HARDENED -40° TO +75° C

ETHERNET OVER COPPER EXTENDER

PoE 30W PoE+ 30W

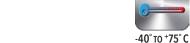**ETHERNET** 4TX+2EX

The ComNet CLFE4+2SMS[POE](C,U) is a six-port Ethernet switch with add/ drop/repeat functionality and provides 4 copper ports operating at 10/100Mbps and is designed to combine four electrical ports along with the incoming Cat5, UTP or Coax CopperLine® extension port into a further CopperLine extension port that forwards this data to the next CopperLine network device. There is no programming required to use this product. The ComNet CLFE4+2SMS(C,U) comes pre-programmed, preventing network video flooding with DIP switch selection of the first CopperLine port as an uplink or as an unmanaged switch. Ports 1–4 of the CLFE4+2SMSPOE(C,U) can supply up to thirty (30) watts of Power over Ethernet (PoE)* and incorporate PoE+ features based on the IEEE 802.3at standard. It is "Plug-and-Play".

FEATURES

› 10/100 Mbps Ethernet
  • 4 × 10/100Mbps RJ-45 Ports
  • 2 × 10/100Mbps UTP/Coax Extended Distance Ports

› Electrical ports support Auto-Negotiation for 10 Mbps or 100 Mbps, full duplex or half duplex data

› Extended distance ports are switch-selectable for 10 Mbps or 100 Mbps data rate, 1 pair or 4 pair in UTP mode

› IEEE802.3at PoE+ 30W (PoE models only)

› Automatic MDI/MDI-X crossover

› Full 10/100 Mbps Bandwidth

› Supports Multicast, Unicast

› Designed to meet 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.

› Voltage transient protection on all power and signal input/ output lines provides protection from power surges and other voltage transient events.

› Extended distance over UTP or Coaxial Cable

› Hot-swappable rack modules

› Interchangeable between stand-alone or rack mount use – ComFit

› LED status indicators confirm operating status

› IEEE 802.3 compliant

› Lifetime Warranty

APPLICATIONS

› 10/100 Mbps Ethernet

› High Speed Computer Links

› Drop/Insert/Repeat Ethernet data over extended distances

› Factory Automation with UTP

* Power Supply for PoE applications is sold separately.

SPECIFICATIONS

Data

Data Interface	Ethernet
Data Rate	10/100 Mbps
	IEEE 802.3 Compliant
	Full Duplex or Half Duplex Electrical Ports

Extended Distance Ethernet

Media	COAX - RG59/U		UTP - 4 pair		UTP - 1 pair	
Data Rate	10M	100M	10M	100M	10M	100M
Extended Distance[1]	5,000 ft 1,524 m	2,000 ft 610 m	3,000 ft 915 m	2,000 ft 610 m	3,000 ft 915 m	1,000 ft 305 m

Running multiple signals in the same twisted pair cable could affect signal quality and is not recommended.

Connectors

Power	Terminal Block
Ethernet	RJ45
Extended Distance	Coaxial (C):female BNC
	UTP (U): RJ-45

POE Pin Assignment

	RJ45 port supports IEEE802.3at
	End-point Positive (VCC+): RJ45 pin 1, 2
	Negative (VCC-): RJ45 pin 3, 6

Power

Operating Voltage	48 to 56 VDC PoE, 9 to 24 VDC non-PoE
Current Draw	5A, with PoE, 1A w/out PoE
Current Protection	Automatic Resettable Solid-State Current Limiters

Electrical & Mechanical

Indicator LEDs	Uplink/Data Activity Electrical Link/Data Activity
	Power PoE
Surface Mount	Wall or Flat Surface Screw Attachment
Circuit Board	Meets IPC Standard
Size	6.1 × 5.3 × 2.2 in (15.5 × 13.5 × 5.6 cm)
Number of Rack Slots	2 (Although the units may be mounted inside a ComNet rack, the PoE models cannot be powered from the built-in rack PSU; they must be powered by an external 48 to 56 VDC PSU.)
Shipping Weight	<2 lb / 0.9 kg

Environmental

MTBF	>100,000 hours
Operating Temp	-40° C to +75° C
Storage Temp	-40° C to +85° C
Relative Humidity	0% to 95% (non-condensing)[2]

Ethernet Standards

IEEE 802.3at PoE+ (PoE Models Only)
RFC: 768 UDP, 2068 HTTP, 793 TCP, 791 IP, 1783 TFTP, 894 IP over Ethernet

[1] Distance figures are obtained using in-house testing mirroring installations. Factors such as coaxial/copper cable quality, the number of connectors/splices 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.
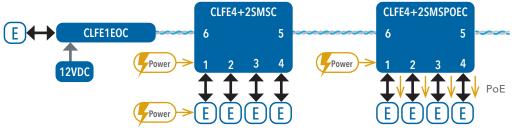
AGENCY COMPLIANCE

FC PART 15 COMPLIANT   CE   cULus   RoHS

MADE IN THE USA

ORDERING INFORMATION

Part Number	Description
CLFE4+2SMSC	10/100TX Drop/Insert/Repeat 4TX/2EX Self-Managed Ethernet Switch, Coax model
CLFE4+2SMSU	10/100TX Drop/Insert/Repeat 4TX/2EX Self-Managed Ethernet Switch, UTP model
CLFE4+2SMSPOEC	10/100TX Drop/Insert/Repeat 4TX/2EX Self-Managed Ethernet Switch with PoE, Coax model
CLFE4+2SMSPOEU	10/100TX Drop/Insert/Repeat 4TX/2EX Self-Managed Ethernet Switch with PoE, UTP model
Accessories	DC Plug-in Power Supply, 90-264 VAC, 50/60 Hz (Included, for benign 0 to 50°C applications only. Hardened power supply available, consult factory)
Options	Suitable Power Supply for PoE Applications (Not included, consult factory)
	Add suffix '/LV' for 12-24 VDC Power option (Not included, consult factory)
	[2] Add suffix '/C' for Conformally Coated Circuit Boards to extend to condensation conditions (Extra charge, consult factory)
	DIN-Rail Mounting Adaptor Plate Kit – With mounting hardware (Optional, order model DINBKT1 or DINBKT4)

Note: In a continuing effort to improve and advance technology, product specifications are subject to change without notice.

TYPICAL APPLICATION

Legend
CAT5e/6 Cable
PoE Power
Coax/UTP

Low Power Consumption

25 May 2022