

RedEagle™ GX

KG-245

**Provides 1 Gbps
HAIPIS* Interoperable
Network Encryption**

FEATURES

- HAIPIS Interoperability
- 1 Gbps "Wire-speed"
- 2 Gbps Aggregate
- Type I, TS/SCI and Below
- FIREFLY and Prepositioned Keys
- 10,000 Simultaneous Security Associations
- Dynamic Discovery and Static Routing
- 20,000 Redside Hosts and Subnetting
- Full Duplex, Simplex, Multicast and Broadcast
- Local and Remote Management
- Full "Remote" Programmability
- Desktop or 19" Rack Mountable
- Crypto Modernization Ready

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www.L-3Com.com/RedEagle



PRODUCT DESCRIPTION

The RedEagle™ KG-245 is a HAIPIS interoperable 1 Gbps network encryptor supporting security levels of TS/SCI and below. With both Red and Black 10/100/1000 BASE-T (RJ-45) and optional (SFP - LX; - SX) network interfaces the RedEagle™ KG-245 separates the network into two parts: Protected and Public. The RedEagle™ KG-245 allows tunneling of classified IP traffic through an unclassified IP network, tunneling of compartmented data through a lower-security level network, or tunneling of unclassified traffic through a classified network. The RedEagle™ KG-245 is fully software programmable (crypto, key management, application and protocols) from a remote location using its RedEagle™ Manager.

APPLICATIONS

Network Secure Communications:

- Virtual Private Networking
- Multi-Security Level Networking
- Video Teleconferencing
- Multicast
- TS/SCI and Below
- Foreign Interoperable Ready (CCEB, NATO Coalition)

* High Assurance Internet Protocol Interoperability Specification

SPECIFICATIONS

RedEagle™ KG-245

PHYSICAL CHARACTERISTICS

Size: 17" W x 17" D x 3.5" H (2U Rack Mounting)
Weight: 20 lbs.
Mounting: Desktop or 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 traffic encryption - SBU 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 (user protocol "agnostic")
- Up to 10,000 simultaneous active security associations between RedEagle™ or other HAIPIs compliant devices
- Up to 20K Redside Hosts and Subnetting
- Supports Traffic Flow Security

Key Management:

- Dynamic FIREFLY key generation
- 100 Prepositioned keys
- DTD-compatible key fill via DS-101
- Supports Multiple Universal FIREFLY KeySet for National, CCEB, NATO and Coalition Operations
- Remote or Local Zeroization

Key Retention:

- No user replaceable battery
- 36 months key storage without AC power

MANAGEMENT

Interfaces:

- RS-232 menu-driven local console interface
- In-band via IEEE 802.3 Ethernet
- Out-of-band via 10/100 IEEE 802.3 Ethernet (future)

Security/Configuration:

- Secure, Authenticated Remote Management
- Extensive audit logging
- Alarm condition detection and reporting
- Configuration and security management
- Secure remote download of software updates and new algorithms
- Operational monitoring
- SNMP management
- Common Management Information Base (MIB)
- Remote Zeroization

Rear View:



The Type 1 encryption provided by the KG-245 is part of the Department of Defense *Defense in Depth* strategy. Type 1 encryption is only one portion of the overall defense in depth. A comprehensive network information Assurance strategy involving *Defense in Depth* is required to ensure secure and reliable protection for sensitive and classified information

NETWORK INTERFACES

Plaintext:

- IEEE 802.3 Ethernet
- 10/100/1000 BASE-T (RJ-45)
- Auto-sensing LAN Port (crossover)
- Optional SFP - LX; - SX Optical Interfaces

Ciphertext:

- IEEE 802.3 Ethernet
- 10/100/1000 BASE-T (RJ-45)
- Auto-sensing LAN Port
- Optional SFP - LX; - SX Optical Interfaces

NETWORKING PROTOCOL

Data Rates Supported:

- Up to 1 Gbps, full duplex (aggregate 2 Gbps throughput)

Protocols Supported:

- IP, TCP, UDP, SNMP, ESP, IKE, HAIPIs
- ToS bits, ICMP and IGMP bypass support

Routing:

- Dynamic Discovery and Static Routing

Communication:

- Full Duplex, Simplex, Multicast, Broadcast

ENVIRONMENTAL

Operating:

- Temperature: 0° to 50° C (32° to 122° F)
- Humidity: up to 90% non-condensing
- Altitude: -200 to 10,000 Ft

POWER REQUIREMENTS

Universal Autoranging Power Supply:

- 85-264 VAC @ 47/63 Hz
- 100 Watts typical

DESIGN COMPLIANCE

EMC/EMI:

- FCC Part 15 Class B

Safety:

- UL 1950

HAIPIs

Security:

- NSA Type I
- NSTISSAM TEMPEST 1/92

WARRANTY AND TRAINING

Standard 3 Year Hardware / 3 Year Software

- Extended warranty options available

Installation, Configuration and Management Training Available

RedEagle™ KG-245 incorporates technology licensed by CipherOptics Corporation.

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