

# CyphreLink

## Protection for data in-transit

### SECURED ENTERPRISE COMMUNICATIONS

CyphreLink is a network encryption solution that provides protection for sensitive and proprietary information transiting any network.

CyphreLink is a site to site network encryption solution securing network connections between two or more sites. Military grade, hardware-based encryption appliances are deployed at each protected site.

CyphreLink is an over the top network solution that secures data as it traverses all points of the network connecting your trusted sites -- routers, switches, firewalls, datacenters, hubs, teleports, and others. Unlike vulnerable software-based VPN solutions that pull heavily on network performance, CyphreLink offloads and accelerates encryption operations through a dedicated security engine.

CyphreLink acts as a network of encrypted tunnels connecting all of your sites and trusted endpoints – tunnels that blacken your network and can't be diverted, unlocked or hacked into. All of your data, communications, network certificates and encryption keys travel in these tunnels freely, so you can conduct business without limitations – and without threats.

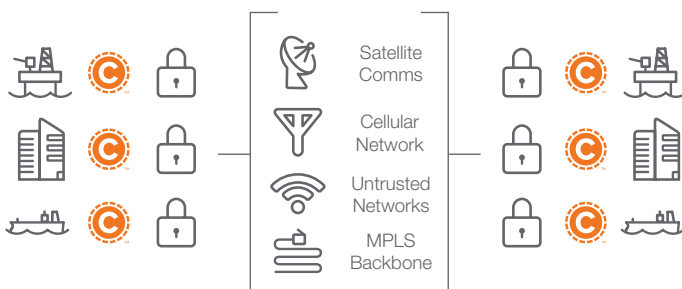
CyphreLink is sold as an appliance or a fully managed and supported service.

#### Features

- Hardware-based encryption not vulnerable to hacks that impact traditional security, software-based technologies, and consumer devices
- Always-on protection does not require a threat to be detected in order to protect data
- No user action required ensures protection can't be turned off or disabled by employees and contractors.
- Ultra low overhead, zero latency improves speed and security, while reducing cost.
- Full compliance with business security, industry standards, and government regulations
- Future-proof solution not impacted by old software, patches, and other security gaps

#### Deployment Flexibility

CyphreLink extends protection for data, keys, and certificates from any site and across any access network. Hardware-based encryption technology leverages a specialized chipset with a dedicated security engine to offload cryptographic operations outside of host CPU and system memory.



## Use Case: Large Multinational Technology Service Provider

**Challenge:** Six separate, distinct challenges associated with software-based encryption commonly experienced in work with client organizations are listed below:

- 20-40% bandwidth overhead for software-based encryption
- Latency increases based on encryption protocol
- Software-based encryption offers limited protection
- Regular maintenance and upgrades require significant human resources; patches difficult to do network-wide
- Some software-based encryption will affect QOS

**Solution:** CyphreLink deployed across 100+ remote locations spanning 20+ countries, enabling the following benefits.

- 4.6% bandwidth overhead (reduced from 20%-40%)
- No latency
- Maximum protection; hardware-based encryption not vulnerable to hacks that impact traditional security
- Software upgrades occur remotely; no human intervention required
- Does not interfere with QOS and other SDWAN appliances

**Benefit:** All data sent across the connections are protected with advanced hardware-based encryption, achieving protection of all data in-transit across the entire CyphreLink-enabled network.

## Security Appliance Hardware Specifications

### Processor

Processor Type	NXP QorIQ P4080 8 PowerPC core 1.5 GHz
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### Memory

Architecture	PC-1333 ECCDDR3 with Parity
Configured RAM	32 GB

### Network

Networking	Freescale DPAA
Ethernet Ports	2 x 10 G Base-T and 2 x 1 G Base-T

### Internal Storage

Hard Drive	Avago LSI MegaRAID 6GiB SATA/SAS RAID4x 2.5inch HDD or SSD
USB Flash Drive	Up to 3 USB 2.0 connections

### Panel Connectors

Network adapter 1 GB	2 RJ-45 for integrated 1-GB network adapters
Network adapter 10 GB	2 RJ-45 for integrated 10-GB network adapters
USB (front)	2 USB 2.0 (Supports video over USB)
USB (back)	1 USB 2.0
Video	HDMI

Power	100-240V AC 50/60 Hz Proprietary BT1 Server Power Supply (BT1 Server -PS)
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### Power Supply

Wattage	203 W @ Maximum
Voltage	100-240V AC 50/60 Hz
Maximum Inrush Current	Under typical line conditions and over the entire system ambient operating range, the inrush current may reach 25 A for 10 ms or less
System Battery	BR2032 3.0 V DC Lithium Coin Cell

### Physical Dimensions

Height	4.2 cm (1.75 in)
Width	21 .0 cm (8.25 in)
Depth	35.6 cm (14 in)
Weight	4.04 kg (8.9 lbs.)
Form Factor	1U
Weight	8.9 lbs. (4.04 kg)

### Environmental

Operating Temperature	10° to 45° C
Operating Altitude	-16 to 2,000 m (-50 to 6,561.68 ft.)
Storage Altitude	-16 to 10,600 m (-50 to 35,000 ft.)
Fans	Long-life, High-efficiency Fans with Variable Auto-speed Control
Ultra-Low Heat Output	< 410 BTU/hr (Per Server)

Cyphre, a RigNet company (NASDAQ:RNET), is a cybersecurity company deploying disruptive data protection innovations by enhancing industry standard encryption protocols with our patent pending BlackTIE® technology.

For more information  
visit our website [www.rignet.net](http://www.rignet.net)

