ELECTRIC™
LIGHTWAVE

# ETHERNET CONNECTIVITY

## Advanced Network Connectivity You Can Trust

Your constituents and partner agencies depend on a reliable communications network for access to critical information. Built on Electric Lightwave's extensive fiber backbone, Electric Lightwave delivers scalable solutions that keep costs contained and provide the bandwidth you need. Our Ethernet Services include Metro Area Ethernet Services, SONET Dedicated Ring Services and SONET Point-to-Point Services. Fiber-optic and SONET ring technologies provide high speed connectivity, fail-over protection, and reliability.

### Metro Area Ethernet Services

Empower your agency with a reliable and cost effective Ethernet solution to connect two or more locations. All Electric Lightwave services meet the Metro Ethernet Forum (MEF) specifications and are MEF 9 and 14 certified. Electric Lightwave offers two configuration types: point-to-point with Ethernet Private Line (EPL) and point-to-multipoint Ethernet Virtual Private Line (EVPL) for:

+ Connecting all of your agency locations to a single private network
+ Lowering costs by consolidating multiple point-to-point connections
+ Prioritizing your critical business traffic with Class of Service (CoS)

### SONET Dedicated Ring Services

Transmit voice, data and video traffic over a high capacity dedicated SONET network. SONET Dedicated Ring Services are the perfect solution for applications requiring high-speed transport to multiple locations. Choose these services for:

+ Delivering continuous Internet access for high-speed data transfers required to support imaging applications, call or data centers.
+ Protecting against downtime with automatic rerouting of traffic in the event of a network outage
+ Lowering operational costs for a wide range of applications

### SONET Point-to-Point Services

Provide a dedicated point-to-point network for two locations with multiple bandwidth options to support data, voice, video applications. SONET Point-to-Point Services utilize Electric Lightwave's fiber-optic network to support bandwidth intensive applications and provide an efficient and reliable transport service for:

+ Reducing downtime due to equipment failure through network monitoring
+ Improving design and installation flexibility and reduce costs with standard optical interfaces
+ Providing the reliability and stability of the Electric Lightwave network without a significant investment in new fiber

## ABOUT ELECTRIC LIGHTWAVE

Electric Lightwave™, an Integra company, serves as a trusted network infrastructure partner to enterprises, government agencies and carriers in select markets throughout the western United States. We combine dense metro and intercity fiber assets, enterprise-grade network solutions, including Ethernet, Wavelengths and IP, with a highly responsive and easy to do business with approach. Electric Lightwave offers a premium service experience to match our premium network infrastructure solutions.
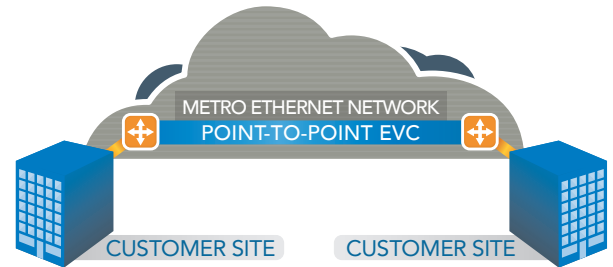
# Features

## Metro Area Ethernet Services

### Ethernet Private Line (EPL)

Provides a point-to-point Ethernet transport solution.

**Components**

+ Port (UNI = User Network Interface): 10/100M port, GigE port, or 10G port

+ Access Link: EoF, EoC, EoS or EoTDM

+ Logical: Ethernet Virtual Connection (EVC) and Committed Information Rate (CIR)



METRO ETHERNET NETWORK
POINT-TO-POINT EVC
CUSTOMER SITE     CUSTOMER SITE

### Ethernet Virtual Private Line (EVPL)

Provides a point-to-multipoint (hub and spoke) Ethernet transport solution.

**Components**

+ Port (UNI = User Network Interface): 10/100M port, GigE port, or 10G port

+ Access Link: EoF, EoC, EoS or EoTDM

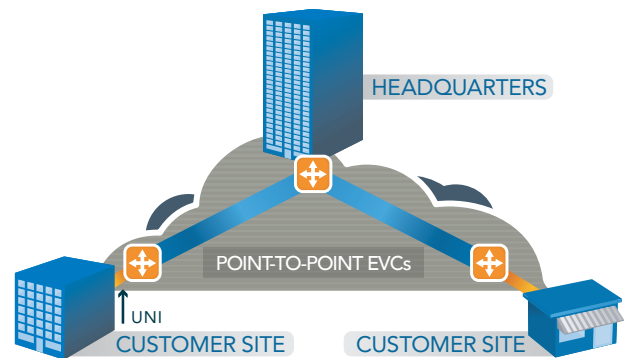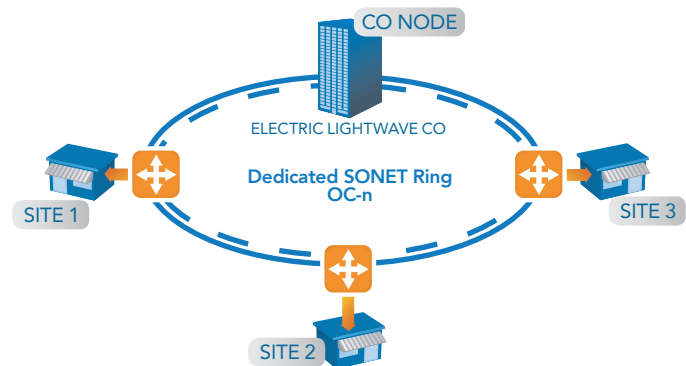+ Logical: Ethernet Virtual Connection (EVC) and Committed Information Rate (CIR)



HEADQUARTERS
POINT-TO-POINT EVCs
UNI
CUSTOMER SITE     CUSTOMER SITE

## SONET Dedicated Ring Services

**Components**

+ Flexible configuration options with ring speeds from OC-3 to OC-192

+ Signal rates from DS1 to Gigabit Ethernet to OC-48c

+ Self-healing SONET ring automatically reroutes without an interruption in transmission with 2-fiber UPSR or 2-fiber BLSR



CO NODE
ELECTRIC LIGHTWAVE CO
Dedicated SONET Ring OC-n
SITE 1     SITE 3
SITE 2

## SONET Point-to-Point Services

**Components**

+ Full-line rate interfacing (at OC-3, OC-12, OC-48, OC-192) and mux drop interfacing (supporting DS1, DS3, OC-3, OC-12, OC-48, or OC-192) available

+ Reliability with sub-50 ms failover and 99.8% availability

+ Bit rates available in OC3 (155.52 Mbps), OC12 (622.08 Mbps), OC48 (2488.32 Mbps) and OC192 (9953.28 Mbps) terminating bit rates



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Electric Lightwave SONET Ring OC-n
SITE 1
SITE 2