

- » Lowest Size, Weight, and Power
200 Mbps (Aggregate) Crypto
- » Embedded Secure Routing and Advanced
Networking Capabilities
- » MIL-STD-810G Rugged for Tactical
and Mobile Applications
- » NSA-Certified Type 1 HAIPE® IS V4.1 Compliant



Delivering high-speed HAIPE IP network encryption to tactical and mobile users with speeds fast enough for enterprise applications, the Viasat KG-250X is a rugged, Type 1 Inline Network Encryptor (INE) certified by the National Security Agency.

The Viasat KG-250X provides advanced network security above and beyond standard HAIPE requirements. Route your IP traffic more efficiently and decrease network overhead with embedded Open Shortest Path First (OSPF) and Protocol Independent Multicast (PIM). Remotely rekey a network of HAIPE devices from a physically secure location with HAIPE-to-HAIPE over-the-air/net keying. Improve performance over high-latency links with embedded TCP/IP acceleration.

This device is field-proven at high altitudes to deliver reliable network encryption for airborne missions. Additionally, users can attach a remote front panel to interface with the Viasat KG-250X, via cable, providing control access even if the stowed crypto is not physically within reach.

The Viasat KG-250X easily fits into a rucksack or three-wide in a 1U rack, enabling trusted communications for high-bandwidth TS/SCI and below missions.



VIASAT KG-250X AT-A-GLANCE

Compact, Rugged, and Flexible

- » Weight 2.8 lb; 4.45 x 7.96 in. (W x D)
- » MIL-STD-810G rugged
- » Multiple interface adapters: copper, fiber/copper
- » Copper/fiber interface supports any combination of copper/fiber connections

Enhanced Networking Capabilities

- » 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

Suite Agile and HAIPE IS Compliant

- » Suite A and/or Suite B
- » HAIPE IS v4.1 compliant with IKEv2/ECDH
- » HAIPE-to-HAIPE over the air/net keying
- » Fully FI compliant with software and key material source authentication and programmability
- » Usable by coalition allies and Department of Homeland Security
- » Supports multiple Communities of Interest (COIs) and segregation via exclusion keys

Crypto-Modernization Centric

- » Programmable encryption
- » Key and algorithm agile per packet
- » Device generated shared key; alternative to EKMS

Premium Support

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

SPECIFICATIONS

NETWORKING FEATURES AND PROTOCOLS

Protocols Supported	TCP, UDP, IPv4/v6 Dual Stack, ICMP, IGMP, ARP, DHCP
Networking Features	Dynamic IP addressing, dynamic key management, red address confidentiality with dynamic peer discovery
Management	SNMP 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
Interface Adapters	Copper, fiber/copper

NETWORK INTERFACES

Copper Ethernet Interface Adapter

» Plaintext Data Interfaces

- › IEEE 802.3; 10/100 Mbps copper, RJ-45

» Ciphertext Data Interfaces

- › IEEE 802.3; 10/100 Mbps copper, RJ-45

Fiber/Copper Ethernet Interface Adapter

» Plaintext Data Interfaces

- › IEEE 802.3; 10/100 Mbps copper, RJ-45
- › IEEE 802.3u; FDDI PMD ISO/IEC 9314-3
- › 100 FX, 1310nm optical, LC connector

» Ciphertext Data Interfaces

- › IEEE 802.3; 10/100 Mbps copper, RJ-45
- › IEEE 802.3u; FDDI PMD ISO/IEC 9314-3
- › 100 FX, 1310nm optical, LC connector

COMSEC CHARACTERISTICS

Algorithm Agile	IPMEIR, Type 1 Suite A and/or Suite B (AES-EFF) cryptography
Flexible Keying	Crypto Ignition Key (removal to unclassified CCI), 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

CERTIFICATION

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

ORDERING INFORMATION

Copper (KG-250X)	P/N 1101000
Fiber/Copper (KG-250X-FC)	P/N 1161607
Rack Mount	P/N 1103865 (holds three KG-250Xs)
Available for Order	Through IDIQ and Viasat
NSN number (KG-250X)	5810-01-593-8026
NSN number (KG-250X-FC)	5810-01-647-0219



COPPER



FIBER/COPPER

CONTACT

SALES

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