

# Lightpath

The background of the top section features a black and white architectural rendering of a modern building's facade, characterized by a grid of windows and structural elements. A bright yellow horizontal bar is positioned below the 'Lightpath' logo. A white rectangular box highlights a portion of the building's upper structure, with a yellow line extending from it towards the left, connecting to the 'Lightpath' logo.

## Optical Encryption

Protect your data and your business with Lightpath Optical Encryption. It's an industry leading, always-on, ultra-low latency solution with high throughput and dedicated encryption management for reliable, secure, ultra-low latency data protection.

The cost-effective solution secures in-flight data in the network transport layer from endpoint to endpoint as it is carried over optical waves across fiber-optic cables. Traffic leaving your site is encrypted at the optical layer for optimized throughput and latency. Gateway routers send traffic directly to the transport device for bulk encryption without requiring expensive encryption gateways or additional encryption appliances. The solution offers protocol-agnostic encryption for a wide range of services and supports all infrastructures, from metro to long-haul.

Lightpath Optical Encryption protects all in-flight data 24/7 whether its traveling across the street, across town, or across borders.

- 10 Gbps, or custom bandwidth speeds

### Highly Secure & Reliable

- Industry-leading encryption over the entire Optical Transport Network (OTN) Layer 1 secures all messaging, headers, and data
- Wire-speed encryption leveraging:
  - Fast & hitless key rotation interval of seconds and Elliptic Curve Cryptography algorithms
  - Independent sets of keys
- Certified Advanced Encryption Standards (AES256) encryption engine
- FIPS 140-2
- TLS https connectivity authenticated with security certificates
- Intrusion detection
- Strong security certification for compliance to data protection legislation
- Adherence to the strictest industry security standards, certifications, and regulations assures solution integrity

Call **877-544-4872** or visit [lightpathfiber.com](http://lightpathfiber.com)

## Easy to Use

Lightpath Optical Encryption enables secure, full end-user control of encrypted service security parameters through the Ciena MyCryptoTool. The Tool software resides on the cryptographic module, so there is no need to install software.

- Simplified key management fully controlled by end user
- Separate set of keys for authentication & encryption
- Integrated software resides on the cryptographic module so no need to install software
- Leverages any web browser to connect to the cryptographic module of the card
- Secure management. Deploys TLS https connectivity that is also authenticated with security certificates

Optical encryption of your in-flight data is a necessary part of a holistic security strategy. Contact Lightpath at 877-544-4872 to learn how we can help your organization secure your data.

## Why Lightpath

Lightpath is revolutionizing how customers connect to their digital destinations by combining our next-generation network with our next-generation customer service. Lightpath's advanced fiber-optic network offers a comprehensive portfolio of custom-engineered connectivity solutions with unparalleled performance, reliability, and security.

Our consultative customer service means we work with you to design, deliver, and support the solution for your unique needs, faster and more easily than ever before. For over 30 years, thousands of enterprises, governments, and educators have trusted Lightpath to power their organization's innovation. Learn how Lightpath can connect you to your digital destinations.

**To learn more about Lightpath, visit [lightpathfiber.com](http://lightpathfiber.com)**