

## Key Features

- Full duplex speeds up to 2.4 Gbps
- First commercially available OC48 SONET encryptor
- Configurable as a path or line encryptor
- Employs federally endorsed, highly secure AES algorithm
- Fully supports both SONET and SDH architectures
- OC3/STM1, OC12/STM4, and OC48/STM16 interface options
- Management through the SafeEnterprise Security Management Center using SNMPv3
- Designed to international security standards

Common Criteria EAL4\*  
FIPS PUB 140-2 Level 3\*

\* In evaluation

# SafeEnterprise SONET Encryptor

SafeEnterprise SONET Encryptor for OC3, OC12, and OC48 Networks



The SafeEnterprise™ SONET Encryptor is a high performance, purpose-built integrated security solution designed to secure SONET and SDH networks at speeds up to 2.4 Gbps. The SafeEnterprise SONET Encryptor has been designed to integrate transparently and easily into the SONET/SDH network architecture. High-speed throughput and extremely low latency make it ideal for high-speed data and time-sensitive voice and video applications.

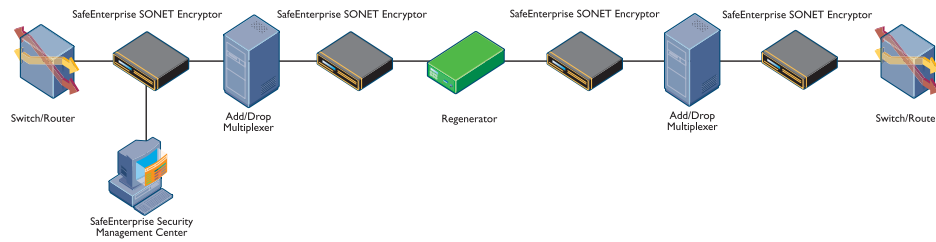
Users value a single solution that provides scalable performance and seamless end-to-end integration to deliver improved network operations and performance without compromising security. The SafeEnterprise SONET Encryptor is the perfect solution. It employs the highly secure, federally endorsed AES algorithm, with the flexibility to be integrated into OC3/STM1 (155 Mbps), OC12/STM4 (622 Mbps), and OC48/STM16 (2.4 Gbps) SONET networks.

The SafeEnterprise SONET Encryptor can be centrally managed across multiple remote stations using SafeNet's SafeEnterprise Security Management Center (SMC), which uses SNMPv3, the first secure version of SNMP. SMC management is available via an Ethernet port or on the SONET network.

Both path and line SONET encryption are supported at various rates and at distances up to 40 kilometers. The OC12 encryptor supports OC12 line, STS-12c path, STS-3c paths, and STS-1 paths. The OC48 encryptor supports OC48 line, STS-48c path and STS-12c paths. For added security, each encrypted circuit uses an independent encryption key pair. In addition, section, line, and path overhead bytes can be selectively encrypted, zeroised, regenerated, or bypassed.

Status operation of the appliance is visibly apparent through LEDs and a two-line, 20-character LCD display. LEDs indicate the status of the local interface, the network interface, power, temperature, battery status, system operation, secure status, and interface transmission and reception.

The SafeEnterprise SONET Encryptor offers superior, industry-standard physical security. It offers tamper-proof storage of encryption keys and user passwords, and has tamper-evident, extruded/sheet metal construction. The encryptor has RJ-45 10/100 Ethernet and RS-232 serial management ports, and duplex LC fiber-optic network connectors.



The SafeEnterprise SONET Encryptor comes in a compact single Rack Unit high chassis (41mm), with both AC and DC power supply options. Coupled with the flexibility provided by short form factor pluggable (SFP) transceivers (2km, 15km, 40km), the SONET Encryptor integrates seamlessly into all customer networks. In addition, the SafeEnterprise SONET Encryptor meets regulatory standards, including FCC Part 15 Class B, UL, TUV, and CE.

SafeNet offers distinct levels of support based on the type of support you require. The SafeEnterprise SONET Encryptor has a one-year (12 month) standard, basic warranty. Extended support and maintenance contracts are available. Support is also offered online through our customer support Web site, Express Service Center, and Customer Connection Center.

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Distributors and resellers  
 located worldwide.

## Technical Specifications

### Cryptography

- AES algorithm – 256-bit key
- Counter mode
- Automatic crypto resynchronization in less than 10ms

### Key Management

- ATM Forum Security Specification v1.1 Key Exchange
- RSA public key
- Master/session keys
- Automatic session key update

### Performance

- Constant non-cumulative delay of less than 10µs
- Full-duplex operation at all line speeds

### Audit

- Event log
- Alarms
- Interface status
- Audit log
- Date and time of secure connection
- Configuration changes

### Environmental

- 5° to 40° C operating temperature
- -10° to 60° C non-operating temperature
- 0 to 80% RH @ 40° C operating humidity
- 95% RH @ 40° C non-operating humidity

### Electrical

- 90VAC to 250VAC, 110W maximum, 47-63Hz
- -48VDC, 40W maximum

### Mechanical

- Height – 41mm (1RU)
- Width – 435mm (19" rack mountable)
- Depth – 285mm
- Weight – 4.5kg