IPS-250X

Non-CCI 200 Mbps IP Network Encryptor

- Lowest Size, Weight, and Power 200 Mbps (Aggregate) CHVP
- Ideal for Unattended, Unmanned, and Coalition Applications—Full HAIPE® Interoperability
- Leave-Behind Capable—Remote Management and Zeroization

Create secure IP connections with US warfighters and government agencies, without the deployment limitations, expensive logistics, and lifecycle costs associated with Controlled Cryptographic Items (CCI). The Viasat IPS-250X is an Inline Network Encryptor (INE) that complies with NSA Cryptographic High Value Product (CHVP) Policy CNSSI_4031 for Non-CCI handling of HAIPE Suite B devices.

Supporting the secure exchange of classified information up to the Secret level, this device is appropriate for government agencies, such as the FBI, Department of Homeland Security, and first responders, with users in their networks who may not have COMSEC accounts or want to minimize COMSEC logistics.

Loaded with HAIPE IS Compliant Suite B and packaged in a low SWaP rugged form factor, this network encryptor is ideal for high-risk and unmanned environments. With an optional remote front panel, aircraft operators can interface with the IPS-250X via cable, providing control access even if the stowed crypto is not physically within reach.

For a less costly alternative to COMSEC logistics, count on Viasat's IPS-250X for compact, rugged, high-speed protection when connecting securely with government agencies and coalition partners.

IPS-250X AT-A-GLANCE

Compact, Rugged, Non-CCI Protection

- Weight 2.8 lb, 4.45 x 7.96 in. (W x D)
- MIL-STD-810 rugged
- Secret and Below InfoSec without the COMSEC logistics
- Interoperable with CCI HAIPE devices operating in Suite B
- Secure connectivity for high-risk operations such as UAVs, unattended sites, and sensors
- Leave-behind capable

HAIPE IS/FI Suite B Operation

- Device generated shared key (DGSK); alternative to EKMS
- SHA-256/384 Hashing , AES-256 (GCM Mode)
- HAIPE IS v4.1 compliant with IKEv2/ECDH
- HAIPE to HAIPE over the air/net keying
- Upgradeable to fully KMI aware/PDE-enabled

Enhanced Networking Capabilities

- Software upgradable to meet evolving cybersecurity requirements
- Multicast video on demand
- Embedded TCP/IP accelerator (xPeP)
- Browser-based HMI configurations
- Centralized INE management; VINE Manager™ software provided at no extra cost

Premium Support

- INE trade-in program available
- 3-year warranty (extended options available)
- Free training and 24/7 technical support

SPECIFICATIONS

NETWORKING FEATURES AND PROTOCOLS

Protocols Supported	TCP, UDP, IPv4/IPv6 Dual Stack, ICMP, IGMP, ARP, DHCP
Networking Features	Dynamic IP addressing, dynamic key management, red address confidentiality with dynamic peer discovery
Management	SNMPv3 and HTTPS browser-based management, VINE Manager software
Multicast	IGMP on red and black subnet
Quality of Service (QoS)	Type of service octet bypass
Fragmentation	Supports fragmentation and header options for red IP packets
Flexible Interfaces	Ethernet interface, adapter provides for RJ-45 copper; fiber optic, wireless, and other interfaces supported

NETWORK INTERFACES

Plaintext Data Interface—Ethernet Interface Adapter

» **Electrical/Mechanical**	IEEE 802.3; 10/100 Mbps copper, RJ-45

Ciphertext Data Interface—Ethernet Interface Adapter

» **Electrical/Mechanical**	IEEE 802.3; 10/100 Mbps copper, RJ-45

CRYPTO CHARACTERISTICS

Algorithms	Secret and Below Suite B cryptography
Key Fill Interface	DS-101
Flexible Keying	EKMS, unclassified/classified DGSK, IKEv2/ECDH, software-upgradeable to KMI OTNK

PHYSICAL CHARACTERISTICS

Dimensions (W x H x D)	4.45 x 1.52 x 7.96 in.
Weight	2.8 lb
Power	14 W typical; 12 to 28 VDC; MIL-STD-1275D; MIL-STD-704F
Battery	External user replaceable battery, one “1/2AA” lithium cell, 3.5 year operating life typical

RELIABILITY AND MAINTENANCE

Predicted MTBF	350,000 hr
Predicted MTTR	15 min
Other	Extensive power up and online BIT

ENVIRONMENT

Operating Temperature	-40° to +60° C
Non-operating Temperature	-40° to +71° C
Solar Radiation	MIL-STD-810G, Method 505.5
Humidity	To 95% MIL-STD-810G, Method 507.5
Altitude	50,000 ft operational; 70,000 ft storage; MIL-STD-810G, Method 500.5
Explosive Atmosphere	MIL-STD-810G, Method 511.5
Rapid Decompression	MIL-STD-810G, Method 500.5
Vibration	MIL-STD-810G, Method 514.6, Category 20 and 24 MIL-STD-167 Type 1
Shock	MIL-STD-810G, Method 516.6; MIL-STD-901D Grade A Class II, Type C
EMI/EMC	MIL-STD-461E
Rain	Blowing rain MIL-STD-810G, Method 506.5
Sand/Dust	MIL-STD-810G, Method 510.5
Fungus	MIL-STD-810G, Method 508.5
Salt Fog	MIL-STD-810G, Method 509.5

ORDERING INFORMATION

IPS-250X	P/N 1190477 NSN 5810-01-654-6415
Rack Mount (holds three IPS-250Xs)	P/N 1103865
NSN number	5810-01-654-6415

CONTACT

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