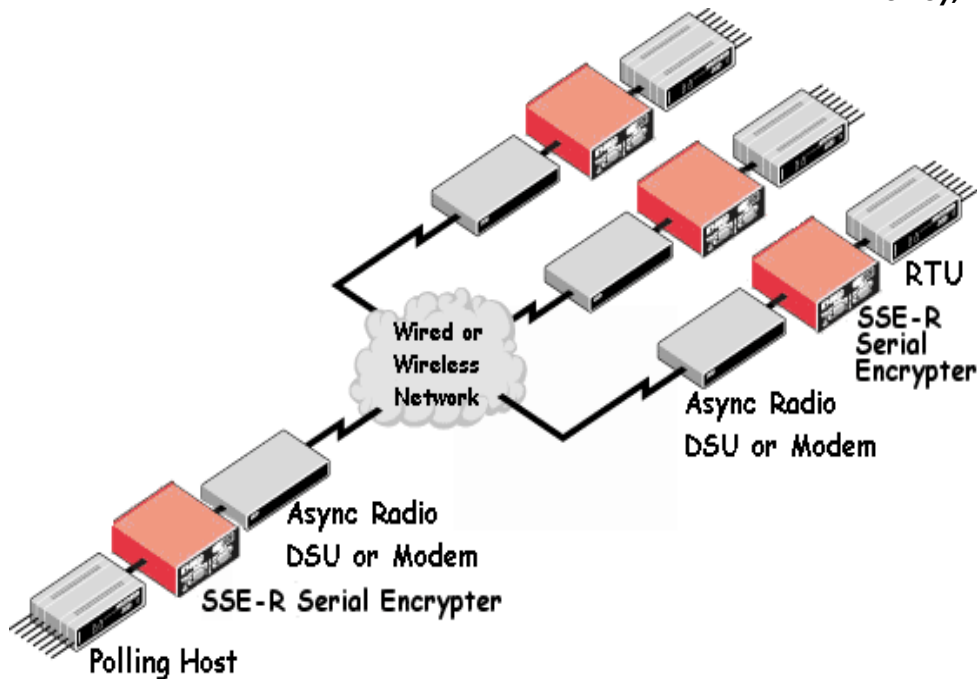Switch to invoke serial port setup

APPLICATION

- Power Requirements: 9 to 30 VDC (2 watts)
- 48. 125 VDC and 240 VAC options are available
- Supplied with 120 VAC to 9 VDC external power supply
- Dimensions: 4 1/4" x 3" x 1"
- 7.5 oz.
- DIN rail mounting clip available
- ROHS

Environmental
Operational Temperature: - 40 to +75 C, 95% non-condensing humidity

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Physical/Electrical