



Senetas CN3000 SONET/SDH encryptors are high performance encryption platforms that provide maximum security within modern telecommunications networks. The system is configured for operation at a speed of 9.9522Gbps (OC-192), and supports both Line and Path mode topologies.

Key Features

- Full duplex line-rate encryption at 9.952Gbps
- Certified to Common Criteria EAL4+ security level
- Certified to FIPS 140-2 level 3 security requirements
- Bump in the wire design for easy installation
- Supports Line and Path connections
- Independent multiplexed path encryption
- Uses the secure AES 256 bit encryption algorithm
- Counter mode encryption with synchronisation
- Hands-off automated key management
- Standards based trust model using X.509 certificate authentication
- Centralised CypherManager configuration and management system

- Tamper resistant and tamper evident enclosure
- Network connections via pluggable XFP interfaces
- Dual redundant hot swappable AC or DC power supplies

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 on the front panel or inband across the network interface, and in addition a Command Line Interface connection is available via a 9-pin D-Sub 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

Specifications

Cryptography

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

Key Management

Automatic connection establishment
X.509 certificate authentication
RSA Public key Infrastructure
Periodic automatic key updates
Master and Session keys

Performance

Speed: 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)

Certification

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 Ethernet port for management
9-pin D-Sub RS232 port for serial console

Rear Panel

XFP optical connector cages
IEC C14 power inlets for dual redundant AC power supplies
Screw terminals for dual redundant DC power supplies

Installation

Size: 482mm (19"), 133mm (3U), 380mm (WxHxD)
Weight: 9kg
0o to 40°C operating temperature
0 to 80% RH at 40°C operating

Shipping/Storage

Size: 570mm, 240mm, 480mm, (WxHxD)
Weight: 12kg
Max temperature: 40°C, 95% RH at 40°C

Physical Security

Tamper proof key and user password storage
Tamper resistant/evident metal case
Anti probing barriers

Power Requirements

90–240 VAC / 47–63 Hertz
105 Watts

Safety

EN 60950-1 (CE)
AS/NZS 60950.1
(UL approval pending)

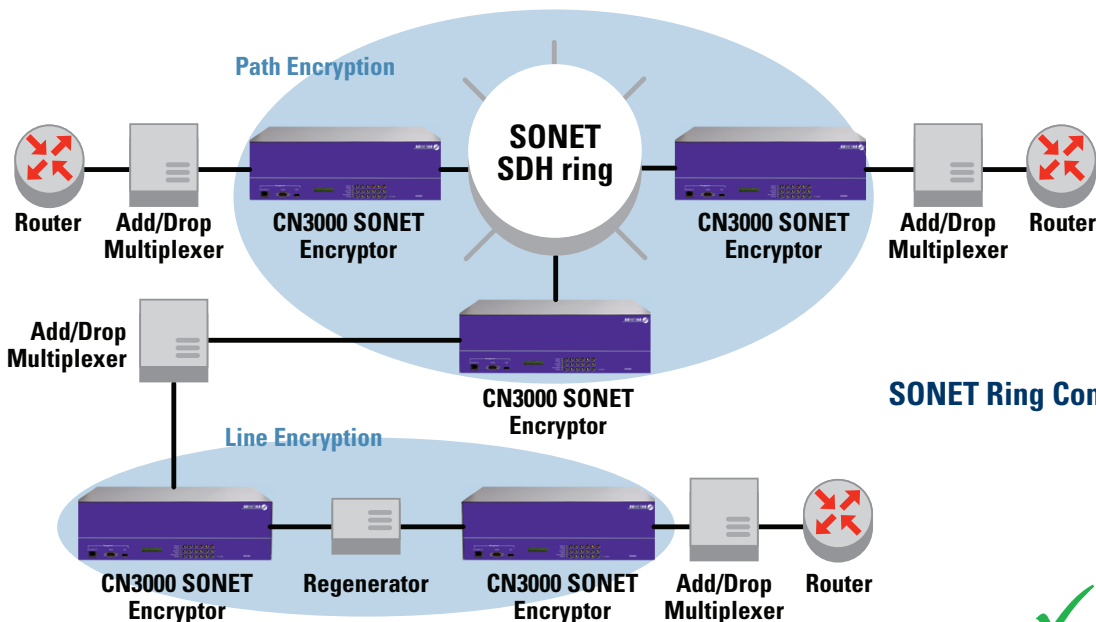
EMC (Emission and Immunity)

FCC Part 15 Class B
ICES-003 Class B
EN 55022 Class A (CE)
AS/NZS CISPR 22 Class A
EN 61000-3-2 (CE)
EN 61000-3-3 (CE)
EN 61000-6-1 (CE)

Environmental

RoHS Compliant

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

