Lumen® Encrypted Wavelength Solutions

Secure, efficient and high-performing

Enterprises must continually evolve to stay relevant in today's hyper-competitive environment. We see companies across the globe turn to digital initiatives to help drive business, product development and customer experience innovation. But, whether implementing cutting-edge applications or securely moving massive amounts of data between data center and cloud environments, the potential complexities that arise can make it truly challenging for IT organizations to keep up with business demands.

In today's business, you need highly scalable network connectivity with in-flight data encryption and an easy-to-use key management tool that only you can control and have visibility into.

Business solutions

We can help. Evolve your network and keep up with the pace of change as your busines transforms. Gain security, efficiency and high-performance with Lumen Encrypted Wavelength Solutions.

Security

- Simplified security infrastructure and management
- Lumen customer premise wavelength equipment that provides end-to-end encryption at Layer 1 helps to mitigate man in the middle attacks (MITM)
- Customer controlled service activation and key management via the Lumen portals

Efficiency

- Single pane of glass for encryption key management
- No key management equipment necessary
- Help minimize capital outlay
- Less encryption overhead

Growth

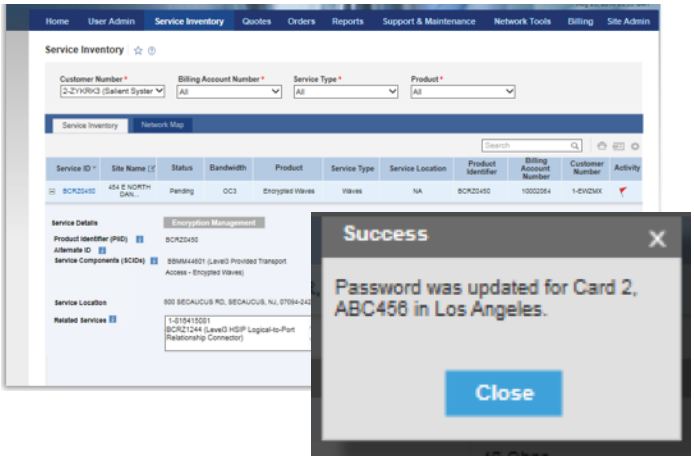
- Ease of scale up to 100G to support growing bandwidth demand
- Global reach with high-capacity footprint in North America and Europe to make site adds easier
- Connect to on-net Lumen locations for better performance



LUMEN® TECHNOLOGIES

Technical features and benefits

- AES-256 encryption with dynamic Diffie-Hellman Key exchange (2048 bit)
- Separated security domain management platform accessible via Lumen portal with two form factor authentication access
- Wide range of speeds supported
  - Ethernet speeds: 10 and 100 Gbps
- Protected and unprotected solutions
- Available low-latency routes and guarantees to meet demand for high performance data mirroring applications
- Available custom routing and network transparency to enable resiliency and maximize customer routing and mapping control
- FIPS 140-2 and Common Criteria (CC EAL-2) certified (future) for compliancy
- Transparent wire-speed service using the internationally recognized AES 256 (Advanced Encryption Standards) algorithm
- Simplified security infrastructure and management to help reduce capital outlay
- Leverage other key Lumen wavelength service benefits and scale up to 100 Gbps, global reach, diversity, protected custom design routing and low latency options and a complete solution



Why choose Lumen service?

- Transformational solutions to achieve your digital initiatives
- Customer-controlled encryption key management via secure, purpose-built application that resides within the Lumen portal
- Strictly separated encryption domain manager

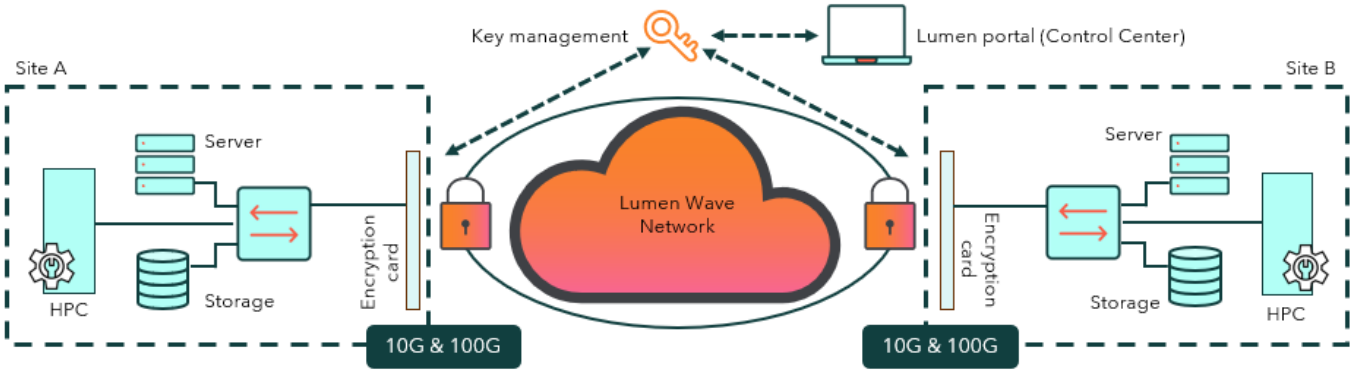


Figure 1: Lumen Encrypted Wavelength

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