

# 10/100/1000 Mbps Ethernet Media Converters with 100FX and 1000FX Support + Optional Power over Ethernet (PoE)

CNMC[2]SFP[POE][/M] Series













The ComNet™ CNMCSFP electrical-to-optical Ethernet media converters accept a 10/100 or 1000 Mbps electrical input and converts this to a 100 or 1000 Mbps optical output (selected by a dip switch) and the 100/1000 Mbps optical input back to the 10/100/1000 Mbps electrical output. "Auto-Negotiating" is supported on the copper interface side. These devices use either one or two optical fibers, depending upon the selection of sold-separately SFP optical module. A PoE model, the CNMCSFPPOE/M meets the IEE802.3at standard and provides 30 watts of PoE+ power. The series consists of a small-size single channel model, CNMCSFP/M; a ComFit standard size, single-channel model, CNMCSFP; and a dual channel, the CNMC2SFP.

#### **FEATURES**

- > Full-duplex transmission of 10/100/1000 Mbps Ethernet
- 10/100/1000BASE-TX electrical port
- 1000BASE-FX or 100BASE-FX optical port when used with suitable ComNet SEPs
- > IEEE 802.3 compliant
- > 10/100/1000 BASE-TX port supports auto-negotiation and automatic MDI/MDI-X crossover for full and half-duplex operation
- Uses customer-installed ComNet SFPs for compatibility with a wide range of optical fibers, optical connector types, and optical transmission distances of up to 120 km
- Designed for installation in harsh out-of-plant/unconditioned industrial or roadside operating environments (-40° to +75°C ambient). Fully compliant with the environmental requirements of NEMA TS-2 for Traffic Signal Control Equipment
- Voltage transient protection on all power and signal input/ output line provide protection from voltage surges and other transient events
- > Mini-package size of the CNMCSFP/M allows the unit to be installed in those locations where space is at a premium.

- > Bi-color LED status indicators confirm operating status
- > Hot-swappable rack modules
- Available in small-size, ComFit interchangeable stand alone or rack unit single and dual models
- > Power supplies are always provided with the product
- > Lifetime warranty
- > Made in the U.S.A.

### **APPLICATIONS**

- Optical transmission of Ethernet-compatible industrial security access control systems, intercom systems, VOIP (Voice over IP) telephony networks, and IP-compatible CCTV camera surveillance networks
- > Optical Ethernet transmission to wireless LAN access points
- > Industrial Security, Transportation/ITS, and Industrial Control/ Factory Automation IP Networks
- Optical transmission of any Ethernet-compatible equipment with a maximum data rate of 100 Mbps or 1000 Mbps

<sup>\*</sup> Small Form-Factor Pluggable Module. Sold separately.

# 10/100/1000 Mbps Ethernet Media Converters with 100FX and 1000FX Support + Optional Power over Ethernet (PoE)

### **SPECIFICATIONS**

Data

Data Interface Ethernet

Data Rate 10/100/1000 Mbps
IEEE 802.3 Compliant

Full Duplex or Half Duplex Electrical Port/ Full

**Duplex Optical Port** 

Connectors<sup>1</sup>

Power Terminal Block
Optical SFP dependent
Electrical RJ45

Fibers<sup>1</sup> SFP Dependent

**Fiber Connectors:** Requires selection of sold-separately SFP modules.

See ComNet data sheet for number and description of SFP modules.
Optical Link/Data Activity

Power

POE Enabled (CNMCSFPPOE/M only)



**LED Indicators** 









#### **Power**

Operating Voltage Range CNMCSFPPOE/M: 48 – 57 VDC @ 0.85A Surface Mount: 9-24 VDC @ 200mA max.,

or 24 VAC @ 200mA max.

Power Consumption CNMCSFPPOE/M: 35W (with full PoE+ load)

Surface Mount: 5W

#### **Electrical & Mechanical**

Current Protection Automatic Resettable Solid-State Current Limiters

Circuit Board Meets IPC Standard

ComFit Size  $6.1 \times 5.3 \times 1.1 \text{ in } (15.5 \times 13.5 \times 2.8 \text{ cm})$ Mini Size  $3.3 \times 2.5 \times 1.1 \text{ in } (8.4 \times 6.4 \times 2.8 \text{ cm})$ 

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)<sup>2</sup>

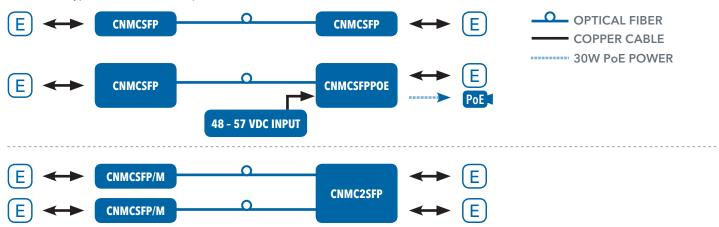
[1] Multimode fiber needs to meet or exceed fiber standard ITU-T G.651. Single mode fiber needs to meet or exceed fiber standard ITU-T G.652

## **ORDERING INFORMATION**

Part Number	Description	# Rack Slots
CNMCSFP/M	Mini 10/100/1000Mbps Ethernet Media Converter	N/A
CNMCSFPPOE/M	Mini 10/100/1000Mbps Ethernet Media Converter with IEEE 802.3at 30W PoE+	N/A
CNMCSFP	ComFit 10/100/1000Mbps Ethernet Media Converter	1
CNMC2SFP	ComFit Dual 10/100/1000Mbps Ethernet Media Converter	1
Included Accessories	DC Plug-in Power Supply, 90-264 VAC. 50/60 Hz (Included) 48 Volt DC Plug-in Power Supply provided with CNMCSFPPOE/M model only.	
Options	[2] Add suffix '/C' for Conformally Coated Circuit Boards to extend to condensation conditions (Extra charge, consult factory) DIN-Rail Mounting Adaptor Kit - With Mounting Hardware (Optional, order model DINBKT4)	

### TYPICAL APPLICATIONS

Fiber Count, Type and Distance are dependent on SFP selection





**Example 2** Low Power Consumption