

OSI's **ISIS™** (Inline-Serial-Information-Shield) is a complete hardware based serial security solution within OSI's Security Shield suite of products. **ISIS** secures and encrypts all serial-based communications to protect against system intrusion, in compliance with evolving NERC, FERC, NIST and other security standards for critical control systems used by the electric utility, gas utility, transportation, chemical processing and other industries.

ISIS can be installed into any existing serial-based communications infrastructure to seamlessly encrypt data transmissions with minimal impact on communications performance. **ISIS** fully supports all major serial-based communications protocols and end devices used in critical control systems. **ISIS** also provides a solution for legacy bit-oriented protocols. Single and multi-drop configurations are supported at rates ranging from 300 to 115.2k baud.

ISIS provides user-configurable 128-bit and 256-bit encryption, using the Advanced Encryption Standard (AES), a standard adopted by the U.S. government. **ISIS** also supports symmetric key encryption algorithms, compliant with the NIST Federal Information Processing Standards (FIPS), 140-2 Security Level 2.

In accordance with NERC CIP requirements, **ISIS** timestamps and stores all log messages in nonvolatile memory.

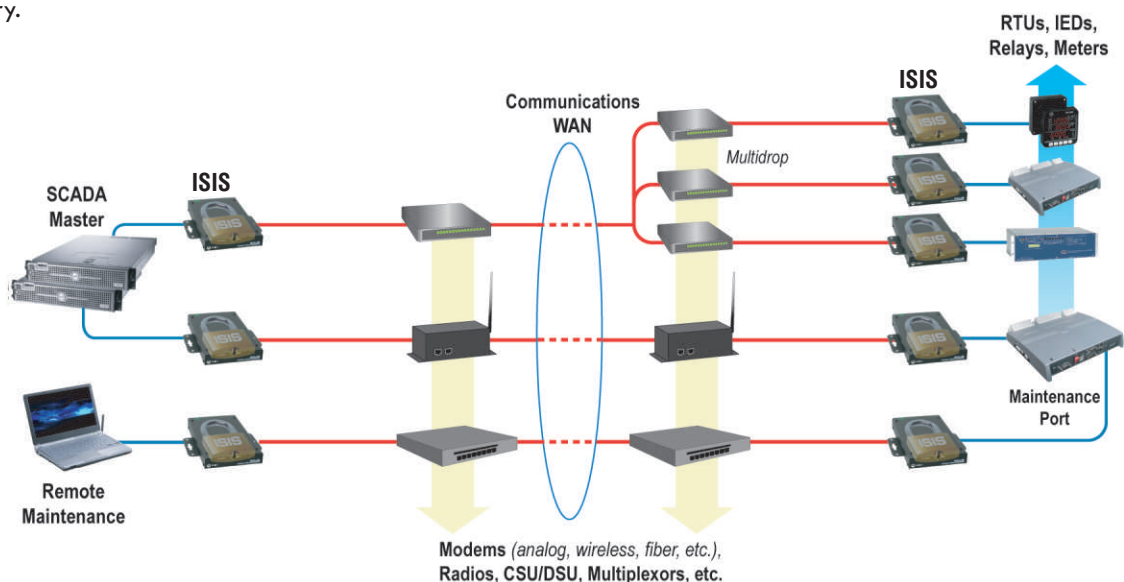
Some stored event and security log types include:

- Privilege Escalation Attempts
- Privilege Drops
- Configuration Changes
- Rebooting
- Password Changes
- New Encryption Key Changes

Options

Deployments of **ISIS** can be managed and monitored from a central station, discarding the time and cost intensive requirement for additional communications pathways or the dispatching of staff to remote locations. Features associated with this option include the ability for remote **ISIS** logs to be sent to and consolidated at the master control unit, as well as the ability for encryption keys and password changes to be centrally managed through a single communication channel via protocol traffic.

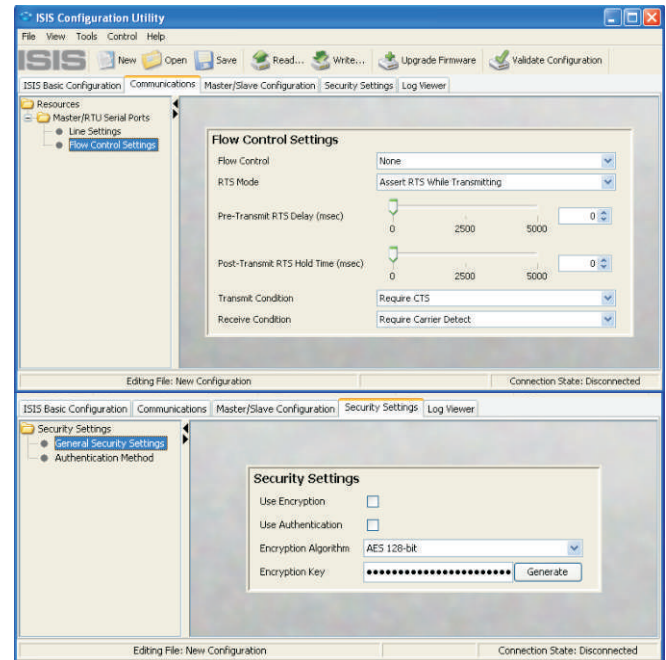
ISIS also has several advanced security features designed to assist in maintaining best-practice cyber security policies, including the ability to enforce periodic password changes, the ability for users to manually set and change encryption keys and the ability for **ISIS** to dynamically change keys for enhanced security. **ISIS** units may also be configured to recognize other **ISIS** units based on permission credentials; thus rejecting communication attempts from unauthorized **ISIS** devices.



Coming Soon

ISIS units will be able to integrate with other OSI Security Shield products for advanced functionality, including the Independent System Monitor product, **OSI Sentinel™**. ISIS will be able to send heartbeat status and security alarm information to the **OSI Sentinel**. Additional upcoming features include; integrated data compression technology, centralized upgrade enhancements as well as more advanced authentication functions. Please contact OSI to discuss all available **ISIS** configuration options.

OSI's **ISIS** units are available in our standalone **SOLUS™** Universal Serial Controller chassis, or deployed as a team in our multi-card, 19" Rack-Mount configuration.



SOLUS Specifications

- Ports: (2) RS232 Serial Ports
- Height: 1.15 inches (29.2 mm)
- Width: 7.2 inches (182.5 mm) with mounting flanges
- Depth: 9 inches (228 mm)
- Operating Temperature Rating: -40 to 80 degrees C (-40 to 176 degrees F)
- Voltage Range: 9 to 36 VDC
- Maximum Power: 3W

Rack Mount Specifications

- **ISIS Card Capacity:** (16) Slot Chassis
- Height: 5.25 inches (133 mm)
- Width: 19 inches (482 mm)
- Depth: 8.625 inches (222 mm)
- Operating Temperature Rating: 0 to 70 degrees C (32 to 158 degrees F)
- Voltage Range: 100-240VAC, 47-63Hz
- *Redundant Power Supply option available.
- Maximum Power: 40W



Product specifications in this document are subject to change without notice.