The lowest size, weight, and power, rugged HAIPE® IP network encryptor. Weighing a little over half a pound and delivering over 100 Mbps (aggregate) asymmetric throughput, the Viasat KG-250XS is a Type 1 Inline Network Encryptor (INE) ideal for telecommuting, flyaway kits, small UAVs, and other dismounted or field applications.

Packing big networking power in a small form factor, the Viasat KG-250XS delivers features above and beyond standard HAIPE requirements. Improve performance over high-latency links with embedded multicast video on demand and TCP/IP acceleration. Remotely rekey a network of HAIPE devices from a physically secure location with HAIPE-to-HAIPE over-the-air/net keying.

This device leverages a field-proven software-upgradable design, so it evolves over time to meet new requirements without hardware changes. It also comes equipped with browser-based HMI for easy configurations and centralized INE management, provided at no extra cost.

The Viasat KG-250XS provides trusted IP encryption on-the-go up to TS/SCI communications with a ruggedized form factor that won’t weigh you down.

**TACTICAL APPLICATION EXAMPLE**

**VIASAT KG-250XS AT-A-GLANCE**

**Lowest SWaP HAIPE**
» Weight 0.65 lb; 3.73 x 1.05 x 3.06 in. (W x H x D)
» 5 W typical power consumption
» MIL-STD-810 rugged
» MIL-STD-461 EMI compliant
» MIL-STD-1275 compliant 12-28VDC power

**Enhanced Networking Capabilities**
» VLAN/Ethernet tunneling for Layer 2 data over Layer 3 networks*
» Software upgradable to meet evolving cybersecurity requirements
» Embedded OSPF and PIM routing*
» Multicast video on demand
» Embedded TCP/IP accelerator (xPeP)
» Browser-based HMI configurations
» Centralized INE management; VINE Manager™ software provided at no extra cost

**Crypto-Modernization Centric**
» Programmable encryption
» Classified and Unclassified Device Generated Shared Key (CDGSK/DGSK); as well as centralized key distribution sources (for example KMI)
» Usable by coalition allies and Department of Homeland Security

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

*Future capability available via software upgrade.
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, plaintext address confidentiality with dynamic peer discovery

Management
- SNMPv3 and HTTPS browser-based management, VINE Manager software

Multicast
- IGMP on plaintext and ciphertext subnet

Quality of Service (QoS)
- Type of service octet bypass

Fragmentation
- Supports fragmentation and header options for plaintext IP packets

NETWORK INTERFACES

Plaintext Data Interfaces—Ethernet Interface Adapter
- IEEE 802.3; 10/100 Mbps copper, RJ-45

Ciphertext Data Interfaces—Ethernet Interface Adapter
- IEEE 802.3; 10/100 Mbps copper, RJ-45

COMSEC CHARACTERISTICS

Algorithms
- ACC Compliant*
- Type 1 Suite A or Suite B (AES-EFF) cryptography or IPMEIR

Key Fill Interface
- DS-101 over USB

Flexible Keying
- Crypto Ignition Key removal to unclassified CCI, OTNK (KMI Aware, PDE enabled)*, unclassified/classified Device Generated Shared Key (DGSK)

PHYSICAL CHARACTERISTICS

Dimensions (W x H x D)
- 3.73 x 1.05 x 3.06 in.

Weight
- 0.65 lb

Power
- 5 W typical; 12 to 28 VDC; MIL-STD-1275D
- Optional PoE breakout cable*

Battery
- External user replaceable battery, one “1/2 AAA” lithium cell, 1.5 year operating life typical

RELIABILITY AND MAINTENANCE

Predicted MTBF
- 1,400,000 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

ENVIRONMENT (CONT.)

Altitude
- 50,000 ft operational; 70,000 ft storage; MIL-STD-810G, Method 501.5

Explosive Atmosphere
- MIL-STD-810G, Method 501.5

Rapid Decompression
- MIL-STD-810G, Method 501.5

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 508.5

Fungus
- MIL-STD-810G, Method 509.5

CERTIFICATION

NSA Certified up to TS/SCI and below
TEMPEST Compliant NSTISSAM 1/92 Level 1

ORDERING INFORMATION

PART NUMBERS

KG-250XS
- 1204585

NSN number
- 5810-01-652-7760

Rack Mount
- P/N 1283625 (Viasat Universal INE Rack: holds four KG-250XS INEs)

Available for Order
- Through IDIQ and Viasat

CONTACT

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