Viasat KG-255X is a rugged, Type 1 Inline Network Encryptor (INE) certified by the National Security Agency for up to TS/SCI. This flexible security appliance delivers trusted protection for your enterprise or tactical network by leveraging 2 Gbps aggregate processing power and a software-programmable architecture to meet evolving cybersecurity requirements. The KG-255X supports standard copper, fiber single-mode/multi-mode SFPs commonly used with networking equipment.

The KG-255X’s thermal design and packaging provides effective power management, high reliability and lower touch temperatures. Combined with Viasat’s high-availability rack, Viasat can accommodate high density 1U stacking of encryptors.

With the ability to host a wide range of networking features such as Open Shortest Path First (OSPF) and Protocol Independent Multicast (PIM), the Viasat KG-255X can help reduce your network overhead and seamlessly integrate remote Plain Text networks. Remotely rekey a network of HAIPE devices from a physically secure location with HAIPE-to-HAIPE over-the-air/net keying. Improve performance over high-latency links with embedded TCP/IP acceleration (xPeP). Viasat’s INE supports configurations for one-to-one, many-to-one and many-to-many multicast scenarios improving flexibility and reducing administrative overhead.

KG-255X can be used either as a Layer 3 HAIPE or Layer 2 EDE depending on the mode of operation that is activated via user selection.*

In HAIPE mode it can interoperate with KG-250X/KG-250XS/IP5-250X or any other HAIPE compliant device. It also has VLAN/Ethernet tunneling for Layer 2 data over Layer 3 networks.

In the EDE-CIS mode it can interoperate directly with Viasat’s Type 1 high speed ethernet encryptors, for example the KG-142, using MACSEC to aggregate data for data center interconnect.

*Future capability available via software upgrade.
SPECIFICATIONS

NETWORKING FEATURES AND PROTOCOLS
- Protocols Supported: TCP, UDP, IPv4/IPv6 Dual Stack, ICMP, IGMP, ARP, DHCP, PIM
- Networking Features: Dynamic IP addressing, dynamic key management, plaintext address confidentiality with dynamic peer discovery, embedded OSPF routing, support for “JUMBO” Ethernet frames
- Management: SNMP & HTTPS browser-based management, VINE Manager software
- Multicast: IGMP on plaintext and ciphertext subnet
- Quality of Service (QoS): Type of service octet bypass
- Fragmentation: Supports fragmentation and header options for plaintext IP packets

WEB
www.viasat.com/encryptors

COMSEC CHARACTERISTICS
- Algorithm Agile: ACC compliant
- Key Fill Interface: Type 1 Suite A and/or Suite B (AES-EFF) or IPMEIR
- Flexible Keying: Crypto Ignition Key removal to unclassified CCI, OTNK (KMI Aware, PDE enabled), unclassified/classified Device Generated Shared Key (DGSK)

PHYSICAL CHARACTERISTICS
- Dimensions (W x H x D): 7.9 x 1.5 x 12.5 in.
- Weight: 9 lb
- Power: 40 W, 12 to 28 VDC; MIL-STD-1275E, MIL-STD-704F
- Battery: External user replaceable battery, one “1/2AA” lithium cell, 3.5 year operating life typical

RELIABILITY AND MAINTENANCE
- Predicted MTBF: 250,000 hr
- Predicted MTTR: 15 min
- Other: Extensive power up and online BIT

ENVIRONMENT
- Operating Temperature: -40° to 60° C
- Storage Temperature: -40° to 71° C
- Humidity: To 95% MIL-STD-810G, Method 507.5
- Altitude: 50,000 ft operational, 70,000 ft storage; MIL-STD-810G, Method 500.5
- Vibration: MIL-STD-810G, Method 514.6, Category 4
- Shock: MIL-STD-810G, Method 516.5
- EMI/EMC: MIL-STD-461E
- Rain: Blowing rain MIL-STD-810G, Method 506.5
- Fungus: MIL-STD-810G, Method 508.6
- Salt Fog: MIL-STD-810G, Method 509.5

CERTIFICATION
- NSA Certified for TS/SCI and below
- TEMPEST Compliant NSTISSAM 1/92 Level 1

ORDERING INFORMATION
- Part Number: 1195064
- NSN number: 5810-01-663-5347
- Rack Mount: P/N 1231432 (High Availability: holds two KG-255X)
- P/N 1283625 (Viasat Universal INE Rack: holds two KG-255X)
- Available for Order: Through IDIQ and Viasat

CONTACT

SALES
TEL 888 842 7281 (US Toll Free) or +1 760 476 4755  FAX +1 760 683 6815  EMAIL insidesales@viasat.com  WEB www.viasat.com/encryptors

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