

# 10/100Mbps Ethernet Electrical to Optical Media Converter with Contact Closures

CNFE2MC2C[/M]











The ComNet™ CNFE2MC2C[/M] Ethernet media converter is designed to transmit and receive 10/100 Mbps data and two bi-directional contact closures over multimode or single mode optical fiber using sold-separately SFP\* modules to select distance and connector type. 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. These media converters are environmentally hardened to operate in extreme temperatures. The CNFE2MC2C/M small package size is ideal for locations where space is at a premium. Packaged in the exclusive ComNet ComFit housing, the full size CNFE2MC2C may be 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
- > Two Bi-Directional Contacts
- 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 for fiber type, distance and connector (ordered separately)
- Designed to meet full compliance with the environmental requirements (ambient operating temperature, mechanical shock, vibration, humidity with condensation, high-line/lowline 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 unconditional protection from power surges and other voltage transient events.
- > No in-field optical adjustments required
- > LED Indicators
- > IEEE 802.3 compliant
- > Lifetime Warranty

### **APPLICATIONS**

- > Access Control Systems
- > Building and Environmental Control Systems
- > Tamper Switch
- > 10/100 Mbps Ethernet Media Converter
- › High Speed Computer Links
- > Dry contacts
- \* SFP = Small Form-Factor Pluggable Module

## 10/100Mbps Ethernet Electrical to Optical Media Converter with Contact Closures

#### **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** 

**Contacts** 

Response Time 25 msec typical, network dependent

Input/Output Channels 2

Inputs Dry Closure

Output Rating 0 – 36V, 190mA (AC or DC)

Connectors<sup>1</sup>

Power Terminal Block

Optical LC or SC (SFP dependent)

Ethernet RJ45
Contact Closure Terminal Block
ibers¹ SFP Dependent

Fiber Connectors: Requires selection of sold-separately SFP

modules. See ComNet data sheet for number

and description of SFP modules.

LED Indicators: - Optical Link/Data Activity - Power

- Loss Of Link - Contacts In/Out

#### **Power**

Operating Voltage Range 8 to 24 VDC

CNFE2MC2C/M: 22 to 27 VAC

Power Consumption 8W Current Draw 320mA

**Electrical & Mechanical** 

Current Protection: Automatic Resettable Solid-State Current Limiters

Circuit Board Meets IPC Standard

CNFE2MC2C Size  $4.1 \times 3.7 \times 1.1$  in  $(10.4 \times 9.5 \times 2.8$  cm) CNFE2MC2C/M Size  $6.1 \times 5.3 \times 1.1$  in  $(15.5 \times 13.5 \times 2.8$  cm)

Shipping Weight <2 lbs./0.9 kg

**Environmental** 

 $\begin{array}{ll} \text{MTBF} & > 100,000 \text{ hours} \\ \text{Operating Temp} & -40^{\circ} \text{ C to } +75^{\circ} \text{ C} \\ \text{Storage Temp} & -40^{\circ} \text{ C to } +85^{\circ} \text{ C} \end{array}$ 

Relative Humidity 0% to 95% (non-condensing)<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	Maximum Distance
CNFE2MC2C/M	Small Size 10/100 Mbps Ethernet Media Converter	See SFP Modules data sheet for optional distances, fiber type and connector type.
CNFE2MC2C	ComFit 10/100 Mbps Ethernet Media Converter	See SFP Modules data sheet for optional distances, fiber type and connector type.
Accessories Options	DC Plug-in Power Supply, 90-264 VAC, 50/60 Hz (Included) [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)	

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.

#### TYPICAL APPLICATION



