



Bandwidth-hungry? Secure your enterprise at full duplex speeds of 1 Gbps with the KG-255. In a stackable 1U form factor, the KG-255 is the fastest certified Type 1 GIGEE HAIPE with the lowest power and operating temperature. The KG-255 supports the secure exchange of classified information up to the TOP SECRET level at full duplex speeds of 1 Gigabit per second over commercial IP Wide Area Networks.

The KG-255 is a highly network capable Gigabit Ethernet INE, capable of exceeding the HAIPE IS threshold level features in areas where users want them. By incorporating the latest networking features with an intuitive secure browser based management interface, the KG-255 is easy to configure and use, so operators can focus on other primary responsibilities. ViaSat has priced the KG-255 for widespread usage.

ViaSat is committed to keeping our customers up to date as new HAIPE IS versions are approved, retaining interoperability with our existing fielded products, and obtaining and maintaining interoperability with our competitor's HAIPE IS products. This is a considerable challenge as both the specification and each vendor's products evolve, but it is one we are prepared to meet aggressively.

You can depend on ViaSat to offer network encryption products that are flexible, capable, and leverage your existing investments in your network infrastructure.

ALTASEC KG-255 AT-A-GLANCE

HAIPE IS V1.3.5 COMPLIANT

- » Interoperable, scalable, manageable, upgradable
- » HAIPE IS v3 (IPv4/IPv6 Dual Stack) via SW download¹

NETWORKING FEATURES

- » Small form-factor pluggable (SFP) optical modular transceivers for increased link characteristic and connector style flexibility
- » HAIPE IS dynamic discovery
- » Provides both copper and fiber 1 Gbps interfaces
- » Trusted bypass, key management, traffic flow security countermeasures, networking protocols

MANAGEMENT

- » Field tamper recoverable²
- » Intuitive, secure browser based management interface
- » Authenticated local and remote management
- » Centrally and remotely managed by VINE™ Manager software
- » Secure remote software download
- » Battery and temperature status/indicator

CRYPTO-MODERNIZATION CENTRIC

- » Authenticated, embedded local and remote management
- » Intuitive, secure browser based management interface
- » Dynamic Firefly, enhanced Firefly and pre-placed keys (PPK)

PERFORMANCE

- » 1 Gbps full line rate speeds across all packet sizes
- » 2 Gbps aggregate line rate
- » Low latency
- » High performance in VoIP applications

PREMIUM SECURE NETWORKING SOLUTION

- » 3-Year HW and SW warranty
- » Extended warranty options
- » Free training and tech support
- » KG-250 and other INE trade-ins accepted³

AltaSec® KG-255: Type 1 Gigabit Ethernet In-Line Network Encryptor



SPECIFICATIONS

NETWORKING FEATURES AND PROTOCOLS

Protocols Supported TCP, UDP, IPv4/IPv6¹ Dual Stack, ICMPv4, ARP

Networking Features Dynamic Key Management, red address confidentiality, tunnel end point discovery (HAIPE IS Dynamic Discovery), support for "JUMBO" ethernet frames

Key Exchange HAIPE IS IKE

Quality of Service (QoS) Type of service (TOS) octet bypass, random early drop

Fragmentation Supports fragmentation and header options for plaintext IP packets; Supports reassembly for ciphertext IP packets

Traffic Flow Security All HAIPE IS mandatory countermeasures

SECURITY CHARACTERISTICS

Algorithms US Type 1 traffic encryption (SBU to Top Secret/ SCI), Type 1 image confidentiality, NATO and Non-NATO Suites¹

Key Management Dynamic FIREFLY Key Generation, Pre-placed Keys.

Type 1 key authentication, 9000 maximum simultaneous active security associations (SAs), DS-101 key fill interface

Flexibility Modular, programmable architecture

Crypto Ignition Key CIK based access control, CIK removal to Unclassified CCI

MANAGEMENT

Local and Remote Browser-Based HTTP through SSL tunnel (HTTPS); Command

Management Line Interface (CLI) through local serial console

Mandatory Access Control CIK possession required to access key material

Discretionary Access Control Operator unique password for command line interface and HTTPS access. ECU unique certificates for SSL tunnel

Secure Remote Software Advanced networking features and algorithm

Download upgrades (e.g., IPv6, SNMPv3)

Type 1 Key Load DS-101 red key load through fill port

Reachability Support ECU to ECU ping to support installation

NETWORK INTERFACES

Plaintext 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)

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

PHYSICAL

Dimensions (WHD) 17 x 1.72 x 19.8 in; 1U 19-inch rack mountable or desktop

Weight 13.3 lbs; 6.0Kg

Power 9- - 264 Vrms autoranging, 47-63 Hz, 72W typ. 89W max

Battery External user replaceable battery, two "AA" alkaline cells, 3-Year operating life, changed annually; internal lithium battery 15+ year shelf life, capacity used only if replaceable batteries neglected

ENVIRONMENT

Operating Temperature 0°C to +40°C at sea level

Non-Operating Temperature -25°C to 70°C

Operating Altitude 10,000 ft above sea level

Non-Operating Altitude 40,000 ft above sea level

Humidity 10% to 85% relative humidity, non-condensing

EMI/EMC FCC class A and EN 55022 class A

Mean Time Between Failure 170,000 hours demonstrated

CERTIFICATION

NSA Certified for TS/SCI and below

JITC Certified

TEMPEST Compliant NSTISSAM 1/92

ORDERING INFORMATION

PART NUMBERS

NSN 5810-01-541-8542

Part Number SI-1034961-0000

Available for Order Through ISSP, IDIQ, and ViaSat

CONTACT

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SALES

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