# Ethernet-over-Coax Extender with Pass-Through PoE



# COPPERKIT CKFE1COAX

# COPPER





The ComNet<sup>™</sup> CopperLine<sup>®</sup> CopperKit CKFE1COAX Ethernet over COAX line consists of a pair of CLFE1COAX which support one channel of 100Mbps Ethernet as well as Pass-through Power over Ethernet (PoE) over standard 75Ω coaxial cable. These units support transmission distances of up to 5,000 feet (1524m) at 10 Mbps, or 1800 feet (548m) at 100 Mbps. The IEEE 802.3-compliant extenders also meets the requirements for IEEE 802.3af PoE power, passing power 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. 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 Passthrough PoE over standard coaxial cable.
- Extends Ethernet up to 5,000 feet (1524 m) over coaxial cable
- > Extended temperature operation from -40C° to +75C°
- 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

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Mechanical

be taken into consideration.

#### **SPECIFICATIONS**

#### Electrical

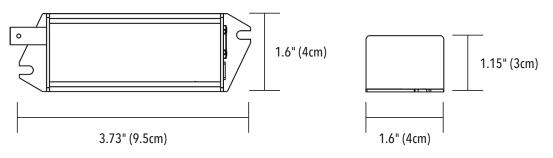
Ethernet Interface	10/100BaseT
Ethernet Data Rate	DIP-switch selectable 10/100Mbps Full data rate / full duplex up to the maximum rated distance
Transmission distance	$Coax^\dagger75\Omega,5,000$ feet (1524m) at 10BaseT, or 1800 feet (548m) at 100BaseT
Operating Power	12 VDC, 24 VAC or PoE af/at @ 150mA (max.)
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

	Size: (H x W x L) Weight: Case Material:	1.15 x 1.6 x 3.73 in, (3.0 × 4.0 × 9.5 cm) 0.28lb (0.12kg) 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			
<sup>†</sup> 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

# DIMENSIONS



### ORDERING INFORMATION

Part Number	Description	Maximum Distance <sup>†</sup>
CKFE1COAX	$2 \times 1$ Port UTP/Twisted Pair Ethernet Extender	3,000 ft (914 m)
Accessories	12 VDC wall-mount power supply (one each provided with each extender unit)	

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.



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