



Datacryptor® AP

10 Mbps and 10/100 Mbps IP Network Encryptors

KEY BENEFITS

- Secures high-value IP networks
- Supports voice, video and data
- Provides high availability
- Adapts as your requirements evolve
- Meets the highest security standards



IP networks are ubiquitous today, providing a flexible and cost-effective means of interconnecting centers of operation. However, it is vitally important that the confidentiality and integrity of all network traffic is adequately protected, particularly where the traffic carries a high value or sensitivity.

Datacryptor AP (Advanced Performance) offers a proven, high-assurance solution to such requirements, enabling the benefits of IP networking to be fully realized with complete peace-of-mind. Based on over 30 years of experience, Datacryptor protects your investment through its unique flexibility, ease of deployment and field upgradeability, while meeting the highest security standards.

Datacryptor AP offers a choice of speed and form factor to suit individual requirements, and is available with the strongest commercially-available encryption algorithms or customized government ciphers. Datacryptor AP also offers configuration flexibility, with a choice between Tunnel and Transport modes and the ability to configure security policies and security associations in a variety of ways to suit the architecture of your network. For high availability applications, two Datacryptors can be paired in a hot standby configuration.

When used to protect inter-site communications, the Datacryptor is typically installed between the protected LAN resources and the router that provides the site's wide area access. To protect an individual workstation or network segment, the Datacryptor can be installed between that workstation or network segment and the rest of the network. The ability to install Datacryptor anywhere in the network allows protection to be brought as close to the source of information as your security policy requires. It also allows multiple VPNs to be established over a shared local or wide area network.

> Datacryptor® AP

Technical Specifications

Interfaces

- > **Network ports:** 10BASE-T/100BASE-TX Ethernet (RJ45)
- > **Management port:** 10BASE-T Ethernet (RJ45)
- > **Control port:** RS-232 serial (DE9)

Cryptography

- > **ESP modes:** Tunnel, Transport (IPv4)
- > **Encryption algorithms:** Triple DES, AES (128, 192, 256-bit key lengths)
Government and custom algorithms also available
- > **Encryption modes:** CFB8, CBC, GCM

Key Management

- > **Unit authentication:** X.509 certificates
- > **Key agreement:** Diffie-Hellman (or national/custom algorithm)

Security Features

- > **Data integrity:** GCM, Extended Sequence Numbers
- > **Management traffic:** Encrypted as data, authenticated using HMAC
- > **Random number generator:** Hardware
- > **Firmware signing:** DSA, SHA-1
- > **Tamper detection:** Voltage, temperature, motion, physical penetration
Automatically erases certificates, keys, algorithm (even when unit is unpowered)
- > **Other protection:** Tamper-resistant security module (SGSS), Tamper-evident enclosure
Keylock, Erase button

Certifications

- > **FIPS:** 140-2 Level 3 (SGSS and Bootstrap code); cryptographic algorithms validated under NIST CAVP
- > **CAPS:** Baseline Grade, Enhanced Grade (up to UK SECRET)
- > **Common Criteria:** EAL4

Performance

- > **Security associations:** Up to 400 (bi-directional)
- > **Maximum throughput:** >190 Mbps full duplex (large frames), >200 kfps full duplex (small frames)
- > **Minimum latency:** <0.7 ms end-to-end (large frames), <0.2 ms end-to-end (small frames)

Device Management

- > **Thales management software:** Element Manager, Front Panel Viewer
- > **Network monitoring support:** SNMPv1

Special Features

- > **High availability:** Hot standby capability
- > **QoS support:** Type-of-Service (ToS) pass-through capability
- > **Route advertisement:** RIPv1, RIPv2
- > **Upgradeability:** Firmware, algorithms, interface speed

Physical

- > **19" rack-mounting model:** 432x240x44mm (WxDxH), weight 4.0kg
- > **Small form factor (SFF) model:** 220x240x60mm (WxDxH), weight 2.4kg (dimensions exclude mounting ears and connectors)

Power

- > **Type:** Internal PSU (19" model), external PSU (SFF model)
- > **Operating voltage:** 100 - 240 VAC 50/60Hz (auto-sensing)
- > **Dissipation:** 25W (85 BTU) maximum

Environment

- > **Temperature:** 5 - 40°C (operating), -10 - 65°C (storage)
- > **Relative humidity:** 10 - 90% at 25°C (non-condensing)

Regulatory

- > **Approval marks:** CE (EU), UL (US/Can), C-Tick (Aus/NZ)
- > **EMC emissions:** EN55022 Class B, FCC Class B, VCCI Class B
- > **EMC immunity:** EN55024
- > **Safety:** EN60950-1, UL60950-1, IEC 60950-1

Ordering Details

- > **10 Mbps:** DCAP-PX (19"), DCAS-PX (SFF)
- > **10/100 Mbps:** DCAP-PH (19"), DCAS-PH (SFF)

* Specifications may vary with model, algorithm and firmware release - contact Thales for further information.