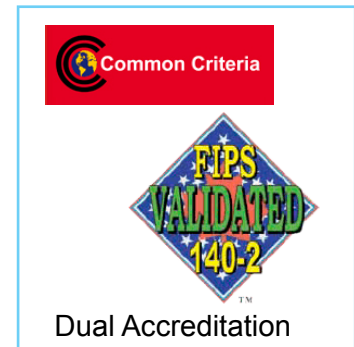


CN1000 Fibre Channel Encryptor

Senetas CN1000 Fibre Channel encryptors are high performance encryption platforms that provide security of traffic between data centres. The platform is used to secure Storage Area Networks (SAN's) and supports data transfer at 1, 2, or 4 Gbps.

Key Features

- Full duplex line-rate encryption at 1, 2 or 4 Gbps without packet expansion
- 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 Single and Multimode optical interfaces
- Cut-through architecture for minimum latency
- Provides standards based certificates and key management
- Uses the secure AES encryption algorithm with a 256 bit key
- 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



Overview

The CN1000 Fibre Channel encryptor addresses the needs of large enterprises that have a requirement to secure sensitive information within Storage Area Networks.

Latency is not effected by packet size and at 4 Gbps is 0.75 microseconds per unit.

Network and Management

CypherManager, the Senetas' element manager can be used to configure and manage the CN1000. Management connections are via an RJ45 connector on the front panel, and in addition a Command Line Interface connection is available via a DB9 RS232 serial socket. The local (protected) and network (unprotected) connections are made via multi-mode or single mode full-duplex SFP optical interfaces. Protocol standards include ANSI INCITS 352-2002, ANSI INCITS 404-2006, and ANSI INCITS 424-2007

Supported Networks

- Direct Fibre links
- Links with Fibre repeaters
- GFP-T connections
- GFP-F connections

Order codes:

- | | |
|--------------|-------------------|
| CN1000-FC-1G | 1Gbps Full Duplex |
| CN1000-FC-2G | 2Gbps Full Duplex |
| CN1000-FC-4G | 4Gbps Full Duplex |



Specifications

Cryptography

- AES encryption algorithm
- CFB mode encryption
- 256 bit session and master keys

Key Management

- Based on ATM Forum V1.1 security specification
- X.509 certificate for authentication
- RSA Public key Infrastructure
- Periodic automatic key updates without traffic interruption
- Master and Session keys

Performance

- Full duplex point to point operation
- Network interface for 1, 2 or 4 Gbps
- Unit latency of 0.75 microseconds max at 4 Gbps

Management

- CypherManager role based element manager
- IPv4 and IPv6 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.
- Two line 20 char LCD display
- Keypad (0-9, and data entry/edit)
- RJ45 and DB9 Management connectors

Rear Panel

- SFP optical connector cages
- IEC13 Power sockets

Installation

- Size - 482mm (19"), 42mm (1U), 380mm (WxHxD)
- Weight: - 6 Kg
- 0° to 40°C operating temperature
- 0 to 80% RH at 40°C operating

Shipping/Storage

- Size - 560mm, 120mm, 430mm, (WxHxD)
- Weight - 6.5Kg
- Max temperature 40°C, 95% RH at 40°C

Physical Security

- Tamper proof Key and user password storage
- Tamper resistant metal case
- Anti probing barriers

Power Requirements

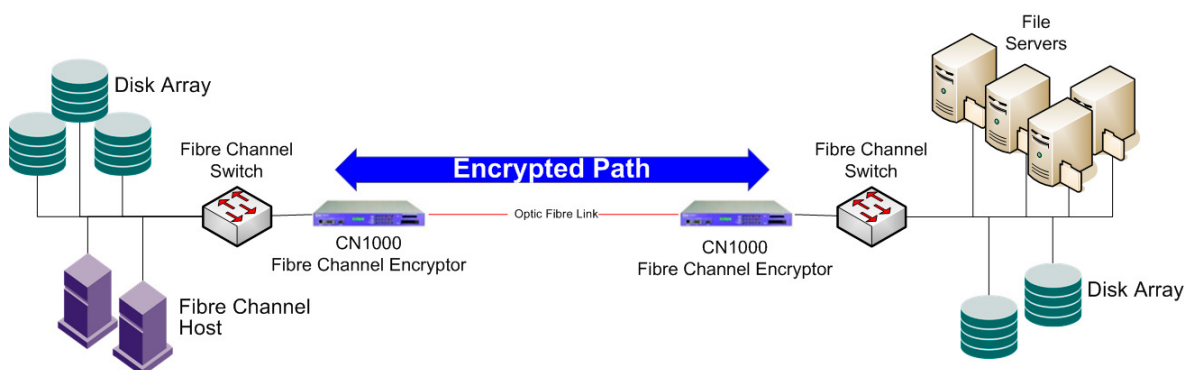
- 90-240 VAC / 47-63 Hertz
- 40 watts

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.



Typical SAN configuration