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CN3000 10G Ethernet Encryptor

Senetas CN3000 10Gbps Ethernet encryptors are high performance encryption platforms that provide maximum security within modern Ethernet networks. The system supports the layer 2 protocol and can be configured for point to point or multipoint operation.

Key Features

- Full duplex line-rate encryption at 10 Gbps
- Cut-through architecture for minimum latency
- Supports Unicast and Multicast traffic
- Supports Line or Multipoint connections
- Certified to Common Criteria EAL4+ security level
- Certified to FIPS 140-2 level 3 security requirements
- Bump in the wire design for easy installation
- Conforms to IEEE802.3 specifications
- Provides standards based certificates and key management
- Uses the secure AES 256 bit encryption algorithm
- Counter mode encryption with synchronisation
- VLAN, MPLS transparency allowing flexible configuration
- 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 selectable XFP modules
- Interoperable with Senetas CS10, CS100 and CN1000 Ethernet encryptors

Common Criteria

FIPS VALIDATED 140-2 TM

Dual Accreditation

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 point to point links or used in a meshed network of up to 63 interoperable units.

The unit operates in full-duplex mode at full line speed without loss of packets. Latency is not effected by packet size and is less then 7.5 microseconds per unit.

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. Support for Ethernet 802.3 and VLAN 802.1Q standards is provided.

Supported Networks

Ethernet II 802.3
Ethernet over MPLS
Carrier Ethernet
VLAN/MPLS transparency

Order codes:

CN3000-ETH-10G 10Gbps Full Duplex

TM: A Certification Mark of NIST, which does not imply product endorsement by NIST, the U.S. or Canadian Governments

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

10Gbps Full Duplex
Supports Unicast and Multicast traffic
Latency of 7.5 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 and DB9 Management connectors

Rear Panel

XFP optical connector cages
IEC13 Power socket

Installation

Size - 482mm (19"), 133mm (3U), 380mm (WxHxD)
Weight: - 9 Kg
0° 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 storage
Tamper resistant/evident metal case
Anti probing barriers

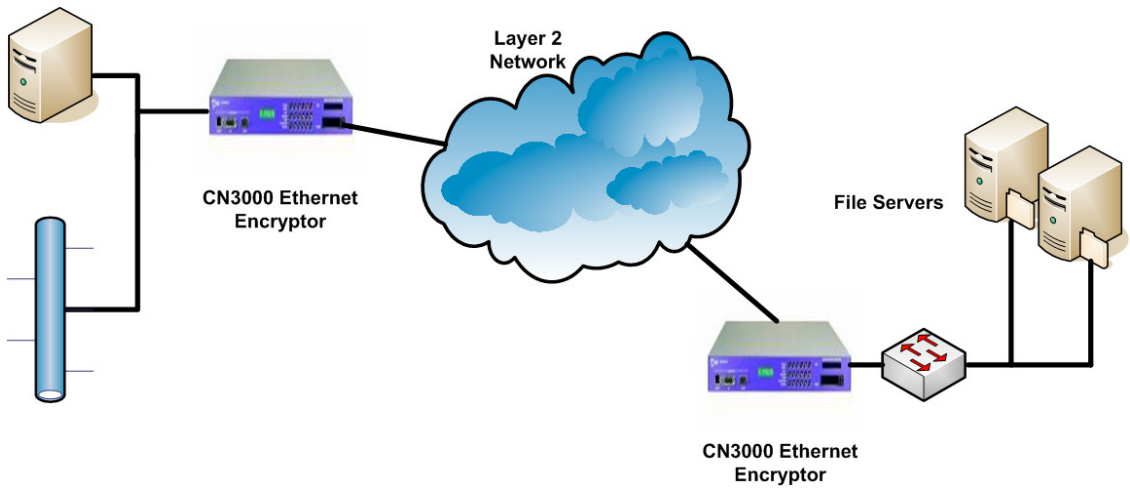
Power Requirements

90-240 VAC / 47-63 Hertz
120 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.



Network example

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