The ComNet™ CopperLine® CLFE(X)COAX Ethernet over COAX line consists of four models that support 100 Mbps Ethernet as well as Pass-through Power over Ethernet (PoE) over standard 75Ω coaxial cable. These models support transmission distances of up to 5,000 feet (1524m) at 10 Mbps, or 1800 feet (548m) at 100 Mbps. The CLFE1COAX, the CLFE4COAX, CLFE8COAX and the CLFE16COAX transport, one, four, eight or sixteen channels respectively. The IEEE 802.3-compliant extenders also meets the requirements for IEEE 802.3af PoE power, passing through up to 30 watts of power per port to the powered device (PD). The CLFE(X)COAX series may also be used interchangeably with other CopperLine Ethernet-over-Coax extenders. LED indicators confirm operating status of the device. Packaged in a rugged aluminum housing, these units are designed for desktop or stand-alone mounting. The CLFE8COAX and CLFE16COAX are offered in EIA 19” 1U high rack for easy installation. Environmentally hardened to the requirements of NEMA TS-1/TS-2 for most out-of-plant applications, and true plug-and-play design ensures ease of installation and operation.

FEATURES

› Transmits individual Ethernet data channels with Pass-through Poe over standard coaxial cable.
› Extends Ethernet up to 5,000 feet (1524 m) over coaxial cable
› Extended temperature operation from -40°C to +75°C
› Extended Pass-through Poe meets the IEEE 802.3af standard for Power over Ethernet
› High-data rate, ideal for the high bandwidth requirements of Mega-pixel cameras, multiple IP cameras systems, and cameras requiring jumbo frame transmission
› Symmetric Bandwidth provides consistent upload and download with virtually zero packet loss over the total usable distance
› Type tested to RFC-2544 TCP/IP network bandwidth packet transmission standards
› User-selectable data rate for maximum bandwidth and transmission distance utilization
› Complies with all major IEEE standards and RFC network protocols for UDP, TCP/IP, HTTP/HTTPs
› Designed for use in harsh operating environments: Fully compliant with the environmental requirements of NEMA TS-1/TS-2 and the Caltrans specification for traffic signal Control equipment
› Aluminum housing
› Designed and manufactured in the USA
› Lifetime Warranty

APPLICATIONS

› Retrofit existing analog CCTV installations to Ethernet-based systems
› CCTV systems for Casinos, airports, school campuses
Ethernet-over-Coax Extender with Pass-Through PoE

**Electrical**

- **Ethernet Interface**: 10/100BaseT
- **Ethernet Data Rate**: DIP-switch selectable 10/100Mbps
  - Full data rate / full duplex up to the maximum rated distance
- **Transmission distance**: Coax: 75Ω, 5,000 feet (1524m) at 10BaseT, or 1800 feet (548m) at 100BaseT
- **Operating Power**:
  - CLFE1COAX: 12 VDC, 24 VAC, PoE af @150 mA (max.) 1.5W with external power supply, 2.5W using PoE
  - CLFE4COAX: 12 VDC @ .5 A
  - CLFE8COAX: 12 VDC @ 1.2 A
  - CLFE16COAX: 12 VDC @ 2.5 A
- **Status Indicating LEDs**:
  - Operating Power
  - Ethernet: Traffic
  - Link Extended Ethernet Traffic
- **Connectors**:
  - Ethernet: RJ-45
  - Coaxial Cable: Female BNC
  - Operating Power: IEC380-8
- **RFC**: 2544 TCP/IP Packet Transmission
- **Standards Compatibility**: IEEE 802.3af PoE, RFC: 768 UDP, 2068 HTTP, 793 TCP, 791 IP, 1783 TFTP, 894 IP over Ethernet.
- **Jumbo Frame**: Supported

**Mechanical**

- **Dimensions (H x W x L)**:
  - CLFE1COAX: 1.15 x 1.6 x 4.73 in, (3.0 × 4.0 × 12.0 cm)
  - Weight: 0.28lb (0.12kg)
  - CLFE4COAX: 1.15 x 3.6 x 3.3 in, (4.2 × 9.2 × 8.4 cm)
  - Weight: 0.67lb (0.3kg)
  - CLFE8COAX: 1.75 x 17x 3.25 in, (4.4 x 43 x 8.25 cm)
  - Weight: 3.12lb (1.4kg)
  - CLFE16COAX: 1.75 x 17x 3.25 in, (4.4 x 43 x 8.25 cm)
  - Weight: 3.9lb (1.8kg)
- **Case Material**: Aluminum
- **Environmental**
  - MTBF: > 100,000 hours
  - Operating Temp: -40°C to +75°C
  - Storage Temp: -40°C to +80°C
  - Relative Humidity: 0 to 95%, non-condensing

† Distance figures are based on a 50V PSE PoE power source, and external power supplies for the extenders. Distance figures are obtained using in-house testing mirroring installations. Factors such as coaxial cable quality, the number of connectors in the cable run, the use of PoE, and environmental conditions encountered within the installation may affect the actual transmission distance, and should be taken into consideration.

**DIMENSIONS**

- CLFE1COAX:
  - Dimensions: 1.15 x 1.6 x 4.73 in
  - Weight: 0.28lb
- CLFE4COAX:
  - Dimensions: 1.15 x 3.6 x 3.3 in
  - Weight: 0.67lb
- CLFE8COAX and CLFE16COAX:
  - Dimensions: 1.75 x 17 x 3.25 in
  - Weight: 3.9lb

**ORDERING INFORMATION**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Maximum Distance without PoE†</th>
<th>Maximum Distance with PoE†</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLFE1COAX</td>
<td>1 Port Coax Ethernet Extender</td>
<td>5,000 ft (1524 m)</td>
<td>3,000 ft (909 m)</td>
</tr>
<tr>
<td>CLFE4COAX</td>
<td>4 Port Coax Ethernet Extender</td>
<td>5,000 ft (1524 m)</td>
<td>3,000 ft (909 m)</td>
</tr>
<tr>
<td>CLFE8COAX</td>
<td>8 Port Coax Ethernet Extender</td>
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<tr>
<td>CLFE16COAX</td>
<td>16 Port Coax Ethernet Extender</td>
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</tbody>
</table>

**Accessories**

- 12 VDC wall-mount power supply (one each provided with each extender unit)
- 19-Inch Rack-Mounting Ear Brackets (for use and provided with the 8 and 16 port models only)

Tested and certified by an independent laboratory for full compliance with the environmental requirements (ambient operating temperature, mechanical shock, vibration, humidity with condensation, high-line/low-line voltage conditions, and transient voltage protection) of NEMA TS-1/TS-2 and the Caltrans Specification for Traffic Signal Control Equipment.