



> Datacryptor® Ethernet Layer 2

KEY BENEFITS

- > Strongest cryptography available commercially (AES-256)
- > Delivers point-to-point encrypted throughput up to 10 Gbps
- > Minimum latency
- > Fully automated key management
- > Multiple interface options and transmission ranges
- > Multiple modes of operation for maximum efficiency
- > Transparent to line protocols
- > FIPS 140-2 and Common Criteria

The Datacryptor® Ethernet Layer 2 is a family of high-speed, stand-alone security platforms that deliver full duplex Bulk and Tunnel encryption at speeds up to 10 Gbps. The encryptors, available in 100 Mbps, 1, and 10 Gbps models, answer the market's need for high-speed point-to-point link security over Wide Area Network (WAN) backbone infrastructures, protecting the confidentiality of sensitive and high-value data, voice, and video.



>> Datacryptor[®] Ethernet Layer 2

Technical Specifications

Maximum Data Transfer Rate

- > 100 Mbps full duplex with 37 µsec latency
- > 1 Gbps full duplex with 7 µsec latency
- > 10 Gbps full duplex with 5 µsec latency

Encryption Algorithm

AES FIPS 197 with 256-bit key length

Key Management

- > Signed Diffie-Hellman key agreement protocol
- > DSA with 1,024-bit key and 160-bit signature (FIPS 186), SHA-1 (FIPS 180)
- > X.509 v1 and v3 certificates
- > Hardware random number generation
- > Automatic-time triggered key change without interruption of connections

Device Management

- > Thales' Element Manager (EM) secured with AES
- > Front Panel Viewer (FPV) Graphical User Interface
- > X.509v1 and v3 digital certificate support
- > PPP protocol (serial V.24) or IP (10/100BaseT RJ-45 Ethernet)
- > In-band and out-of-band management
- > Secure download of software updates
- > SNMP v1, v2c, and v3 network monitoring
- > Thales' Certificate Manager (CM)

Connection Interfaces

100 Mbps platform

- > Fixed RJ-45 copper 10 or 100BaseT host and network ports
- > Serial V.24 and Ethernet management ports

1 Gbps platform

- > Removable RJ-45 copper (SFP) host and network ports
- > Removable multi-range and DWDM optical (SFP) duplex LC host and network ports
- > Serial V.24 and Ethernet management ports

10 Gbps platform

- > Removable multi-range and DWDM optical (XFP) host and network ports
- > Serial V.24 and Ethernet management ports

Flexibility

- > Bulk and Tunnel encryption
- > Transparent to line protocols
- > AC and DC redundant power options
- > Secure auditing

Synchronization

Automatic, continuous

Physical Security

- > Tamper-resistant metal casing
- > Tamper-response circuit

Safety and Security Certifications

- > Pending FIPS 140-2 Level 3 and Common Criteria EAL 3
- > FCC Part 15 Class B, UL, CE

Power

100 Mbps platform

- > Single AC (universal) or DC (-48v), 25 Watts, 86 BTU

1 Gbps platform

- > Dual-redundant AC (universal) or DC (-48v), 120 Watt, 410 BTU

10 Gbps platform

- > Dual-redundant AC (universal) or DC (-48v), 140 Watt, 480 BTU

Temperature

- > Operating 5°C to 40°C (40°F to 100°F)
- > Storage -10°C to 60°C (15°F to 140°F)

Relative Humidity

10% to 90% at 25°C (77°F) non-condensing, falling to 50% max at 40°C (100°F)

Barometric Pressure

780 to 1100 mBar

Physical Specifications

100 Mbps platform

- > 19", 1RU housing
- > **Height:** 4.20cm (1.70")
- > **Width:** 43.00cm (16.93")
- > **Depth:** 22.30cm (8.80")
- > **Weight:** 3.70kg (8.00lb)

1 Gbps platform

- > 19", 1RU housing
- > **Height:** 4.40cm (1.70")
- > **Width:** 43.00cm (16.93")
- > **Depth:** 37.00cm (14.60")
- > **Weight:** 8.50kg (18.75lb)

10 Gbps platform

- > 19", 2RU housing
- > **Height:** 8.80cm (3.50")
- > **Width:** 43.00cm (16.93")
- > **Depth:** 38.50cm (15.20")
- > **Weight:** 9.75kg (21.50lb)

Thales - Information Systems Security

