

CN1000 Fibre Channel Encryptor



Dual Certified:



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
- 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 9-pin D-Sub 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

Specifications

Cryptography

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

Key Management

Certificate revocation; OCSP, CRL Automatic connection establishment 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
Operates at 1, 2 or 4 Gbps
< 1 microsecond latency per device at 4 Gbps

Management

CypherManager element manager
IPv4 and IPv6 management support
Automatic encryptor discovery
Syslog, NTP
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 Ethernet port for management 9-pin D-Sub RS232 port for serial console

Rear Panel

SFP optical connector cages
IEC C14 Power Inlet

Installation

Size: 435mm (17"), 43mm (1U), 320mm (WxHxD)
Weight: 5kg
0° to 40°C operating temperature
0 to 80% RH at 40°C operating

Power Requirements

90-240 VAC / 47-63 Hertz
40 Watts

Shipping/Storage

Two units shipped in one box
Size: 570mm, 280mm, 450mm (WxHxD)
Weight: 14kg
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

Safety

EN60950-1 (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.

