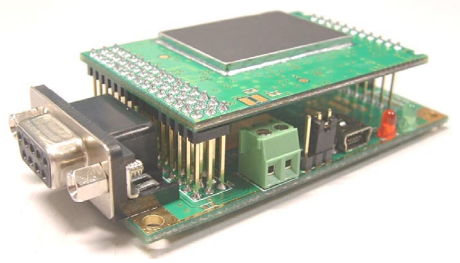
D'CRYPT
Personalizing Your Security



SCADA Encryptor

D'Crypt's SCADA Encryptor is a *protocol transparent* RS232 Serial Link Encryptor. It is used to secure the communication links in a SCADA network. The SCADA Encryptor employs D'Crypt's FIPS 140-2 Level 3 certified cryptographic core. The encryptor is designed to operate in harsh environments and can support a range of different RTU protocols.

Technical Specifications*

Configuration
- Processor – ARM-based processing core
- Main Memory – 2MB Flash ROM and 80KB SRAM

Electrical
- Power source – 5-24VDC, 150mA max.
  - In-line power for seamless integration
  - Screw-terminal for harnessing
- Cryptographic keys backed up by integrated battery
  - Battery life of 7 years.

Ports
- Separate EIA561 Plaintext and Ciphertext Interfaces
  - Programmable baud rate (440bps to 460.8Kbps)
  - Supports different frame format (5-8 data bits, 1-2 stop bit and odd/even/none parity)
  - Configurable for single-ended and differential signaling
- LED Status indicator
  - LEDs for operation, transmission, and reception
- Audio Interface
  - Optional buzzer for sounding alarm
- Configuration and Key Loading Interface
  - 3-wire TTL-serial port operating at 115.2Kbps

Operation Mode
- Point-to-point configuration
  - Secure communication between uniquely paired SCADA encryptors
- Multi-drop configuration
  - Master Encryptor establishes keys and communicates securely with Serial Link Encryptor.

Security
- Secure micro O/S
- BiST (Built-in Self-Test)
- 256-bit factory-programmed un-erasable Factory ID
- 32-character one-time programmable Serial Number
- UTC clock
- Tamper Resistant and Evident construction
- Active Tamper Sense and Response capability
- Cryptographic core certified to FIPS 140-2 Level 3 (Certificate No. 637)

Cryptography
- Multiple Cryptographic Algorithms supported
  - DES, 3DES, AES, RSA, SHA-1, HMAC, PRNG
- All cryptographic algorithms are FIPS-approved
- CRYPTO OFFICER and multiple user roles
- Identity-based challenge-response authentication
- Key Management
  - Comprehensive key-management framework customizable through key profiles
  - APIs reference keys through opaque handles
  - Key generation using FIPS-approved RNG

Environment
- Operating temperature: +0°C to +60°C
- Storage temperature: 0°C to +80°C
- Humidity: maximum 85% non-condensing
- Supports weather and environment hardening to specific requirements

EMI/EMC
- Meets CISPR11 Class A and FCC Part 15C for radiated emission
- Meets IEC61000-4-3, Class A for radiated immunity
- Meets IEC61000-4-3, Class B for electrostatic discharge
- Tested by independent testing authority
  - Reports available on request

Physical Specifications
- Module Size: 100×60×25 mm (TBC)
- Can support multiple units in 19" rack-mounted chassis

** Specifications subjected to change without notice*

Another quality product by:
D'Crypt Pte Ltd
20 Ayer Rajah Crescent, #08-08 Singapore 139964
DID: +65 6773 9016 FAX: +65 6873 0796
URL: http://www.d-crypt.com Email: marketing@d-crypt.com