ViaSat

Fully Compliant with the HAIPE FI Feature Set

- **Suite B algorithms**
- **Software source authentication and programmability**
- **Key material source authentication and programmability**
- **COI segregation via Exclusion Keys**

The world's first FI-capable Type 1 high-speed IP network encryptor, the AltaSec KG-250 from ViaSat® offers seamless foreign interoperability and programmable information assurance. This inline network encryptor (INE) is certified by the National Security Agency for use on classified US Government communications networks, and is available to U.S. Department of Defense customers, and authorized international and Homeland Security organizations.

The KG-250 is ready for multi-national operations, featuring Suite A and/or Suite B cryptographic algorithms, and both software source and key material source authentication and programmability. With support for multiple Communities of Interest (COIs), the KG-250 ensures that communications are controlled and restricted to members of selected COIs via Exclusion Keys. Featuring field tamper recovery and advanced technology to handle complex missions, this AltaSec can be deployed to support the end-to-end security requirements of the Global Information Grid (GIG), providing the warfighter with secure information when and where it is needed.

Based on ViaSat's PSIAM™ crypto system, the KG-250 features programmable and scalable information assurance capabilities that can evolve and adapt to ongoing changes in your network infrastructure.

This INE is designed for low cost of ownership and ease of portability. Unlike other network encryptors, the KG-250 does not require a centralized manager, making it the product of choice for one-way networks or mobile networks with partial or intermittent connectivity. However, KG-250 networks can be centrally managed, monitored, and configured by the VINE™ Manager software application, which is free to ViaSat AltaSec customers. VINE Manager's intuitive interface allows users to remotely manage any AltaSec parameter.

By incorporating the latest networking features, this equipment brings full mesh network operation to the classified user in an intuitively managed, cost-effective package. Also, while completely appropriate in strategic applications, the KG-250 delivers the advantage of a quicksetup, high-throughput node on any IP-capable medium to the on-the-move tactical user.

AltaSec KG-250 At-A-Glance

The FI Leader – Selectable Suite A or Suite B Support, Available Today

- Suite A, Suite B or Suite A/Suite B capable
- The only NSA Type 1 Suite B solution for coalition allies and DHS use
- Supports multiple Communities of Interest (COIs)
- Supports Exclusion Key for fine-grained control of COIs
- Software source authentication and programmability
- Key material source authentication and programmability

HAIPE IS Compliant

- HAIPE IS v1.3.5 compliant in Suite A
- HAIPE IS v3 compliant in Suite B
- Upgradeable to future versions via software download

Crypto-Modernization Centric

- Programmable Encryption
- Key Management and Encryption Agile
- Enhanced FIREFLY, Pre-Placed Key, Crypto Ignition Key

Robust Networking Features

- Full Duplex 100 Mbps Ethernet (200 Mbps aggregate)
- Protects Red Addressing Information
- Multicast capable
- Control of QoS bits
- Auto Reconnect

Light Weight, Compact Size

- Multiple units in a 19 inch rack, 1 or 2 per shelf
- Less than 6.5 lbs.

Easy to Use

- Field Tamper Recoverable
- Secure browser-based management plus local command line configuration; Optional VINE Manager's intuitive, familiar interface manages multiple AltaSec INEs
- Dynamic Discovery
- DC power

Premium Secure Networking Solution

- Full Mesh Network capability in a portable package
- Low cost of ownership, INE trade-ins accepted
- 3-Year HW & SW warranty
- Free training and tech support

SPECIFICATIONS

NETWORKING FEATURES & PROTOCOLS

Protocols Supported	TCP, UDP, IPv4/IPv6* Dual Stack, ICMP, IGMP, ARP, DHCP
Networking Features	Dynamic IP addressing, dynamic key management, red address confidentiality dynamic discovery
Management	HTTPS browser-based management, VINE manager
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

RED DATA INTERFACE — ETHERNET

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

BLACK DATA INTERFACE — ETHERNET

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

COMSEC CHARACTERISTICS

Algorithms	Type 1 Suite A and Type 1 Suite B cryptography
Key Fill Interface	DS-101
Dynamic Key Generation	FIREFLY (9,17, Enhanced)
Flexibility	Modular, reprogrammable Architecture
Crypto Ignition Key	CIK Removal to UNCLASSIFIED CCI

PHYSICAL

Dimensions (WHD)	7.5 x 1.68 x 11.9 in. (190.5 x 42.7 x 302.2 mm)
Weight	6.5 lbs. (2.9Kg)
Power	+5 VDC and +3.3 VDC

RELIABILITY AND MAINTENANCE

Predicted MTBF	150,000 hours (Telcordia) ground benign
Predicted MTTR	15 minutes
Other	Extensive power up and online BIT

ENVIRONMENT

Operating Temperature	-0°C to +50°C
Non-Operating Temperature	-20°C to +70°C
Operating Altitude	Up to 31,000 Ft.
Non-Operating Altitude	Up to 69,000 Ft.
Non-operating rapid decompression	27,000 ft to 69,000 ft. in 15 seconds
Shock	MIL-STD-810F 516.5 Procedure I SRS curve: 9 to 45 g from 10 Hz to 45 Hz w 6dB slope, 45 g from 45 Hz to 2000 Hz
Vibration	MIL-STD-810F 514.5 Procedure I Cat 24: $0.04g^2$/Hz from 20 Hz to 2000 Hz for 15 minutes each on 3 main orthogonal axes
	MIL-STD-810F, 516.5, Procedure I, ground equipment with a peak acceleration of 40g;
	RTCA-DO-160E, Section 8, Category S, Curve B: $0.012g^2$/Hz for 10 to 40 Hz, $0.012g^2$/Hz to $0.002g^2$/Hz for 40 to 100 Hz, $0.002g^2$/Hz for 100 to 500 Hz, and $0.002g^2$/Hz to $0.00013g^2$Hz for 500 to 2000 Hz for 1 hr. each on 3 main orthogonal axes
EMI/EMC	FCC Class B and EN 55022 Class B
Humidity (Non-Condensing)	90% @+45°C for 96 hours

CERTIFICATION

NSA Certified for TS/SCI and below

JITC Certified

TEMPEST Compliant	NSTISSAM 1/92
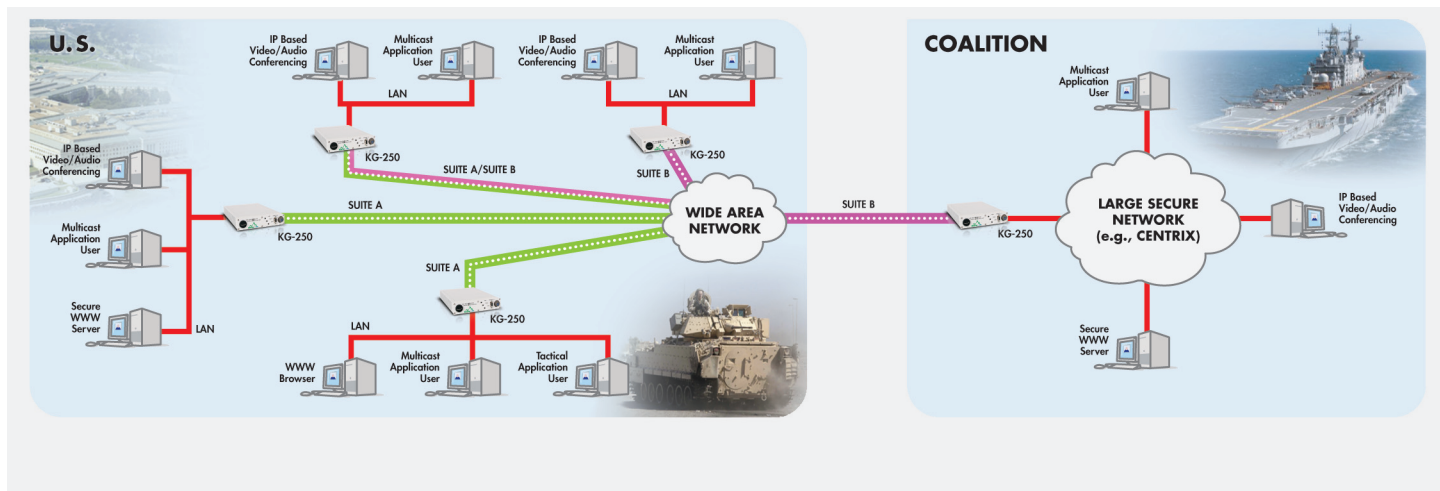
Ordering Information
NSN 5810-01-524-6615CA
Part Number SI-017750-0000

Available for order through ISSP, IDIQ, GSA, and ViaSat

Sales
6155 El Camino Real
Carlsbad, CA 92009
Tel 888.ViaSat.1
(888-842-7281)
Fax 760.683.6815
Email insidesales@viasat.com

Technical Support
Tel 760.476.4754
888.ViaSat.4
Fax 760.929.3938
Email altasec@viasat.com
Web www.viasat.com/secure

ViaSat