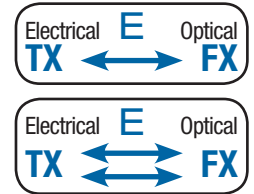


10/100 Mbps Ethernet  
Electrical to Optical media converter



### Description

The ComNet™ CNFE2MC Ethernet and CNFE22MC media converters are designed to transmit and receive 10/100 Mbps data over optical fiber through user selectable SFP options. These models require the ordering of sold-separately interchangeable SFP modules for fiber type, distance and connectors. The CNFE2MC transmits and receives a single channel of Ethernet data and the CNFE22MC transmits and receives two independent channels in one unit. 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. Both are environmentally hardened to operate in extreme temperatures. LED indicators are provided for confirming equipment operating status. Packaged in the exclusive ComNet ComFit housing, the CNFE2MC and CNFE22MC units may be either wall or rack-mounted, or may be DIN-rail mounted by the addition of ComNet model DINBKT1 adaptor plate.

### 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.
- 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 unconditional protection from power surges and other voltage transient events.
- No in-field optical adjustments required
- CNFE2MC and CNFE22MC are hot-swappable rack modules
- CNFE2MC and CNFE22MC are interchangeable between stand-alone or rack mount use – ComFit
- LED Indicators
- IEEE 802.3 compliant
- Lifetime Warranty

SFP = Small Form-Factor Pluggable Module

### Applications

- 10/100 Mbps Ethernet Media Converter
- High-Performance Computer Links



specifications

DATA

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

FIBERS\*

SFP Dependent

FIBER CONNECTORS

Requires selection of sold-separately SFP modules. See ComNet data sheet for number and description of SFP modules

CONNECTORS

|             |                |
|-------------|----------------|
| Power:      | Terminal Block |
| Electrical: | RJ45           |

LED INDICATORS

- Optical Link/Data Activity
- Power

ELECTRICAL & MECHANICAL

|                       |  |
|-----------------------|--|
| Power:                | 8-15 VDC @ 220 mA                              |
| Surface Mount:        | From Rack                                      |
| Rack Mount:           | 1  |
| Number of Rack Slots: | Automatic Resettable                           |
| Current Protection:   | Solid-State Current Limiters                   |
|                       | Meets IPC Standard                             |
| Circuit Board:        |  |
| Size (in./cm) (LxWxH) |  |
| Standard Size         | 6.1 x 5.3 x 1.1 in.,<br>(15.5 x 13.5 x 2.8 cm) |
| Small Size            | 3.3 x 2.5 x 1.1 in.,<br>(8.4 x 6.4 x 2.8 cm)   |
| Shipping Weight:      | <2 lbs./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)† |

\* 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

† May be extended to condensation conditions



| PART NUMBER | DESCRIPTION  |
|-------------|--|
| CNFE2MC     | 10/100 Mbps Ethernet Media Converter   |
| CNFE2MC-M   | Small-size 10/100 Mbps Ethernet Media Converter  |
| CNFE22MC    | 10/100 Mbps Ethernet Media Converter – two independent channels  |
| Accessories | 9 Volt DC Plug-in Power Supply, 90-264 VAC, 50/60 Hz (Included)  |
| Options     | Add '/C' for Conformally Coated Circuit Boards (Extra charge, consult factory)<br>DIN-Rail Mounting Adaptor Plate Kit – With mounting hardware (Optional, order model DINBKT1) |

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.



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