POWER SUPPLY INCLUDED* | **HARDENED -40° TO +75°C** | **SFP FLEXIBILITY** | **PoE 30W PoE+ 30W POE+** | **TX ↔ FX ELECTRICAL TO OPTICAL CONVERTER**

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 SFPs

› 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

› 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

* Power Supply for PoE applications is sold separately.
† 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[1]

Power	Terminal Block
Optical	SFP dependent
Electrical	RJ45
Fibers[1]	SFP Dependent
Fiber Connectors	Requires selection of sold-separately SFP modules. See ComNet data sheet for number and description of SFP modules.

Power

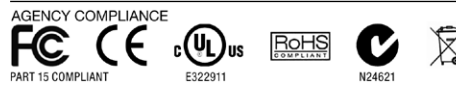|	
Operating Voltage Range	Non-PoE: 9-24 VDC @ 200mA Max, or 24 VAC @ 200mA Max
	PoE: 48 – 57 VDC @ 0.85A (not included)
Power Consumption	CNMCSFPPOE/M: 35W (with full PoE+ load)
	Surface Mount: 5W
Current Protection	Automatic Resettable Solid-State Current Limiters

Electrical & Mechanical

LED Indicators	› Optical Link/Data Activity › Power
	› POE Enabled (CNMCSFPPOE/M only)
Circuit Board	Meets IPC Standard
ComFit Size	6.1 × 5.3 × 1.1 in (15.5 × 13.5 × 2.8 cm)
ComFit Rack Slots	1
Mini Size	3.3 x 2.5 x 1.1 in (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)[2]

[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
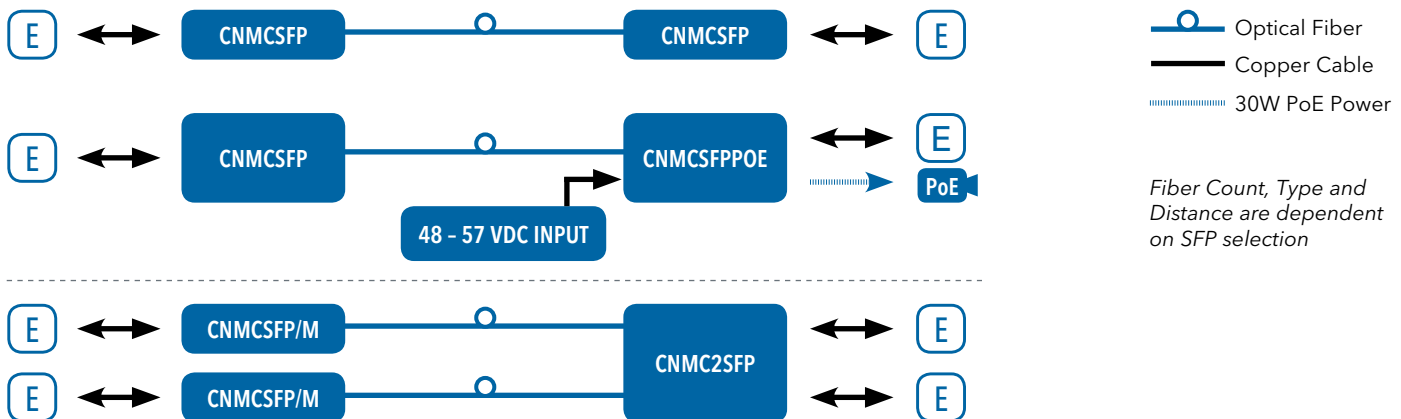
AGENCY COMPLIANCE

FC PART 15 COMPLIANT CE cULus E322911 RoHS COMPLIANT N24621

MADE IN THE USA

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
CNMC2SFPPOE	ComFit Dual 10/100/1000Mbps Ethernet Media Converter with IEEE 802.3at 30W PoE+	1
Included Accessories	DC Plug-in Power Supply, 90-264 VAC, 50/60 Hz (Included, for benign 0 to 50ºC applications only. Hardened power supply available, consult factory)	
Options	48 Volt DC Plug-in Power Supply for use with CNMCSFPPOE/M model only (Extra charge, consult factory).	
	User selection of ComNet SFP (see SFP Modules data sheet for product numbers and compatibility before ordering)	
	[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)	

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

TYPICAL APPLICATIONS

E ↔ CNMCSFP —————○————— CNMCSFP ↔ E

E ↔ CNMCSFP —————○————— CNMCSFPPOE ↔ E / PoE

48 – 57 VDC INPUT

E ↔ CNMCSFP/M —————○—————
E ↔ CNMCSFP/M —————○————— CNMC2SFP ↔ E / ↔ E

○ Optical Fiber
—— Copper Cable
30W PoE Power

Fiber Count, Type and Distance are dependent on SFP selection

Low Power Consumption

02 Sep 2015