

REV UP YOUR SECURE SATELLITE NETWORK WITH EMBEDDED TCP ACCELERATION

- » All-in-one IP encryption/acceleration device is ideal for secure networking in mobile and/or space-limited environments
- » Delivers faster, more dependable secure networking over satellite and high-latency connections
- » Field-upgradable via KG-250 software download



Share mission-critical information securely over satellite links with the all-in-one convenience offered by the AltaSec KG-250 IP encryptor with embedded xPEP. Boosted by built-in TCP/IP acceleration, this HAIPE Type 1 Inline Network Encryptor (INE) delivers faster, more dependable secure networking over high-latency IP connections.

With the KG-250's embedded TCP/IP accelerator, you can supercharge your secure satellite connection to improve throughput by up to eight times faster than a typical TCP connection. Because HAIPE encryption algorithms inhibit TCP acceleration techniques employed by Satcom modems and VSAT equipment, secure satellite networks rely on ViaSat's eXtreme Performance Enhancing Proxy (xPEP) technology to overcome latency issues. Injected with xPEP, the KG-250 revs up secure satellite connections without needing extra devices and peripherals in the network.

When enabled, the KG-250 with embedded xPEP provides TCP/IP acceleration for reliable end-to-end communications without requiring any changes to end-user equipment. The device ensures better performance over latent links, so you can successfully run web applications, send emails, and transfer files over your secure satellite connection without adding another device.

Armed with two modes of TCP acceleration, xPEP automatically detects your network configuration, and dynamically switches to the optimal TCP acceleration technique for your network. If another KG-250-with-xPEP or ViaSat Compact xPEP external accelerator is detected, XL mode is used for maximum throughput. If xPEP technology is not detected on the other end of the connection, embedded xPEP provides one-way acceleration.

Keep deployment and operation simple over your secure satellite network with the all-in-one convenience of the KG-250 with embedded xPEP. This TCP/IP accelerator is available via an optional software download for currently deployed KG-250s.

EMBEDDED xPEP AT-A-GLANCE

POWERFUL TCP ACCELERATION

- » Uses faster connection start, faster window recovery, and fast connection set-up
- » Supports over 10,000 simultaneous TCP connections
- » Supports priority queuing and rate limiting
- » Preserves TCP end-to-end semantics
- » Uses large TCP window size over satellite networks
- » Flow control and congestion control used to adapt throughput for each TCP connection
- » Accelerates TCP over high-loss links/networks using ViaSat's proprietary XL mode

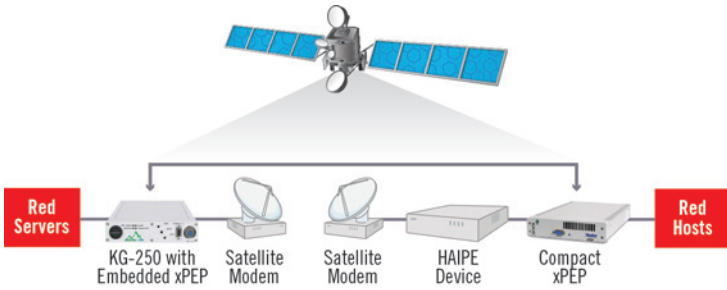
EASY TO USE

- » Simple to configure and manage
- » Provides secure web-based menu options for local and remote management
- » Easily enabled via an xPEP software License key
- » Built-in satellite link rate/delay/error simulator for testing

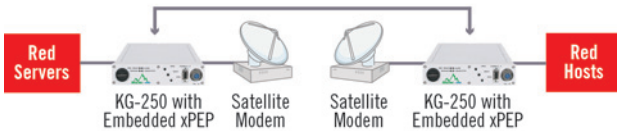
VERSATILE FOR VARYING NETWORK CONFIGURATIONS

- » Supports GRE tunnels
- » Supports multicast forwarding and IGMP bridging
- » Can be configured as a VLAN trunk end point
- » Can be used in configurations where xPEP is installed on only one side of a satellite network
- » Interoperable with other TCP/IP devices
- » Designed from the ground-up for multi-site, variable rate, asymmetric rate, satellite DAMA networks, not just fixed rate-to-point links
- » Provides fair sharing of bandwidth among multiple connections
- » Adapts quickly to dynamically-varying bandwidth

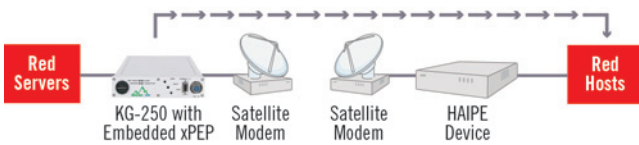
TWO MODES FOR AUTOMATIC TCP ACCELERATION OVER ANY NETWORK



XL: ViaSat's two-way acceleration works with both embedded and Compact xPEP



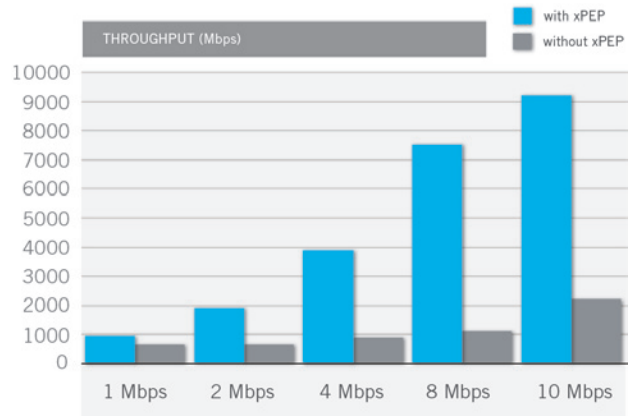
XL: ViaSat's two-way acceleration for superior performance in noisy, high-loss networks



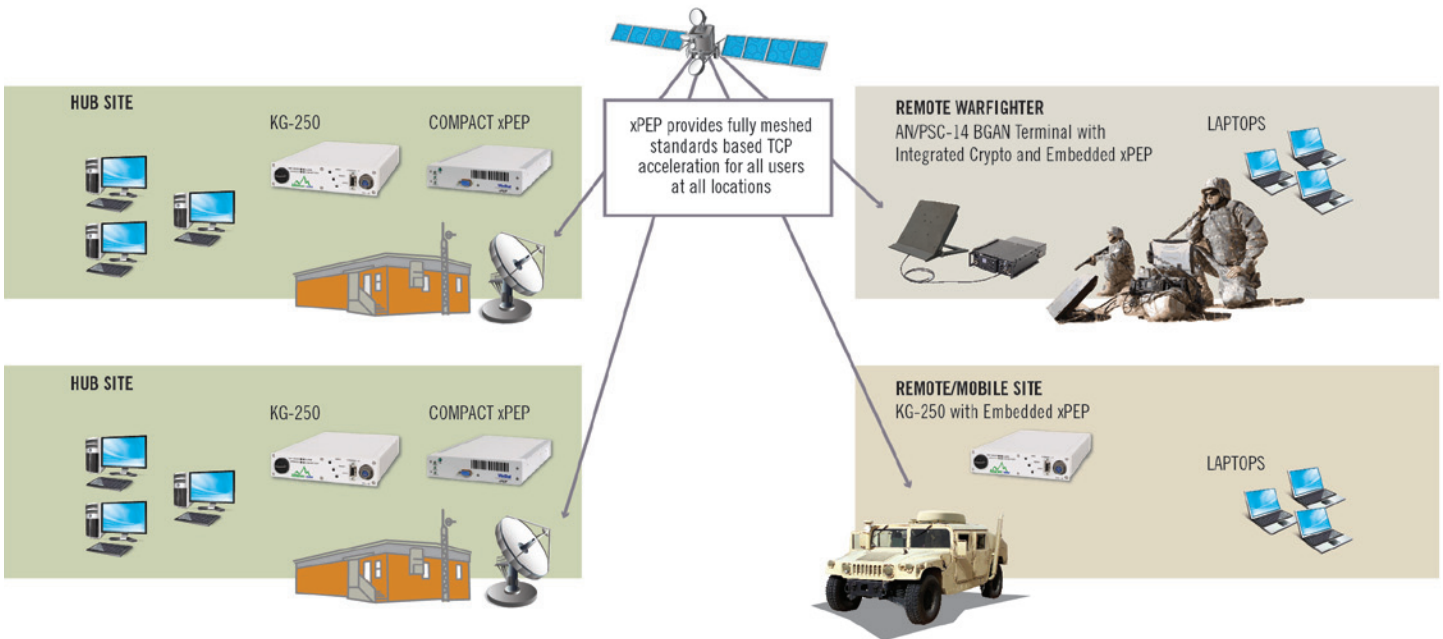
One-way acceleration if there is no TCP accelerator on the other end

The KG-250 is the only crypto with embedded TCP/IP acceleration for satellite and high-latency connections. Injected with xPEP acceleration technology, the KG-250 automatically detects your network configuration and dynamically chooses between two-way XL and one-way acceleration to maximize data throughput.

xPEP improves file transfer times by up to eight times faster than typical TCP satellite connections.



xPEP IN THE TACTICAL ENVIRONMENT



CONTACT

6155 EL CAMINO REAL, CARLSBAD, CA 92009

SALES
TEL 888.VIASAT.1 (888.842.7281) FAX 760.683.6815 EMAIL INSIDESALES@VIASAT.COM

TECHNICAL SUPPORT
TEL 760.476.4754 OR 888.VIASAT.4 FAX 760.929.3938 EMAIL ALTASEC@VIASAT.COM WEB WWW.VIASAT.COM/SUPPORT

Copyright © 2011 ViaSat, Inc. All rights reserved. ViaSat, the ViaSat logo, and AltaSec are registered trademarks of ViaSat, Inc. HAiPE is a registered trademark of the National Security Agency. All other trademarks mentioned are the sole property of their respective companies. Specifications and product availability are subject to change without notice. The Type 1 encryption provided by this High Speed IP Encryptor 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.

