

- » High-Speed (2 Gbps) GIGEE
- » Type 1 HAIPE® IS V4.1 Compliant
- » NSA-Certified for TS/SCI and Below
- » Unmatched Efficiency, Speed, and Usability



Bandwidth-hungry? Secure your enterprise at 2-Gbps aggregate throughput with the KG-255. Type 1 HAIPE® IS v4.1 compliant, the KG-255 delivers unmatched speed with the lowest power and operating temperature. The KG-255 is a Type 1 Inline Network Encryptor (INE) certified by the National Security Agency and is used throughout the Department of Defense.

The KG-255 provides advanced networking with embedded Open Shortest Path First (OSPF) routing and HAIPE® to HAIPE® Keying (H2HK). Now warfighters can avoid traveling forward and physically delivering keys to network nodes in high risk and remote locations. A single KG-255 can remotely rekey a network of HAIPE® devices and can function behind commercial firewalls, enabling centralized management from a physically secure location.

With exclusive capabilities such as embedded OSPF routing and an intuitive interface, the KG-255 delivers easy-to-use, faster, more efficient network security above and beyond standard HAIPE® requirements.

The KG-255 provides high-speed gateway functionality for secure networks and supports the end-to-end security requirements of the Global Information Grid (GIG). Answer your network's need for performance and speed with the KG-255.

### ALTASEC KG-255 AT-A-GLANCE

#### High-Speed IP Network Encryption

- » 2 Gbps aggregate line rate
- » 1 Gbps full line rate
- » Low latency
- » Full-mesh network capability
- » Top Secret/SCI and Below secure networking

#### Exclusive Networking Capabilities

- » Software upgradable to meet evolving cybersecurity requirements
- » Embedded OSPF routing with dynamic peer discovery; eliminates GRE tunnels
- » Multicast video on demand
- » Browser-based HMI configurations
- » Centralized VINE Manager™ software provided at no extra cost, seamlessly manage multiple INEs

#### Suite A and/or Suite B

- » Usable by coalition allies and Department of Homeland Security
- » Supports multiple Communities of Interest (COIs) and segregation via Exclusion Keys
- » Fully FI compliant with software and key material source authentication and programmability

#### HAIPE® IS Compliant

- » HAIPE® IS v4.1.0 and v3.1.2 compliant
- » HAIPE® to HAIPE® over the air/net keying

#### Crypto-Modernization Centric

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

#### Premium Support

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

# AltaSec® KG-255 2-Gbps HAIPE® IP Network Encryptor



\* Suite A/Suite B operation supported in all AltaSec INEs except for the IPS-250, which supports Suite B only.

## SPECIFICATIONS

### NETWORKING FEATURES AND PROTOCOLS

<b>Protocols Supported</b>	TCP, UDP, IPv4/IPv6 Dual Stack, ICMP, IGMP, ARP, DHCP
<b>Networking Features</b>	Dynamic IP addressing, dynamic key management, red address confidentiality with dynamic peer discovery, embedded OSPF routing, support for "JUMBO" ethernet frames
<b>Management</b>	SNMP & HTTPS browser-based management, VINE Manager
<b>Multicast</b>	IGMP on red and black subnet
<b>Quality of Service (QoS)</b>	Type of service octet bypass
<b>Fragmentation</b>	Supports fragmentation and header options for red IP packets

### NETWORK INTERFACES

#### Red Data Interfaces

» Electrical/Mechanical: IEEE 802.3; copper RJ-45 100/1000 baseT, IEEE 802.3; Optical SFP 1000 base-SX, LX, ZX, various connector styles (LC, MT-RJ)

#### Black Data Interfaces

» Electrical/Mechanical: IEEE 802.3; copper RJ-45 100/1000 baseT, IEEE 802.3; Optical SFP 1000 base-SX, LX, ZX, various connector styles (LC, MT-RJ)

### COMSEC CHARACTERISTICS

<b>Algorithms</b>	U.S. Type 1 Suite A and Type 1 Suite B cryptography
<b>Key Fill Interface</b>	DS-101
<b>Key Management</b>	Dynamic FIREFLY Key Generation (9,17, Enhanced), Pre-placed Keys. 1700 maximum simultaneous active security associations (SAs)
<b>Flexibility</b>	Modular, reprogrammable architecture, remote HAIPE® to HAIPE® keying
<b>Crypto Ignition Key</b>	CIK based access control, CIK removal to Unclassified CCI, FTR CIKs available upon request

### RELIABILITY AND MAINTENANCE

<b>Demonstrated MTBF</b>	> 170,000 hr
<b>Predicted MTTR</b>	15 min
<b>Other</b>	Extensive power up and online BIT

### PHYSICAL

<b>Dimensions (WxHxD)</b>	17 x 1.72 x 19.8 in; 1U 19-inch rack mountable
<b>Weight</b>	13.3 lb; 6.0 kg
<b>Power</b>	90 to 264 Vrms, 47-63 Hz, 72W typical, 89W max
<b>Battery</b>	External user replaceable battery, two "AA" lithium cells, 3-year operating life typical

### ENVIRONMENT

<b>Operating Temperature</b>	0° to +40° C at sea level
<b>Non-Operating Temperature</b>	-25° to +70° C
<b>Operating Altitude</b>	10,000 ft above sea level
<b>Non-Operating Altitude</b>	40,000 ft above sea level
<b>Humidity</b>	10% to 85% relative humidity, non-condensing
<b>EMI/EMC</b>	FCC class A and EN 55022 class A

### CERTIFICATION

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

### ORDERING INFORMATION

#### PART NUMBERS

<b>NSN</b>	5810-01-541-8542
<b>Part Number</b>	SI-1034961-0000
<b>Available for Order</b>	Through ISSP, IDIQ, and ViaSat

## CONTACT

### SALES

TEL 888 842 7281 (US Toll Free) or +1 760 476 4755 FAX +1 760 683 6815 EMAIL insidesales@viasat.com

### TECHNICAL SUPPORT

TEL 888 842 7284 (US Toll Free) or +1 760 476 4754 FAX +1 760 929 3938 EMAIL altasec@viasat.com WEB www.viasat.com/secure