

# KG-245A 1Gbps In-line Network Encryptor



## Full Tactical HAIPE Encryptor (v3.1.2/FI)



Supports Both Full Tactical and Wiring Closet Environments

### OVERVIEW

The KG-245A is a full-tactical Type-1 HAIPE encryptor supporting unicast and multi-cast operations for U.S., CCEB, National, NATO, Joint/Coalition, and Homeland Security missions. The KG-245A protects data up to TS/SCI and represents the industry standard for high performance, low latency, and interoperable security for IP networks.

### FEATURES

- Security
  - Secures data up to TS/SCI
  - HAIPE 3.1.2/Foreign Interoperability
  - Supports FF/EFF and PPK keymat
  - Over the Network HAIPE-to-HAIPE Rekey
- Interoperability
  - HAIPE 4.1 compliant
  - Interoperable with legacy Hv1.3.5 & Hv3.0
  - IPv4 and IPv6
  - Foreign Interoperability
- Networking
  - NAT-T for remote access users
  - Advanced Networking/Routing/QoS Features
  - Flexible Adapters for Copper or Fiber
  - Static Routes & Dynamic Discovery
  - Type of Service (TOS) Bypass
  - Load Key while in Traffic; No Network Outages
  - Field Tamper Recovery
  - User replaceable battery
- Performance/Capacity
  - Throughput 1 Gbps full duplex (2 Gbps Aggregate)
  - Low Latency (< 100µs)
  - 4, 8, 48-byte cipher blocks
  - 8,000 Simultaneous Security Associations
  - 8,000 PT Destinations
  - 6 FF/EFF Keysets/100 PPKs
- Ease of Use
  - Common HAIPE Management (MIB) Support
  - Local and Remote Management (SNMP v3)
  - Remote Programmability & Zeroization
  - Flexible, Scalable, Distributed Management with Web Browser and Northbound I/F
  - Remote or Local Software Upgrade
- Low Cost of Ownership
  - 5 or 7 year warranty with 1 or 2 year extensions
  - No Cost Training & Hot Line
  - Low initial acquisition cost



Two (2) KG-245As fit in a 1U 19" Rack

# KG-245A 1Gbps In-line Network Encryptor



## Full Tactical High Assurance IP Encryptor (HAIZE v3.1.2/FI)

### PHYSICAL CHARACTERISTICS

- Size: 8.5"W x 1.61"H x 18.13"D
- Weight: 11 lbs
- Mounting 2 per 1µ 19" Rack (mounting kit available)
- Use of Flexible Adapters support FO and Copper I/O
  - Copper: RJ-45 10/100/1000 ETHERNET
  - Fiber: LC -SX, LC -LX, -SX Tactical
- Power: 34W, 18-36VDC; Internal MIL-STD-1275 PS; Ext AC Adapter (Included) 90-256 VAC; 47-63 Hz

### RELIABILITY/ENVIRONMENTS

- Temperature:
  - Operational: -40°C to +51°C
  - Non-Op: -40°C to +71°C
- Passive Cooling
- Humidity: 95% Non-Condensing
- Vibration:
  - Composite Wheeled Vehicle
  - Tracked Vehicle (NO isolation required)
  - Shipboard Equipment
  - Fixed Wing Turbo Jet/Turbo Fan Engines
- Shock (Operational): - 40g peak, 11 ms
  - Navy Hammer
  - RTCA/DO-160D
  - Crash Hazard: 75g peak, 6 ms
- Harsh Environments: - Fuel Air Explosive Atmosphere
  - Blowing Rain
  - Humidity: 95% RH Non-Condensing
  - Fungus
  - Salt & Fog - Sand & Dust
- MTBF: 256K hours, Ground Fixed

### MANAGEMENT

- Secure, Authenticated Remote Management via SNMPv3 and Common MIB
- Operational monitoring
- Extensive audit logging
- Alarm condition detection and reporting
- Configuration and security management
- Secure remote download of software updates
- In-band management via IEEE 802.3 Ethernet
- Local management via RS-232 console interface or SNMP v3

### SECURITY

#### Encryption/Modes:

- Type -1 encryption – Unclass to Top Secret/SCI
- Programmable algorithm implementation
- Suite A & B user selectable configurations
- 4-byte, 8-byte, and 48-byte crypto block sizes
- ESP tunnel mode and transport mode

- 1-8,000 simultaneous security associations
- 1-8,000 Redside Hosts and Subnetting
- Supports Traffic Flow Security

#### Key Management:

- Dynamic FIREFLY/EFF key generation
- 6 FF/EFF KeySets/100 Pre-positioned keys (PPK)
- Over the network Rekey and Zeroization
- PPK Autochaining
- 8 User CIKS, Field Tamper Recovery CIK
- COI Separation via exclusion keys
- Supports Multiple Universal EFF keys
- CCEB, NATO, and Coalition Releasable

### ADVANCED NETWORKING

- IPv4; IPv4/6 Dual Stack
- Routing: Static; Dynamic Discovery RIP; Generic Discovery Client, OSPF Tunneling
- QoS/ToS Bypass & Setting
- Multiple Manager Support
- Key Load & Key Changeover/Update while in traffic
- Automated Recovery
- Fragmentation/Reassembly
- NAT-Traversal for Remote Access Users
- ICMP/PING; IGMP (Multicast); PMTU Discovery; SNMP v1/v2/v3; ARP; UDP; TCP; PHRD; SA Orphan Recovery
- 64-9,216 Byte Packets (Supports Jumbo Frames)
- Explicit Congestion Notification Bypass

### WARRANTY AND TRAINING

- Purchase with 3, 5, or 7 Year Warranty
- 1 and 2 year warranty extensions available
- Free 2-day training class (1 seat)
- Installation and Configuration support available

L-3 Communication's Type-1 encryption technology is part of the DoD's "Defense in Depth" strategy and considered only a portion of an overall defense in-depth implementation. A comprehensive network Information Assurance strategy involving "Defense in Depth" is required to ensure secure and reliable protection for sensitive and classified information. HAIZE® is a registered trademark of the National Security Agency (NSA). RedEagle™ is a trademark of L-3 Communication and represents the KG-240A, KG-245A and KG-245X product family. Specification is subject to change without prior notice. Incorporating NetHawk VPN Technology Licensed by SafeNet Inc. Copyright L-3 Communication Systems-East 2011. CHM is Powered by Zoho corporation. [www.zoho.com](http://www.zoho.com)

### **L-3 Communication Systems-East**

1 Federal Street

Camden, NJ 08103 USA

Toll Free: 1-800-339-6197

Technical Support: [IASupport.CSE@L-3Com.com](mailto:IASupport.CSE@L-3Com.com)

[www.L-3com.com/RedEagle](http://www.L-3com.com/RedEagle)