

CipherOptics SG100 IPSEC APPLIANCE

PRODUCT SNAPSHOT

- Standalone IPSec appliance
- Runs Fast Ethernet IPSec with low latency
- Integrates into existing IP networks
- Plug-and-play simplicity



FEATURES AND BENEFITS

IN-TRANSIT DATA SECURITY

IPSec for your core transport network

FULL-DUPLEX

FAST ETHERNET WIRE-SPEED

AES OR 3DES ENCRYPTION

To avoid encryption bottlenecks

MICRO-SECOND RANGE LATENCY

To allow for voice and video applications on your IP network

MPLS AND VLAN TAG SUPPORT

Transparent operation in a service provider or corporate environment

SIMPLE, TRANSPARENT IMPLEMENTATION

Easy setup, policy definition and network installation

IMPROVE SECURITY FOR:

- Site-to-site communications
- Voice- and video-over IP
- Storage networking
- Broadband wireless
- Government SBU data

Taking the vulnerabilities out of IP

The convergence of data, voice and video onto a single network is driving the need for more bandwidth. That, combined with demands to lower networking costs, has resulted in the increased use of IP networks for core business applications. If you are making the move to IP to lower costs and increase bandwidth, the trade-off is that your network is more vulnerable to security breaches, including eavesdropping, tampering and denial-of-service attacks. IP was designed for resiliency and ease-of-use, not security. Mitigating the risks and eliminating the vulnerabilities of your IP transport network is the most significant protection necessary for ensuring data integrity.

Locking your data in transit

Your firewalls, intrusion detection systems (IDS), anti-virus software and other perimeter security technology do their part in preventing many outside threats from entering your network. But what about your data—the heart of your business—when it travels over your core IP transport network? The only way to protect that data is to encrypt it while it's in transit. The CipherOptics SG100 network security appliance protects data in transit while it travels over IP networks at up to 100 Mbps.

IPSec encryption at wire-speed

Using IP Security Protocol (IPSec), the CipherOptics SG100 network security appliance provides full-duplex, wire-speed protection—all with virtually no latency—providing protection for all of your business-critical information in transit, whether it's data, voice or video conferencing. The CipherOptics SG100 combines the best-of-breed in security and speed: robust AES or 3DES encryption processing with full-duplex Fast Ethernet wire-speed throughput. It eliminates costly processing bottlenecks in the network while affordably maximizing the efficiency of existing network resources.

Fast, simple, transparent security

Because it is an appliance and not a multi-purpose device, the CipherOptics SG100 makes network security simple. No complicated network or router re-configuration required. It easily integrates into your existing network without consuming valuable network resources. With simple installation and policy set-up, the CipherOptics SG100 can be installed in minutes, operating transparently to ensure that all of your data in transit is locked down.

Security best practices for regulatory compliance

By having the CipherOptics SG100 integrate easily into the network while at the same time being able to manage it separately, you can build a robust security infrastructure that will help withstand the scrutiny of a security audit. In fact, it is an integral part of best practices to encrypt all sensitive data in transit. The flexibility of the CipherOptics SG100 also makes it a valuable tool in ensuring industry best practices for compliance with such regulations as Graham-Leach-Bliley, California SB1386 and HIPAA.

IPSEC MODES

- Tunnel mode
- Encapsulated Security Payload (ESP)

ENCRYPTION AND INTEGRITY

- AES: FIPS 197 (256 bit keys)
- 3DES: ANSI X.952 (168 bit keys), standard CBC mode
- HMAC-SHA-1-96
- HMAC-MD5-96

AUTHENTICATION AND KEY MANAGEMENT

- Diffie-Hellman groups 1, 2, and 5
- Pre-shared secrets
- Internet Key Management (IKE)
- Manual keys

DEVICE MANAGEMENT

- Secure management interfaces (CLI and browser)
- Out-of-band management
- Secure download of software updates
- SNMP v2c MIB managed object support
- Optional certificated authentication
- Alarm condition detection and reporting

NETWORK SUPPORT

- IEEE 802.3
- VLAN and MPLS tag support
- Jumbo frame support
- Dead peer detection
- PMTU

PERFORMANCE

Throughput: Up to 190 Mbps full-duplex Fast Ethernet with AES or 3DES

Concurrent IPSec tunnels: 350

Secure Associations: 16,000

INTERFACES

- Two Fast Ethernet ports
- *Management:* 10/100 Ethernet and RS-232

ENVIRONMENTAL

- *Operating Temperature:* 0° to 40°C (32° to 104°F)
- *Operating Humidity:* up to 90% non-condensing
- *Operating Altitude:* -200 to 10,000 feet AMSL

PHYSICAL

- Tamper-evident chassis
- *Footprint:* 1.75" H x 17" W x 13" D
- Rack-mountable in standard 19" rack
- *Power:* 115-250 VAC @ 50/60 Hz, auto-sensing
- *Weight:* 5 lbs.

REGULATORY

- *Emissions:* FCC part 15 to Class A Specifications, EN61000-3-2: 1995; EN61000-3-3: 1999; EN61000-4-2 through 4-6, 4-11: 1995
- *Safety:* IEC 60950 for the participating European nations; EN 60950 for all country deviations

CERTIFICATION

- FIPS PUB 140-2 Level 2 validated

