The comnet by acre CNMCSFP electrical-to-SFP based optical Ethernet media converters accept a 10/100 or 1000 Mbps electrical input and convert it 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; a dual channel model, CNMC2SFP; and a quad channel model, the CNMC4SFP.
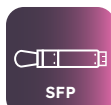
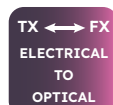† Small Form-Factor Pluggable Module. Sold separately.

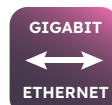| HARDENED	PoE 30W PoE+	SFP	TX ⟷ FX ELECTRICAL TO OPTICAL	GIGABIT ⟷ ETHERNET
-40° TO +75°C	30W PoE+	FLEXIBILITY	CONVERTER	1, 2, OR 4

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

AGENCY COMPLIANCE

FC PART 15 COMPLIANT   CE   c(UL)us   RoHS   MADE IN THE USA   TAA COMPLIANT   NDAA Compliance

Key Features

- Full-duplex transmission of 10/100/1000 Mbps Ethernet
  - 10/100/1000BASE-T(X) electrical port
  - 1000BASE-FX or 100BASE-FX SFP Ports
- 10/100/1000 BASE-T(X) 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.
- Supports Jumbo Frames up to 10K Bytes for streaming video applications
- 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 (non PoE-Models)
- Limited Lifetime warranty
- Made in the U.S.A.

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
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 OR 24 VAC PoE: 48 – 57 VDC @ 0.85A
POWER CONSUMPTION	CNMCSFPPOE/M: 35 W (WITH FULL POE+ LOAD) SURFACE MOUNT: 2.5 W 1CH, 5 W 2CH, 10 W 4CH
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
OPERATING 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

[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)

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E ←→   CNMCSFP   —○—   CNMCSFP   ←→ E

E ←→   CNMCSFP   —○—   CNMCSFPPOE/M  ←→ E
                                     ·····> PoE
                  48 – 57 VDC INPUT

E ←→   CNMCSFP/M  —○—
                        CNMC2SFP    ←→ E
E ←→   CNMCSFP/M  —○—                ←→ E
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| ── COPPER CABLE | ─○─ OPTICAL FIBER | ·········· 30W PoE POWER |
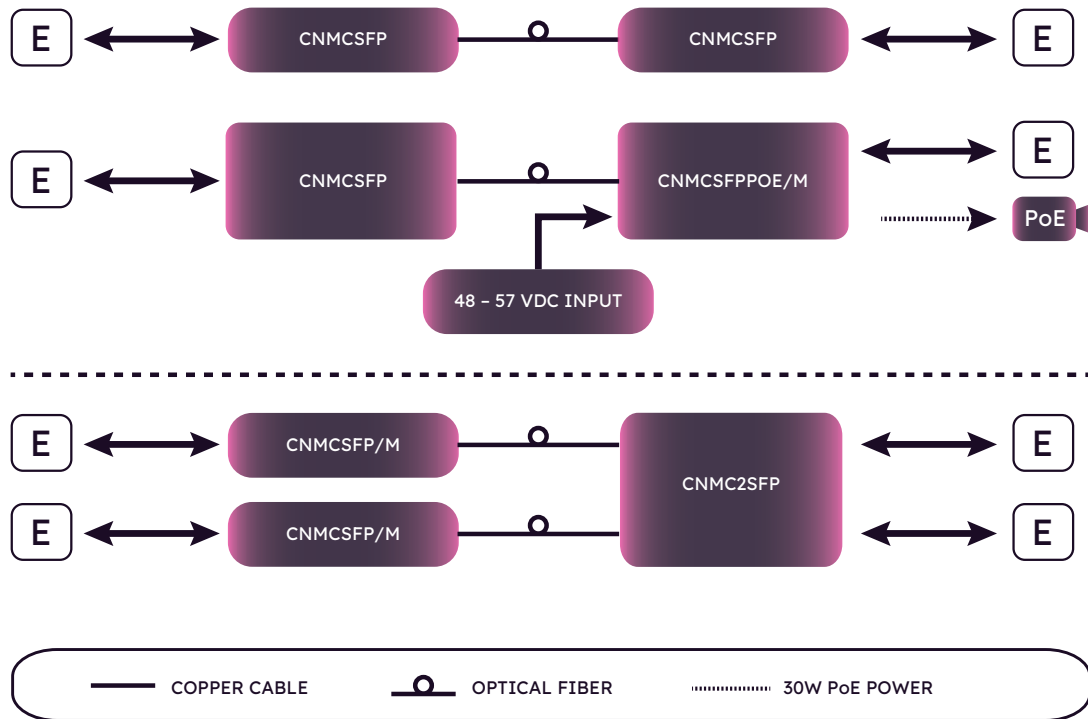
Fiber Count, Type and Distance are dependent on SFP selection

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	DUAL 10/100/1000MBPS MULTI-RATE MEDIA CONVERTER, 100FX/1000FX SELECTABLE, POE+	1
CNMC4SFP	COMFIT QUAD 10/100/1000MBPS ETHERNET MEDIA CONVERTER	1
OPTIONS	Hardened power supply available, consult factory User selection of comnet by acre 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.

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