

# SIMREX Corporation

## SIMCRYPT

# SECURE wireless DATA



### FEATURES

- 128/256 Bit AES Encryption
- Block or Streaming Modes of Encryption
- Bypass (clear) mode for non intrusive upgrade of live systems.
- Only draws 42mA @ 13.6VDC
- 9 -30 VDC Input voltage.
- Seamless (gapless) operation for sensitive protocols such as MODBUS
- Password protected user interface
- Compatible with SIMREX, MDS, DataRadio and other transparent radios with RS232 interface
- Can accept power from auxillary pin on radio data connector or use seperate power supply

### Applications

- Add encryption to existing live systems
- Oil, Gas , Electric and other critical utilities
- Solar powered SCADA systems
- Homeland security applications

### Specifications

- **Encryption**  
AES standard 128/256 bit key (selectable)  
Clear or Block mode (selectable)
- **Power**  
42mA @ 13.6VDC  
9 - 30 VDC power

### SIMREX..Global wireless solutions. Secure Wireless Data

For almost 2 decades, SIMREX Corporation's wireless, GPS products have been providing wireless networking solutions with applications in SCADA, telemetry, telecommunications, mobile data and online transaction markets. SIMREX Corporation now provides affordable data encryption solutions for critical wireless networks worldwide.

### Product Overview

SIMREX Corporation has created the SIMCRYPT data encryption solution to allow state of the art encryption capability to be added as an upgrade to any legacy wireless or wireline systems that uses RS232 asynchronous interface. The SIMCRYPT uses the latest AES 128/256 bit encryption standard. The SIMCRYPT is completely transparent to the data and is ideal for protocols such as MODBUS that do not tolerate gaps in the data. The SIMCRYPT has features that allow the upgrade of a live system by installing SIMCRYPT units that are in clear (bypass) mode. When all nodes are upgraded to SIMCRYPT, a cutover command is issued from the master and from that point on, all data is encrypted. The live system does not suffer any down time for the encryption upgrade or cutover.

### Why Consider SIMCRYPT?

- **Cost effective.** A low cost alternative to replacing unencrypted radios with new units that include encryption.
- **Bypass mode.** Allows upgrade of live systems without any down time for cutover.
- **High data speed.** Supports most SCADA applications.
- **Seamless.** Supports intercharacter gap sensitive protocols such as MODBUS.
- **Low latency.** Less than 25 ms end to end latency due to the Encryption.

- **Ports**  
(2) RS232 ports for clear and encrypted data  
(1) RS232 port for configuration
- **Latency**  
Less than 25 ms at data rates of 9600 bps and higher.

- **Operating Modes**  
Encrypted and Bypass (clear)  
Master or Remote  
Point to Point, Point to Multipoint  
Full or Half Duplex
- **Size**  
4.4W x 4.0L x 2.2H (in)  
(11.2W x 10.2L x 5.6H (cm))

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