

EP430GN

IP Encryption Unit for NATO networks protection



IP encryption equipment up to 2 Gbps for NATO networks protection.

The EP430GN is a high speed IP encryption equipment which allows a deployment of virtual private networks (VPN) in a completely secure way. Specially designed for NATO networks protection.

The EP430GN has a communications platform with two security domains physically separated (red and black networks) communicated through the cryptographic module | Each start-up the software that has to run in the communications platform is downloaded from the cryptographic module.



IP encryption equipment up to 2 Gbps for NATO networks protection

- **Security Services that guarantee:**
 - Confidentiality and integrity of the information.
 - Origin and destination authentication.
- **Security protections:**
 - Tempest approved according to SDIP 27 level A.
 - Common Criteria EAL4+ approved.
 - Antitamper design equivalent to level 4 of the standard FIPS 140-2.
 - Zeroitiation button for keys erasure.
- **Throughput near to 2Gbps (aggregated).**
- **Up to 1000 simultaneous security associations.**
- **Optical fiber gigabit interfaces.**
- **Designed for 19" rack mounting.**



GENERAL FEATURES

OPERATIONAL FEATURES

- Tunnelling mode operation according to IETF (Internet Engineering Task Force) RFC's.
- The encryption equipment operates on OSI (Open Systems Interconnection model) layer 3.
- All traffic in black network is encapsulated in ESP (Encapsulating Security Payload) datagrams over UDP .
- Operation 24 hours without interruption.
- Physical level: 1000 Base-X over multimode fiber (1000 Base SX).
- Link level: Ethernet IEEE 802.3.
- Support unicast and multicast traffic
- Reconstruction of fragmented datagrams.
- Transparent operation for all IP protocols between local and remote RED networks.
- Automatic discovery of encryption routes.
- Operation with static and dynamic addresses.
- Dynamic IP addresses assignment (DHCP and BOOTP).
- Support dynamic routing protocols (RIP and OSPF).
- The operation is always in encrypted mode, it doesn't support non encryption operation mode.
- Up to 1000 simultaneous security associations.
- Throughput near to 2Gbps (aggregated)
- Red and black areas configuration with physical access to the crypto equipment by means of independent console ports (military connectors MIL-C-26482), accessible at the front panel.

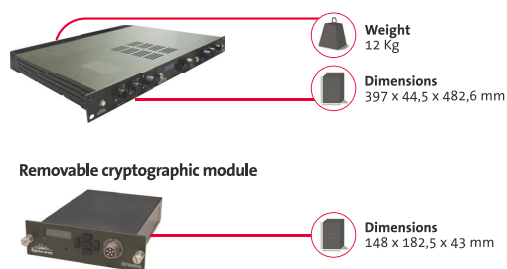
SECURITY SERVICES

- Approved its use in NATO networks with NATO SECRET and below classification.
- Provide confidentiality of the IP directions in the red network.

- Protection of the IP data datagrams integrity.
- Origin and destination authentication.
- Protect against "replay" and other attacks by the introduction of data fields in the encrypted datagram.
- Access control system based on rights profiles that determine actions allowed to a specific user over the crypto equipment. The user must be authenticated using a specially programmed Fill device activated by an access code.

SECURITY PROTECTIONS

- Design with antitamper mechanisms equivalent to level 4 of the standard FIPS 140-2.
- TEMPEST certified SDIP 27/1 Level A to avoid radiated and conducted emissions.
- Common Criteria EAL4+ approved.
- Software authentication in each start up.
- Emergency zeroization button accessible at the crypto module front panel.
- Alarms record.
- Blocking of the Fill device devices after a maximum number of validation failure attempts.



ELECTRICAL FEATURES

- +24 Vdc nominal power input (+18 Vdc to +32 Vdc range allowed).
- External power supply: 100-240 VAC 50-60 Hz .

ENVIRONMENTAL FEATURES

- Operation temperature: 0 to 50°C.
- Storage temperature: -30 to 65°C.
- Relative humidity: 5 - 95% no condensation.