



FLEXIBILITY



INCLUDED



30W PSE



-40° TO +75°



1 CH



The ComNet CNFE2MCPOE[2,/M] Ethernet media converter is designed to transmit and receive 10/100 Mbps data over optical fiber through user selectable SFP\* modules. These models require the ordering of sold-separately interchangeable SFP modules for fiber type, distance and connectors. The CNFE2MCPOE[2,/M] transmits and receives a single channel of Ethernet data. It also supports IEEE 802.3at as Power Sourcing Equipment (PSE) with up to 30 Watts @ 48VDC. The electrical interface will Auto-Negotiate to a 10 Mbps, or 100 Mbps Ethernet rate without any adjustments. The optical interface operates at a 100 Mbps Ethernet rate. It is environmentally hardened to operate in extreme conditions.

## FEATURES

- › 10/100 Mbps Ethernet
  - 10/100 BASE-T/TX electrical port
  - 100 BASE-FX optical port
- › Electrical port supports Auto-Negotiation for 10 Mbps or 100 Mbps, full duplex or half duplex data.
- › Power over Ethernet (PoE) 30W@48VDC (not supported on CNFE2MCPOE when mounted within ComNet rack)
- › Optical port supports 100 Mbps full duplex data
- › Automatic MDI/MDI-X crossover
- › Distances up to 80 km with optional SFPs
- › 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.
- › Uses interchangeable SFP for fiber type, distance and connector (Ordered separately)
- › Voltage transient protection on all power and signal input/output lines provides protection from power surges and other voltage transient events.
- › No in-field optical adjustments required
- › LED Indicators
- › IEEE 802.3 compliant
- › Lifetime Warranty

## APPLICATIONS

- › 10/100 Mbps Ethernet Media Converter
- › High Speed Computer Links
- › PoE Power Source

\* Small Form-Factor Pluggable Module. Sold separately.

## SPECIFICATIONS

### Data

|                |  |
|----------------|--|
| Data Interface | Ethernet   |
| Data Rate      | 10/100 Mbps<br>IEEE 802.3 Compliant<br>Full Duplex or Half Duplex Electrical Port/Full Duplex Optical Port |

### Fibers<sup>1</sup>

SFP Dependent

### Connectors

|                  |  |
|------------------|--|
| Optical          | Requires selection of sold-separately SFP modules. See ComNet data sheet for number and description of SFP modules |
| Power Electrical | Terminal Block<br>RJ45   |

### PoE pin assignment

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

### Max. PoE current

600mA continuous

### LED Indicators

Optical Link/Data Activity, Power, PSE

### Electrical & Mechanical

|                    |  |
|--------------------|--|
| Power              | 12VDC @ 3A, 24VDC@1.5A   |
| Current Protection | Automatic Resettable<br>Solid-State Current Limiters   |
| Circuit Board      | Meets IPC Standard   |
| Size               | ComFit 6.1 × 5.3 × 1.1 in (15.5 × 13.5 × 2.8 cm)<br>Mini: 4.1 × 3.7 × 1.1 in (10.4 × 9.4 × 2.8 cm) |
| 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 | 5% to 95% <sup>2</sup> |

[1] Multimode fiber needs to meet or exceed fiber standard ITU-T G.651. Single mode fiber needs to meet or exceed fiber standard ITU-T G.652



## ORDERING INFORMATION

| Part Number          | Description   |
|----------------------|---|
| CNFE2MCPOE           | ComFit 10/100 Mbps Ethernet Media Converter with PoE  |
| CNFE2MCPOE2          | ComFit 10/100 Mbps Ethernet Media Converter with PoE, and 2 DIP switch operation (POE and Fiber Link control)   |
| CNFE2MCPOE/M         | Mini 10/100 Mbps Ethernet Media Converter with PoE  |
| Included Accessories | 24 Volt DC 1.5 Amp 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              | [2] Add suffix '/C' for Conformally Coated Circuit Boards to extend to condensation conditions (Extra charge, consult factory)                                      |

NOTE: This product requires a fiber installation with a minimum 30 dB connector return loss. The use of Super Polish Connectors is recommended. Complies with FDA Performance Standard for Laser Products, Title 21, Code of Federal Regulations, Subchapter J. In a continuing effort to improve and advance technology, product specifications are subject to change without notice.

