



> Datacryptor[®] SONET/SDH

KEY BENEFITS

- > Strongest cryptography available commercially (AES-256)
- > Delivers SONET/SDH path and line encrypted throughput up to OC-192
- > Minimum latency
- > Fully automated key management
- > Multiple interface options and transmission ranges
- > Transparent to SONET/SDH switches and regenerators
- > FIPS 140-2 and Common Criteria

Datacryptor SONET/SDH is a family of high-speed, high-bandwidth, stand-alone security platforms that deliver full duplex Line and Path encryption at speeds up to 10 Gbps. The encryptors, available in OC-3c/STM-1, OC-12c/STM-4, OC-48c/STM-16, and OC-192c/STM-64 models, answer the market's need for high-speed point-to-point link security over Synchronous Optical Networks (SONET) and Synchronous Digital Hierarchy (SDH) backbone circuits, protecting the confidentiality of sensitive and high-value data, voice, and video.



>> Datacryptor® SONET/SDH

Technical Specifications

Maximum Data Transfer Rate

- > 155 Mbps (OC-3/STM-1) full duplex with 16 sec latency
- > 622 Mbps (OC-12/STM-4) full duplex with 8 sec latency
- > 2.488 Gbps (OC-48/STM-16) full duplex with 2 sec latency
- > 9.953 Gbps (OC-192/STM-64) full duplex with 1.8 sec latency

Encryption Algorithm

AES FIPS 197 with 256-bit key length

Key Management

- > Signed Diffie-Hellman key agreement protocol
- > DSA with 1,024-bit key and 160-bit signature (FIPS 186), SHA-1 (FIPS 180)
- > X.509 v1 and v3 certificates
- > Hardware random number generation
- > Automatic time triggered key change without interruption of connections

Device Management

- > Thales' Element Manager (EM) secured with AES
- > Front Panel Viewer (FPV) Graphical User Interface
- > X.509v1 and v3 digital certificate support
- > PPP protocol (9-pin D serial) or IP (10/100BaseT RJ45 Ethernet)
- > In-band and out-of-band management
- > Secure download of software updates
- > SNMP v1, v2c, and v3 network monitoring
- > Thales' Certificate Manager (CM)

Connection Interfaces

OC-3/STM-1, OC-12/STM-4, OC-48/STM-16 platforms

- > Removable multi-range and DWDM optical (SFP) duplex LC host and network ports
- > Serial V.24 and Ethernet management ports

OC-192/STM-64 platform

- > Removable multi-range and DWDM optical (XFP) duplex LC host and network ports
- > Serial V.24 and Ethernet management ports

Flexibility

- > Line and Path encryption
- > Transparent handling of SONET/SDH overhead and pass through of network clocks
- > AC and DC redundant power options
- > Secure auditing

Synchronization

Automatic, continuous (10 ms)

Physical Security

Tamper-resistant metal casing

Safety and Security Certifications

- > Designed to FIPS 140-2 Level 3 and Common Criteria EAL 3
- > FCC Part 15 Class B, UL, CE

Power

OC-3/STM-1, OC-12/STM-4, OC-48/STM-16 platforms

- > Dual-redundant AC (universal) or DC (-48v), 120 Watt, 410 BTU

OC-192/STM-64 platform

- > Dual-redundant AC (universal) or DC (-48v), 140 Watt, 480 BTU

Temperature

- > Operating 5°C to 40°C (40°F to 100°F)
- > Storage -10°C to 60°C (15°F to 140°F)

Relative Humidity

10% to 90% at 25°C (77°F) non-condensing, falling to 50% maximum at 40°C (100°F)

Barometric Pressure

780 to 1100 mBar

Physical Specifications

OC-3/STM-1, OC-12/STM-4, OC-48/STM-16 platforms

- > 19 in, 1RU housing
- > Height: 4.40 cm (1.70 in)
- > Width: 43.00 cm (16.93 in)
- > Depth: 37.00 cm (14.60 in)
- > Weight: 8.50 Kg (18.75 lb)

OC-192/STM-64 platform

- > 19 in, 2RU housing
- > Height: 8.80 cm (3.50 in)
- > Width: 43.00 cm (16.93 in)
- > Depth: 38.50 cm (15.20 in)
- > Weight: 9.75 Kg (21.50 lb)

Thales - Security Solutions & Services

