

KG-245X 10Gbps In-line Network Encryptor



The Highest Performing HAIPE® Encryptor for Enterprise Wide IP



- HAIPE v3.1.2/HAIPE 4.1 Compliant
- 20 Gbps Aggregate data rate
- Common HAIPE Manager Support
- Free Training, Hotline Support

PRODUCT DESCRIPTION

The KG-245X is the fastest NSA certified High Assurance Internet Protocol Encryptor available. It supports IP security requirements at classification levels up to TS/SCI for network backbone applications.

EASE OF USE AND SUPPORT

When deployed with L-3's Common HAIPE Manager (CHM), the KG-245X offers extraordinary ease of use. Deployment is simplified using a range of configuration tools, management is via an intuitive user interface, and the KG-245X supports over the network rekey for your entire network of Hv3.1 products. L-3 provides free training for every unit, no-cost hotline support, and 3, 5 & 7 year warranty options with optional 1 or 2 year warranty extensions.

FEATURES

- Security
 - Secures data up to TS/SCI
 - HAIPEv3.1.2/Foreign Interoperability
 - Supports FF/EFF and PPK keymat
- Interoperability
 - All HAIPE: Hv1.3.5, Hv3.0, Hv3.1.2, & Hv4.1
 - IPv4 and IPv6
 - Foreign Interoperable
- User Friendly Operation:
 - Common HAIPE Management (MIB) Support
 - Flexible Interfacing via XFP Modules
 - PPK Auto-chaining
 - Static Routes & Dynamic Discovery
 - Type of Service (TOS) Bypass
 - Remote Programmability, Rekey, & Zeroization
 - Load Key while in Traffic; No Network Outages
- Performance/Capacity
 - Throughput: 20Gbps Aggregate
 - Low Latency: <100µs
 - Efficient Data Handling: 4, 8, 48-byte cipher blocks
 - 8,000 Simultaneous Tunnels
 - 4,000 PT Destinations
 - 6 FF/EFF Keysets
 - 100 PPKs



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PHYSICAL CHARACTERISTICS

Size: 17"W x 17"D x 3.5"H
Weight: 20 lbs
Mounting: 2µ 19" Rackmount (with supplied brackets)

SECURITY

Authentication:

- CIK-based access control (supports up to 8 CIKs)
- Device-to-device authentication
- Access control lists
- Security level checking

Encryption/Modes:

- Type-1 encryption-Unclass to Top Secret/SCI
- Programmable algorithm implementation
- 4-byte, 8-byte, and 48-byte crypto block sizes
- Multi Security Level Enclaves by "Nesting" INEs
- ESP tunnel mode and transport mode
- 1-8,000 simultaneous security associations
- 1-4,000 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
- Supports Multiple Universal EFF keys
- National, CCEB, NATO, and Coalition Operations
- Load Key without interruption of Traffic
- 36 months key storage without AC power

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

ENVIRONMENT

- Temperature: 0° to 40°C
- Humidity: 90% non-condensing
- Altitude: -200 to 10,000 Ft
- MTBF 179K hours-calculated @ 25°C GSI

POWER REQUIREMENTS

- Universal Auto-ranging Power Supply
- 100-240 VAC @ 50-60 Hz
 - 250 Watts typical

NETWORK INTERFACES

Plaintext/Ciphertext:

- IEEE 802.3 Ethernet
- Standard XFP (SR, LR, ER) Optical Interfaces

NETWORK PROTOCOL

Data Rates Supported

- Up to 10 Gbps, full duplex (aggregate 20 Gbps)
- 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, Configuration, and Management Support available

DESIGN COMPLIANCE

TEMPEST/EMC/EMI

- NSTISSAM TEMPEST 1/92
- FCC Part 15 Class B

Safety

- UL 1950

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. HAIPE® 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

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