CN6140

SENETAS

Scalable high-speed encryption for demanding networks

CN6140 delivers high assurance encryption for organisations transmitting large volumes of sensitive data. Single-port and multi-port configurations provide scalable encrypted throughput from 1Gbps to 4 × 10Gbps within one carrier-grade platform.

Product highlights



Scalable throughput

Single-port or multi-port configurations from 1Gbps to 4 × 10Gbps.



High-performance encryption

Full-duplex, line-rate encryption with latency below 5µs at 10Gbps.



Consolidated infrastructure

Multiple encrypted links in one 1U platform reduce rack and management overhead.



Transparent protection

Encrypts data without disrupting applications, protocols or network architecture.



Crypto-agile and quantum-ready

Supports PQC certificates, optional QRNG and third-party QKD.



Built for critical environments

Balances performance, operational resilience and security assurance.

Built for performance, scale and resilience



Performance agility

FPGA-based processing with ultra-low latency.



Deployment agility

Supports point-to-point, hub-and-spoke and mesh topologies.



Operational Agility

CM7 management simplifies configuration and monitoring.

Key specifications

MAXIMUM SPEED

- Single-port: up to 10Gbps encrypted throughput
- Multi-port: up to 4 × 10Gbps encrypted throughput

PHYSICAL INTERFACES

- One or up to four physical encryption channels
- SFP and SFP+ interface support
- Front-panel access for all interfaces

NETWORKING AND TOPOLOGY

- Encrypts unicast, multicast and broadcast traffic
- Protocol and application transparent
- Jumbo frame support
- Point-to-point, hub-and-spoke and mesh topologies
- Automatic network discovery and connection establishment

PERFORMANCE AND POLICY

- Low-overhead, full-duplex, line-rate encryption
- FPGA-based cut-through architecture
- Latency below 5µs at 10Gbps
- Policy based on MAC address, VLAN ID IP address and/or TCP/UDP port numbers

**GCM @1Gbps only for CN6140 multi-port*

SECURITY

- AES-128 and AES-256 encryption
- Encryption modes CFB, CTR and GCM*
- Automatic and self-healing key management
- Flexible encryption policy engine

MANAGEMENT

- Centralised configuration using Senetas CM7
- Remote management via SNMPv3
- Support for external X.509 certificate authorities
- In-field firmware upgrades

RELIABILITY

- Dual swappable AC or DC power supplies
- User-replaceable fans and battery modules
- Tamper-resistant and tamper-evident enclosure
- Anti-probing barriers

INTEROPERABILITY AND CERTIFICATIONS

- Interoperable with CN and CV Series encryptors
- FIPS 140-3 Level 3 certified
- Common Criteria certified EAL2+. (EAL4+ in process)

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