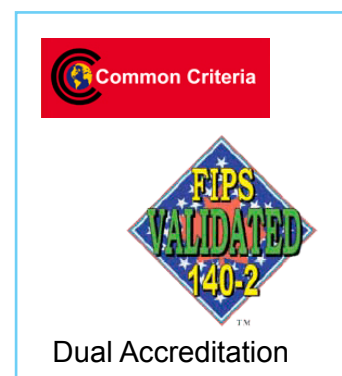


CN3000 SONET/SDH Encryptor

The Senetas CN3000 SONET/SDH encryptor is a high performance encryption platform that provides maximum security within modern telecommunications networks. The system is configured for operation at a speed of 9.952Gbps (OC-192), and supports both Line and Path modes topologies.

Key Features

- Full duplex line-rate encryption at 9.952Gbps
- Accredited to Common Criteria EAL4+ security level
- Accredited to FIPS 140-2 level 3 security requirements
- Bump in the wire design for easy installation
- Supports Line and Path connections
- Provides standards based certificates and key management
- Uses the secure AES 256 bit encryption algorithm
- Counter mode encryption with synchronisation
- Hands-off automated key management
- Trust model based on X.509 certificate authentication
- Centralised CypherManager configuration and management system
- Tamper resistant and tamper evident enclosure
- Network connections via pluggable XFP interfaces



Overview

The CN3000 provides users with flexible encryption that addresses the needs of the largest enterprises that have a requirement to secure sensitive information traversing the network. The system can be used to secure both path and Line connections.

The unit operates in full-duplex mode at full line speed without loss of frames. SONET frame size is fixed but varies based on line speed.

Network and Management

CypherManager, Senetas' element manager can be used to configure and manage the CN3000 within the network. Management connections are via an RJ45 on the front panel, and in addition a Command Line Interface connection is available via a DB9 RS232 serial connector. The local (protected) and network (unprotected) connections are made via XFP optical interfaces.

Supported Networks

SONET OC-192
SDH STM-64
Line mode
Path mode
2-40km Range

Order codes:

CN3000-SONET-OC192 9.952 Gbps



Specifications

Cryptography

AES encryption algorithm
256 bit session and master keys
Counter mode encryption

Key Management

ATM Forum V1.1 specification
X.509 certificate authentication
RSA Public key Infrastructure
Periodic automatic key updates
Master and Session keys

Performance

Auto-negotiation of line speed
Speed of up to 9.952Gbps
Latency of 20 Microseconds max

Management

CypherManager element manager
IPv4 and IPv6 management support
Automatic encryptor discovery
SNMPv3 control, SNMPv1 monitoring
Out-of-band and Inband management
Alarm, Event, and Audit logs
SNMP traps and monitoring
RS232 local console (CLI)

Accreditation

FIPS 140-2 level 3
Common Criteria EAL4+

Front Panel

LED's for interface, security, temperature, alarms, power.
20 char LCD display
Keypad (0-9, and data entry/edit)
RJ45 and DB9 Management connectors

Rear Panel

XFP optical connector cages
IEC13 Power socket

Installation

482mm (19") wide
42mm (3U) high
380mm deep
9 Kg weight (12Kg shipping)
0° to 40°C operating temperature
0 to 80% RH at 40°C operating
95% RH at 40°C non-operating

Physical Security

Tamper proof Key and Password storage
Tamper resistant metal case
Anti probing barriers

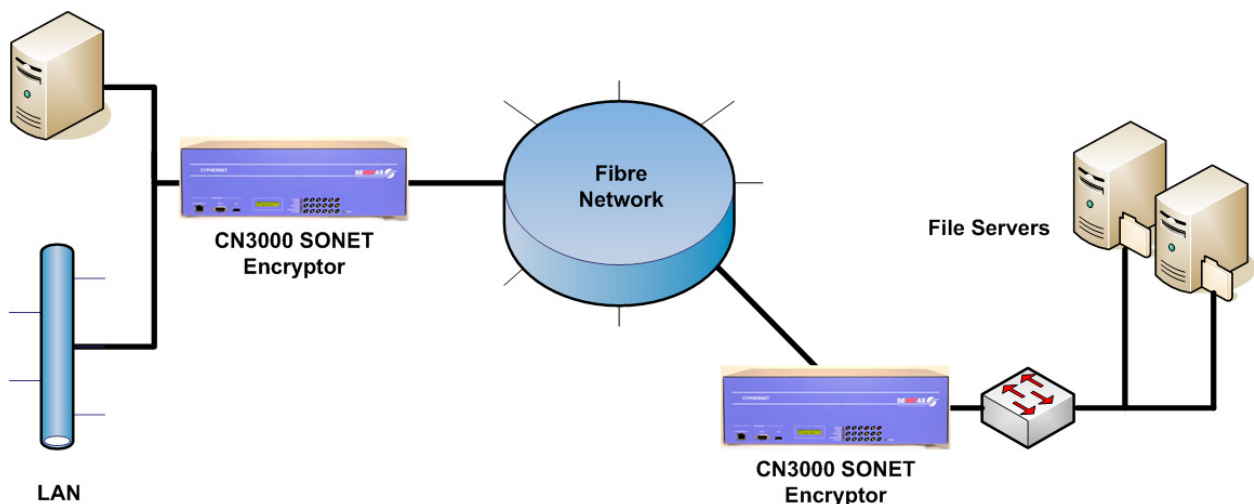
Power Requirements

90-240 VAC
47-63 Hertz
200 watts

Regulatory

Emissions - FCC Part 15 Class B
RoHS compliant
Other - CE and N3912

All specifications are accurate as of the time of printing and are subject to change to meet the ongoing requirements of Senetas and its customers.



SONET Ring Configuration