

Key Features

10 Gbps operation is ideal for high-performance, time-sensitive networks

Full duplex wirespeed throughput

Extremely low latency

No additional network overhead

First commercially available OC192 SONET encryptor

Configurable as a path or line encryptor Employs federally endorsed, highly secure AES algorithm

Fully supports both SONET and SDH architectures

Flexible XFP OC192 interface

10km, 40km, and 80km options

Highly reliable redundant DC power supplies

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 OC192 Networks



The SafeEnterprise™ SONET Encryptor is a high performance, purpose-built integrated security solution designed to secure 10 Gbps SONET/SDH networks. It has been designed to integrate easily and transparently into the SONET/SDH network architecture. Wirespeed throughput and extremely low latency make it ideal for high-speed data and time-sensitive video and voice applications.

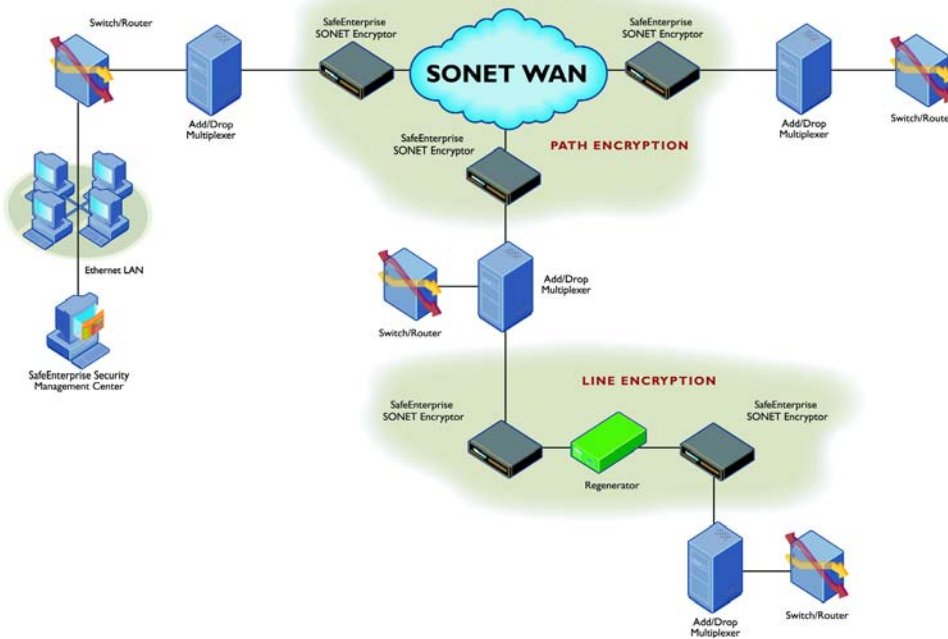
Users value a single solution that provides scalable performance and seamless end-to-end integration to deliver improved network operations and performance without compromising security. The SafeEnterprise SONET Encryptor is the solution. It employs the highly secure, federally endorsed AES algorithm, with the flexibility to be integrated into any OC192/STM64 (10 Gbps) SONET network.

The 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 a 10/100 Ethernet port or on the SONET network.

Both path and line SONET encryption are supported at rates up to 10 Gbps and at distances up to 80 kilometers. The encryptor supports OC192 line and STS-192c paths, with independent keys used in each direction. 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 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. It 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 three Rack Unit (3RU) high chassis (130mm) with redundant -48VDC power supplies. Coupled with the flexibility provided by pluggable XFP (10 Gbps small form factor pluggable) transceivers (10km, 40km, and 80km), the SONET Encryptor integrates seamlessly into all customer networks. In addition, the SafeEnterprise SONET Encryptor meets all regulatory standards, including FCC Part 15 Class A, UL, TUV, and CE.

SafeNet offers distinct levels of support tailored to meet our customers' individual requirements. The SONET Encryptor has a one-year (12 month) standard warranty with three levels of extended support. Maintenance contracts are also available. Support is available online through our customer support Web site, Express Service Center, and Customer Connection Center.

Corporate: 4690 Millennium Drive, Belcamp, Maryland 21017 USA
 Tel: +1 410.931.7500 or 800.533.3958 email: info@safenet-inc.com

www.safenet-inc.com

Brazil +55 11 4208 7700
 Canada +1 613.723.5077
 China +86 10 885 19191
 Finland +358 20 500 7800
 France +33 1 41 43 29 00
 Germany +49 18 03 72 46 26 9
 Hong Kong +852.3157.7111
 India +91 11 26917538

Japan +81 45 640 5733
 Korea +82 31 705 8212
 Mexico +52 55 5575 1441
 Netherlands +31 73 658 1900
 Singapore +65 6297 6196
 Taiwan +886 2 27353736
 UK +44 1276 608 000
 U.S. (Massachusetts)
 +1 978.539.4800

U.S. (Minnesota)
 +1 952.890.6850
 U.S. (New Jersey)
 +1 201.333.3400
 U.S. (Virginia) +1 703.279.4500
 U.S. (Irvine, California)
 +1 949.450.7300
 U.S. (San Jose, California)
 +1 408.452.7651

U.S. (Torrance, California)
 +1 310.533.8100

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

Circuits

- Supports path and line encryption
- Each encrypted circuit uses an independent encryption key pair
- Section, line, and path overhead bytes can be selectively encrypted, zeroised, regenerated, or passed through unchanged
- APS (K1, K2) compatible

Performance

- Constant non-cumulative delay of less than 10 µs
- Full-duplex operation at OC192 line speeds

Audit

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

SMC Management

- SNMPv3
- Ethernet 10/100 RJ-45

Network Interfaces

- OC192/STM 64
- Single-mode fiber – 10km (1310nm)
- Single-mode fiber – 40km (1550nm)
- Single-mode fiber – 80km (1550nm)*
- Duplex LC connectors
- 3R interfaces (re-amplify, re-shape, re-time)

Accreditations

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

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

- -48VDC
- 40 Watts maximum

Mechanical

- Height – 5.1 inches, 130mm (3RU)
- Width – 17 inches, 432mm (19" rack mountable)
- Depth – 14 inches, 356mm (includes handles)
- Weight – 21 lbs., 9.5kg

* In evaluation