ONLY HAIPE® BUILT TO MOVE WITH MOBILE-SPECIFIC FEATURES

» Remote interface panel
» Suite B cryptography
» Remote zeroization
» Heartbeat signaling
» Mobile and Airborne-specific housing enclosures

The KG-250M, part of the AltaSec family of Inline Network Encryptors (INEs), is the first Type 1 HAIPE® device specifically designed for secure networking in mobile platforms such as helicopters, cargo aircraft, and HMMWVs. This INE is built to move, with mobile-specific features such as a remote interface to stowable device, remote zeroization, and heartbeat signaling.

The KG-250M offers remote zeroization and heartbeat ("keep alive") signaling, ideal for any situation in which a command post warfighter needs to assess or terminate crypto operation in a remote vehicle or aircraft. For installations in which the remote interface panel is not near the driver or pilot, you can optionally connect a small, secondary zeroization panel within the user's reach to allow for even faster zeroization in emergency situations. The first certified HAIPE with Suite B algorithms, AltaSec is the crypto of choice for mobile platforms in hostile environments. This cryptography also ensures that the KG-250M can connect with coalition HAIPE devices.

CONVENIENT MANAGEMENT OF STOWED CRYPTO

Stow your AltaSec anywhere in the vehicle or aircraft, and control the encryptor by using its remote interface panel — even if the stowed crypto is not physically accessible. The remote interface panel, only available on AltaSec encryptors, can be used via cable away from the stowed unit.

The KG-250M offers Suite B for UAV use and coalition interoperability as it is the only airborne-specific NSA Type 1 Suite B HAIPE crypto. It is ideal for UAV's in hostile environments and is interoperable with coalition HAIPE devices with the capability of Suite A, Suite B, or Suite A/Suite B.

ALTASEC KG-250M AT-A-GLANCE

THE ONLY HAIPE® BUILT TO FLY WITH AIRBORNE-SPECIFIC FEATURES

» 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 (IPv4 only)
» 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 and SW warranty
» Free training and tech support

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, 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, Enhanced FIREFLY

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 mins

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: 0.04g2/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% (±4%) @+45°C for 96 hours

CONTACT

ViaSat®