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CS10 Ethernet Encryptor

Senetas CS10 Ethernet encryptors are flexible encryption platforms designed as desk top systems that can be integrated into modern Ethernet networks. The units can encrypt either layer 2 (Ethernet) or layer 3 (IPSec) protocols and can be configured for point to point or multipoint operation at speeds of up to 10 Mbps.

Key Features

- Full duplex encryption at up to 10 Mbps
- 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 or Multipoint connections
- Conforms to IEEE802.3 specifications
- Uses the secure AES 256 bit encryption algorithm
- Supports SEED, Aria, Camellia and custom algorithms
- Self sychronising CFB mode minimises traffic disruption
- 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
- Interoperable with Senetas CS100 and CN1000 Ethernet encryptors
- Switchable between layer 2 and layer 3 (IPSec) modes. IPSec mode implements ESP tunnel

Common Criteria

Accreditation

Overview

The CS10 provides users with flexible encryption that addresses the needs of small to medium sized organisations that have a requirement to transfer sensitive information between branch offices. The units can be used to secure point to point links or used in a meshed network of up to 509 interoperable units.

The unit operates in full-duplex mode at full line speed. Latency is a function of transmission speed and packet size is typically 1-5 milliseconds.

Network and Management

CypherManager, Senetas' element manager can be used to configure and manage the CS10 within the network. The unit can operate as a layer 2 Ethernet encryptor or as a layer 3 (IPSec) device. Management connections are via an RJ45 on the rear panel, and in addition a Command Line Interface connection is available via a DB9 RS232 serial connector. The local (protected) and network (unprotected) 10/100Base-T connections are made using CAT5 cables with RJ45 connectors. 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
- Alternate IPSec mode

Order codes:

CS10-AU	Australia/New Zealand
CS10-IN	International

Specifications

Cryptography

AES encryption algorithm
128 or 256 bit session keys
Self sychronising CFB mode
256 bit master keys
Optional algorithms (SEED, Aria, Camellia, custom)

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 10Mbps
Latency 5 milliseconds (typical)

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

Common Criteria EAL4+

Front Panel

LED's for interface, security, temperature, alarms, power.

Rear Panel

RJ45 Local and Network connectors
RJ45 and DB9 Management connectors
Plug pack socket

Installation

Size - 185mm, 42mm, 160mm (WxHxD)
Weight: - 630 gram
0° to 40°C operating temperature
0 to 80% RH at 40°C operating

Shipping/Storage

Size - 350mm, 180mm, 280mm, (WxHxD) - 2 units
Weight - 1.2Kg (1 unit) - 2.0Kg (2 units)
Max temperature 40°C, 95% RH at 40°C

Physical Security

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

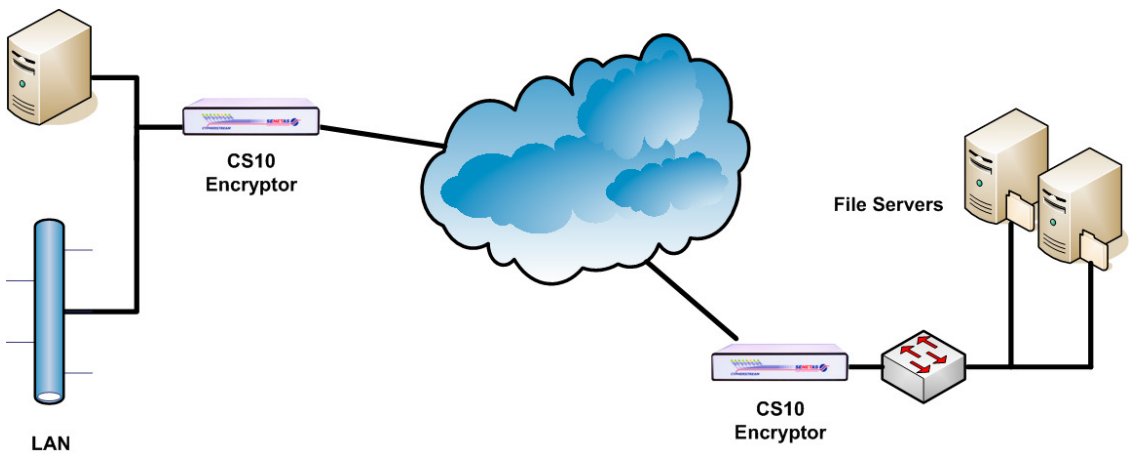
Power Requirements

90-240 VAC / 47-63 Hertz Plug pack (7-20 VDC)
6 watts (20 watts maximum)

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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