



**Senetas CN1000 ATM** encryptors are high performance encryption platforms that provide maximum security within Asynchronous Transfer Mode networks. The systems can be ordered at speeds of 1.5Mbps (T1), 2Mbps (E1), 34Mbps (E3), 44Mbps (DS3), 155Mbps (OC-3) and 622Mbps (OC-12) and provide full duplex communications in all modes.

## Key Features

- Full duplex line-rate encryption at up to 622Mbps
- 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 Permanent Virtual Paths
- Supports Permanent Virtual Circuits
- Provides standards based certificates and key management
- Uses the secure AES 256 or 128 bit encryption algorithm
- CFB or 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 pre-configured electrical or optical (OC-3, OC-12) interfaces

## Overview

The CN1000 provides users with flexible encryption that addresses the needs of enterprises that have a requirement to secure sensitive information traversing the network. The system can be used to secure both Permanent Virtual paths (PVP) and Permanent Virtual Circuits (PVC) connections.

The unit operates in full-duplex mode at full line speed without loss of cells. Latency is determined by the transmission speed.

## Network and Management

CypherManager, Senetas' element manager can be used to configure and manage the CN1000 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 9-pin D-Sub RS232 serial connector. The local (protected) and network (unprotected) connections are made via RJ45, BNC or SC optical connectors.

## Supported Networks

- Permanent Virtual Paths
- Permanent Virtual Circuits

## Specifications

### Cryptography

AES encryption algorithm  
128 or 256 bit session keys  
CFB or Counter mode encryption  
256 bit master keys

### Key Management

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

### Performance

Speed of up to 622Mbps  
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

SC optical connectors  
IEC C14 Power Inlet

### Installation

Size: 482mm (19"), 42mm (1U),  
380mm (WxHxD)  
Weight: 5kg  
0° to 40°C operating temperature  
0 to 80% RH at 40°C operating

### Shipping/Storage

Two units shipped in one box  
Size: 570mm, 440mm, 280mm (WxHxD)

Weight: 14kg

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  
60 Watts

### Safety

EN 60950-1  
AS/NZS 60950.1

### 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.

