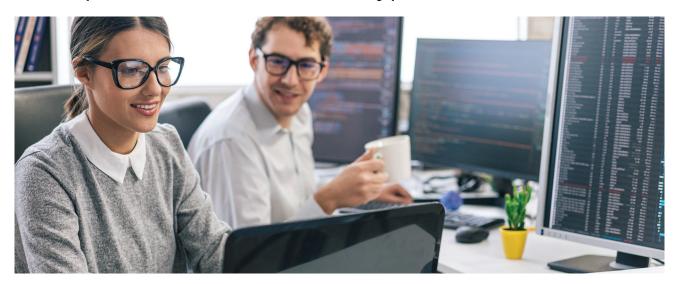**SENETAS**

Securing Your Network:
A Deep Dive into Senetas Encryption Solutions

In today's hyper-connected world, data security is paramount. Networks face constant threats, from opportunistic eavesdropping to sophisticated cyberattacks. Protecting sensitive information as it traverses these networks is no longer optional, it's a critical mandate. Senetas solutions deliver robust, high-performance encryption to safeguard your valuable data assets.

The Need for Network Encryption

Organisations across all sectors — government, defense, financial services, healthcare, and more — transmit sensitive data across their networks daily. This data can include:

- **Government and defense secrets:** Classified information, military intelligence, and national security data.
- **Commercially sensitive data:** Financial records, intellectual property, customer data, and trade secrets.
- **Critical infrastructure data:** Information related to power grids, transportation systems, and other vital services.

Failing to protect this data can have severe consequences, including:

- **Financial loss:** Data breaches can lead to significant financial penalties, legal liabilities, and reputational damage.
- **Operational disruption:** Attacks can disrupt critical services and business operations, causing downtime and productivity losses.
- **National security risks:** Compromised government or defense data can jeopardise national security and public safety.

Senetas Encryption Solutions: An Overview

Senetas encryption solutions provide a comprehensive approach to securing network traffic. These solutions are built on the foundation of dedicated hardware encryption, ensuring high performance and robust security. Key features include:

- **Certified Security:** Certified by leading independent authorities including Common Criteria (CC), FIPS and NATO, validating their suitability for government and defense use.
- **High Performance:** Delivering predictable maximum throughput with minimal latency, operating at line speed without compromising network performance.
- **Crypto-Agility:** Supporting a wide range of encryption algorithms with built-in customisation options, ensuring adaptability to evolving threats and future cryptographic standards. This includes readiness for post-quantum cryptography with support for NIST Post Quantum Cryptography, ETSI Quantum Key Distribution (QKD) and Quantum Random Number Generation (QRNG) capabilities.
- **Flexible Deployment:** Solutions are available in various form factors, from single-port appliances to multi-port devices, and can be deployed in hardware or virtualised environments.

Key Benefits

- **Robust Security:** Hardware-based encryption, CC EAL4+ and FIPS 140-3 L3 certified, tamper-resistant key management provide a high level of security for sensitive data.
- **Maximum Performance:** Near-zero latency, full-duplex operation, and deterministic performance ensure smooth network operation even under heavy loads.
- **Optimal Flexibility:** Vendor-agnostic interoperability and support for various network speeds and environments enable seamless integration into existing infrastructure.
- **Future-Proof Design:** Crypto-agility and support for custom curves ensure adaptability to future threats and evolving security requirements.

About us

Senetas, a leading public Australian cybersecurity company, specialises in high-performance network encryption solutions, both hardware and virtualised, that secure critical data for organisations worldwide. With over 25 years of industry experience, we've earned the trust of governments, defense agencies, and large enterprises across more than 60 countries. Our solutions are certified by the world's most stringent security authorities, including Common Criteria, FIPS, NATO and the US DoD.

Through our global partnership with Thales, the world's largest security provider, we deliver and support our cybersecurity solutions to customers internationally.

Senetas CypherNET Network Encryptors

CN9000 series

Experience uncompromising security and performance with the CN9000 Series. These high-assurance network encryptors deliver ultra-low latency (just 1.5 microseconds) for your most demanding 100Gbps applications. Ideal for data centres, cloud services, and high-bandwidth applications.

CN7000 series

Future-proof your network security with the CN7000 Series. These high-assurance encryptors deliver crypto-agile data protection at speeds up to 10Gbps, with built-in quantum resistance and support for evolving cryptographic standards. Available in a range of form factors, from rack mountable bare metal to ruggedised in-field deployments. Platform agile, the FIPS certified encryption OS can be deployed on pre-validated COTS hardware to meet customer requirements.

CN6000 series

Secure your critical data at high speeds with the CN6000 Series network encryptors. These versatile, rack-mounted solutions provide efficient, certified encryption for bandwidths from 1Gbps to 10Gbps, making them ideal for any network environment. Offering both Common Criteria and FIPS 140-3 certifications as well as compact 1U form factor.

CN4000 series

The CN4000 Series delivers affordable, high-assurance encryption with zero network impact, near-zero latency, and easy implementation at speeds up to 1Gbps. Delivering renowned security and performance at a price point that's accessible from SMEs to large enterprise.

CV1000 Virtual Encryptor

Secure your multi-layer network with the CV1000, the first crypto-agile virtual network function designed for large-scale encryption. It delivers robus security across Layers 2, 3, and 4, with centralised management for flexible policy enforcement. Scalable and cost-effective, it delivers multi-layer data protection at speeds up to 10Gbps, ensuring the same agility as your network and providing high-assurance security to the edge of your WAN and SD-WAN.