

## >> STANDARDS, CHARACTERISTICS, INTERFACES:

- Wire interfaces 10 Base T / 100 Base Tx
- Option: Optical interfaces 100 Base Fx
- Ethernet V2, 802.3, ARP (RFC: 826, 894, 1042)
- IPv4, TCP/UDP, ICMP (RFC: 791, 792, 793, 768, 1042)
- IPSEC for Defense (derived from RFC: 2401, 2406)
- SNMPv1, MIB II (RFC: 1155, 1157, 1213)
- Path MTU (RFC: 1191)
- Injectors: - DS-101 (DTD)  
- EMV smart card
- Use: 0 to +40°C
- Storage and transportation: -20 to +65°C / altitude 0 to 10,700 m
- TEMPEST AMSS 720B category A (conduction and radiation)
- 110/220V - 2A automatic
- MTBF > 20,000 H
- 2 MIB
- 2 IP addresses
- Automatic fragmentation
- QoS mechanisms
- VoIP compatible (latency < 500µs)
- Compatible with 64 kb/s to 100 Mb/s networks
- Satellite link compatible

# THALES



## >> A COMPREHENSIVE AND FLEXIBLE SERVICE OFFERING

THALES offers a full range of services to support users in the equipment deployment and use phases:

- Training
- Equipment installation/ deployment
- Extended warranty
- Customer call centre
- On-site technical support
- Maintenance
- Software upgrades

## > ECHINOPS

High-speed IP encryption system for classified defense networks

## High-speed IP encryption system for classified defense networks

The ECHINOPS system effectively protects against monitoring, alteration and intrusion threats.



- >> VPN/IPSEC for defense
- >> 100 Mb/s full duplex
- >> NATO Secret / EU Secret
- >> TEMPEST
- >> Open-ended, flexible and lasting system

## PROTECTION OF SENSITIVE DATA ON CLASSIFIED IP NETWORKS

Based on the latest military encryption technologies, the ECHINOPS encryption system was developed jointly with the Délégation Générale pour l'Armement (DGA), the French armament procurement agency. It was designed to provide the ultimate level of security for your IP network exchanges. A stand-alone security solution for sensitive data on IP networks, the encryption system consists of:

- Advanced encryption equipment (100 Mb/s) offering ultra-high security
- Centralised, user-friendly and secure management



### ULTRA-HIGH SECURITY EQUIPMENT

Inserted in-line on networks requiring protection, ECHINOPS encryption equipment offers all the security features required for the deployment of Virtual Private Networks (VPN) to protect data up to the Secret level:

#### DATA PROTECTION

- Data confidentiality during transfer
- Integrity: detection of altered data
- Playback prevention

#### NETWORK PROTECTION

- Authentication of stream origins
- Address masking
- Stream type masking

#### LOCAL PROTECTION

- Intrusion detection and emergency clearing
- Alarm generation
- Event logging
- CIK secret sharing mechanism
- End-to-end encrypted key management

- >> The ECHINOPS device offers an excellent level of security through a highly compartmentalised architecture that is compliant with French and NATO requirements.
- >> In addition to its integration capabilities, the ECHINOPS encryption device has the interfaces required to interoperate with DS-101 key fill devices (DTD).



### CENTRALISED, SECURE ADMINISTRATION

The ECHINOPS operating center enables:

- Graphic definition of network security policy
- Remote management of deployed encryption equipment
- Key generation and automatic renewal processing
- ECHINOPS network and alarm surveillance
- Interpretation of audit logs

Its ergonomic, graphic and user-friendly interfaces consist of:

- An off-line Key Generation Centre (KGC)
- A secure Personalisation Centre (PC)
- A Management Centre (MC)
- Protected key injectors

The ECHINOPS system includes advanced "network" features

- "Encrypting gateway" operation
- Automatic cascading of crypto devices
- Inter-domains for system interconnections
- Total internal and external SNMP supervision

The ECHINOPS system is available in infrastructure office system and rackable versions.