SEL-3025

Serial Shield®

Authenticate and encrypt all serial data communications to protect critical assets

- Strong cryptography secures serial and dial-up devices.
- Up to 57,600 bps link speed protects engineering access and SCADA communications.
- Centralized remote management allows you to securely monitor and change configurations from any location.
- Bump-in-the-wire architecture makes the SEL-3025 Serial Shield easy to integrate into your system.

Key Features

The SEL-3025 is a bump-in-the-wire EIA-232 cryptographic transceiver that provides centralized management, dial-up access controls, and easy integration. You can protect meters, protective relays, programmable logic controllers (PLCs), remote terminal units (RTUs), and computers from unauthorized access and control, eavesdropping, and malicious attacks by authenticating and encrypting all serial data communications.

The SEL-3025 uses powerful AES-128/-256 and SHA-1 256-bit key strengths to encrypt and authenticate serial and dial-up links at speeds up to 57,600 bps. This encryption provides confidentiality and integrity for remote monitoring and interactive remote access and locks out malicious intruders from your critical assets. With its remote management functionality and wide range of application support, the SEL-3025 is flexible and easy to use.

FIPS 140-2 Level 2-Compliant Secure Serial Protocols

The SEL-3025 comes with one of the following cryptographic cards preinstalled. Each card supports a separate secure protocol at speeds up to 57,000 bps.

- SEL-3045 Secure SCADA Card—Protect engineering access links with the Secure SCADA Communications Protocol (SSCP). See historical FIPS certificate #1488.
- SEL-3044 SEL Encryption Card—Protect SCADA and other links that demand low latency with the Streaming Encryption Protocol (SEP). See historical FIPS certificate #1564.

Easily Integrate the SEL-3025 Into Existing Systems

Ensure minimal equipment replacement or settings changes with the bump-in-the-wire architecture.

Centralized Remote Management

Securely manage the SEL-3025 remotely from any location with ACSELERATOR QuickSet® SEL-5030 Software. You can use any web browser with HTTPS to change configurations on the device through the Ethernet management port or can manage remote units through the secured serial link.

Secure Dial-Up Engineering Access

Transform normal serial PC communications to cryptographically secure serial PC communications using the SEL-3025 with the PC Serial Security Kit. Simply plug the USB card dock into your PC and install the virtual port software to use a secured serial port with existing software and terminal applications.

Wide Network Topology and Protocol Support

Use the SEL-3025 in a wide variety of serial architectures, including point-to-point, point-to-multipoint, and many-to-many. The SEL-3025 supports all byte-oriented and most bit-oriented serial protocols.

Centralized Logging

Track actual and attempted access to the SEL-3025. The device logs and stores up to 2,048 events locally and can send unlimited logs to multiple remote locations using the Syslog protocol.

SEL Complete Dial-Up Security Solution

PC Serial Security Kit

Securely communicate with remote devices protected by the SEL-3025. You can transform normal serial PC communications to cryptographically secure serial PC communications with the compact, self-powered SEL-3055 USB Card Dock, an SEL-3045 Secure SCADA Card, and SEL-5025 Secure Port Service Software. True dual-factor authentication using a unique cryptographic identity and password is possible with the PC Serial Security Kit, a remote SEL-3025, and a remote SEL-3620 Ethernet Security Gateway.

Add security to your existing serial and dial-up links. The USB card dock and virtual port software provide a secured serial port for your existing software and terminal applications. This is an ideal solution for engineering workstations using dial-up access.

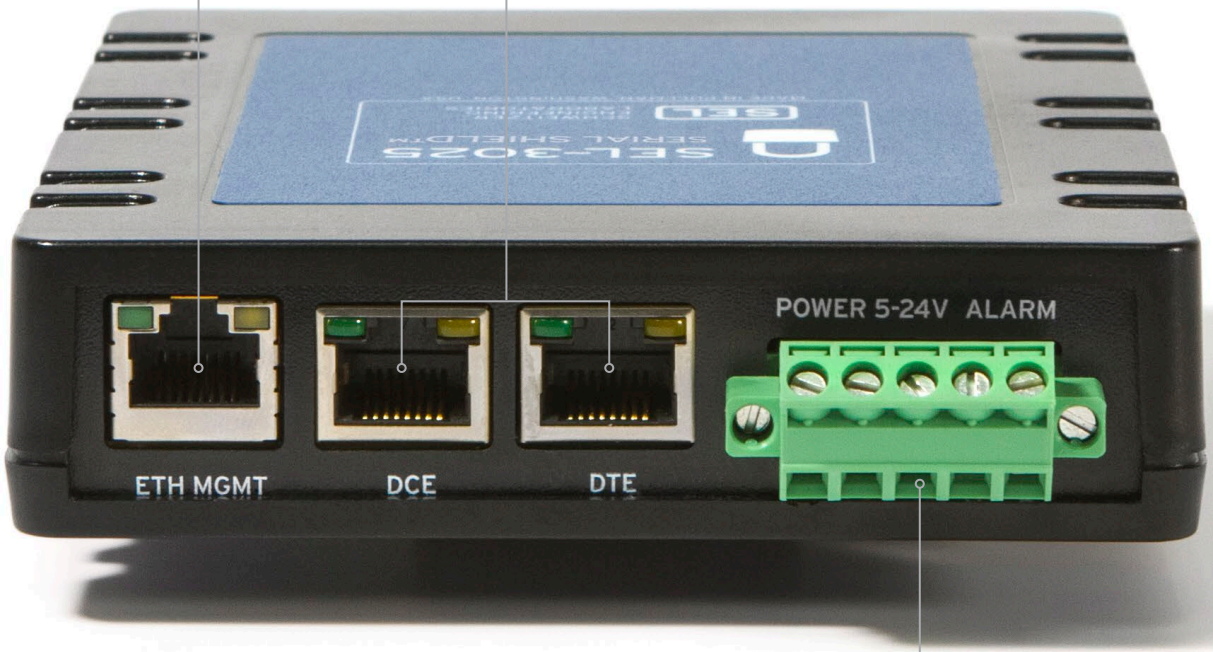
SEL-9192 Modem

The SEL-9192 is a 56 kbps dial-up modem built to withstand the extremely harsh conditions in a utility environment. You can connect RTUs, communications processors, and other equipment for dial-up or dial-out engineering access or data acquisition through the DB-9 serial or USB-B ports. The SEL-9192 receives power via the optional power supply or the USB-B or DB-9 ports. Configuration is simple with the extended AT command set.

Product Overview

RJ45 Ethernet management port enables easy management and troubleshooting from any web browser.

Two EIA-232 distributed computing environment (DCE)/data terminal equipment (DTE) ports provide strong bump-in-the-wire cryptography.

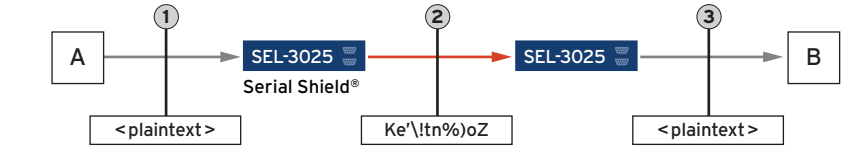


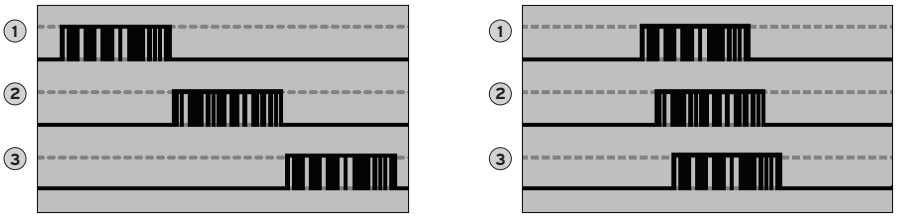
5—24 V compression terminal and alarm contact output.

Applications

Engineering Access and SCADA Links

The SEL-3025 supports SEP or SSCP for protecting serial communications with strong cryptography. SSCP is best for person-to-machine communications, such as engineering access links. SEP is best for protecting machine-to-machine communications, such as SCADA links.

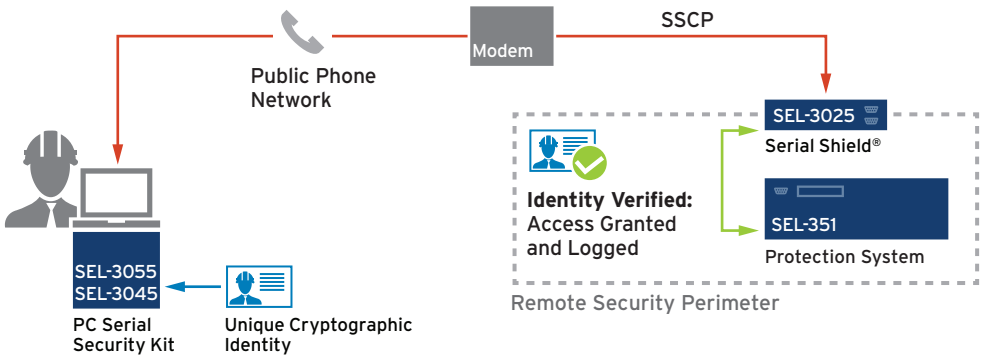




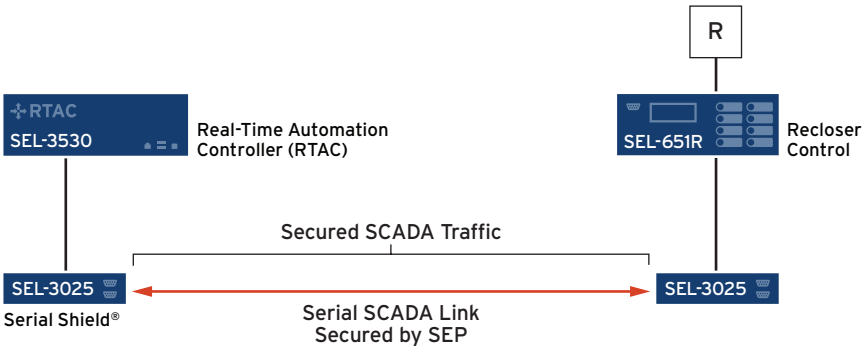
SSCP is a full-holdback protocol that authenticates every message and optionally encrypts.

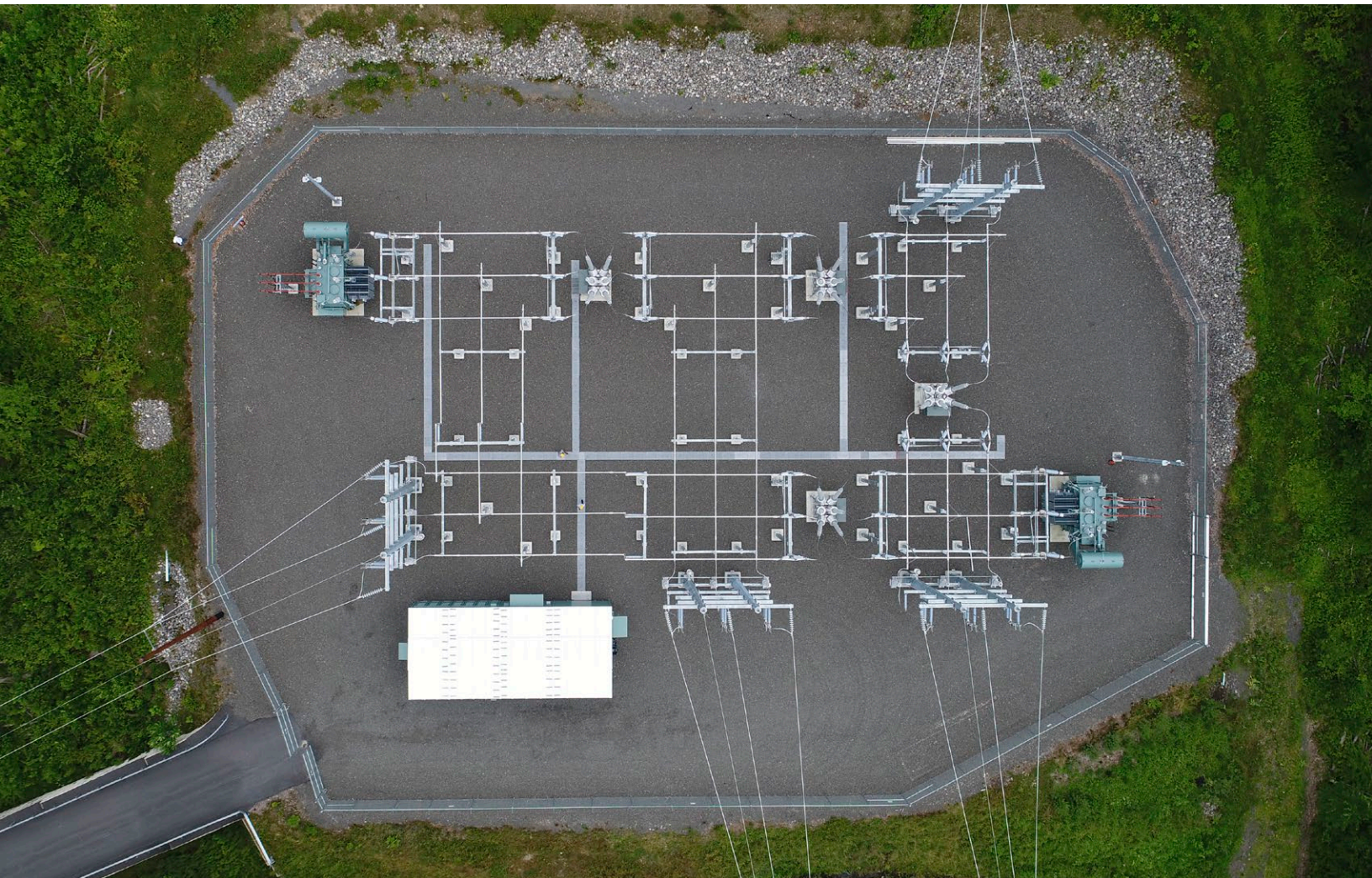
SEP is a low-latency protocol that authenticates the session and encrypts the data.

Secure dial-up engineering access with the SEL-3025 and the PC Serial Security Kit. Field engineers can use an SEL-3045 Card and SEL-3055 USB Card Dock to verify their unique cryptographic identity. It's easy to use—just plug in the security kit and connect.



Secure machine-to-machine connections with SEP, and easily manage remote SEL-3025 Serial Shields over Ethernet or serial links. SEP supports a variety of bit- and byte-based protocols, including DNP3, Modbus® RTU, IEC 60870, Conitel, and more.





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