comnet
Communication Networks

INSTALLATION AND OPERATION MANUAL

CNFE4+1SMS(M,S)2POE
FOUR 10/100T(X) +ONE 100FX ETHERNET
## SELF-MANAGED SWITCH WITH POWER OVER ETHERNET (POE+)

The ComNet CNFE4+1SMS(M,S)2POE is a five-port Ethernet switch with uplink management functionality and provides four copper ports operating at 10/100Mbps and is designed to combine four electrical ports into a single optical port that forwards this data to the next network device. The fiber interface has an option of SC or ST connector type. There is no programming required to use this product. The ComNet CNFE4+1SMSPOE comes pre-programmed, preventing network video flooding with DIP switch selection of fiber port as uplink or as an unmanaged switch. Ports 1–4 can supply up to thirty (30) watts of power ("Power over Ethernet") and incorporate PoE+ features based on the IEEE 802.3at standard. It is "Plug-and-Play".

LED indicators confirm the operating status of this device. See **Figure 4** on **Page 3** for an explanation of the indicators.

The ComNet CNFE4+1SMSPOE may be either wall mounted, rack mounted ("ComFit" packaging) or DIN-rail mounted with the use of the ComNet DINBKT1 adapter. See **Figure A** on **Page 4** for mounting instructions.

See **Figures 1 – 5** for complete installation details.

FIGURE 1 – CNFE4+1SMSPOE
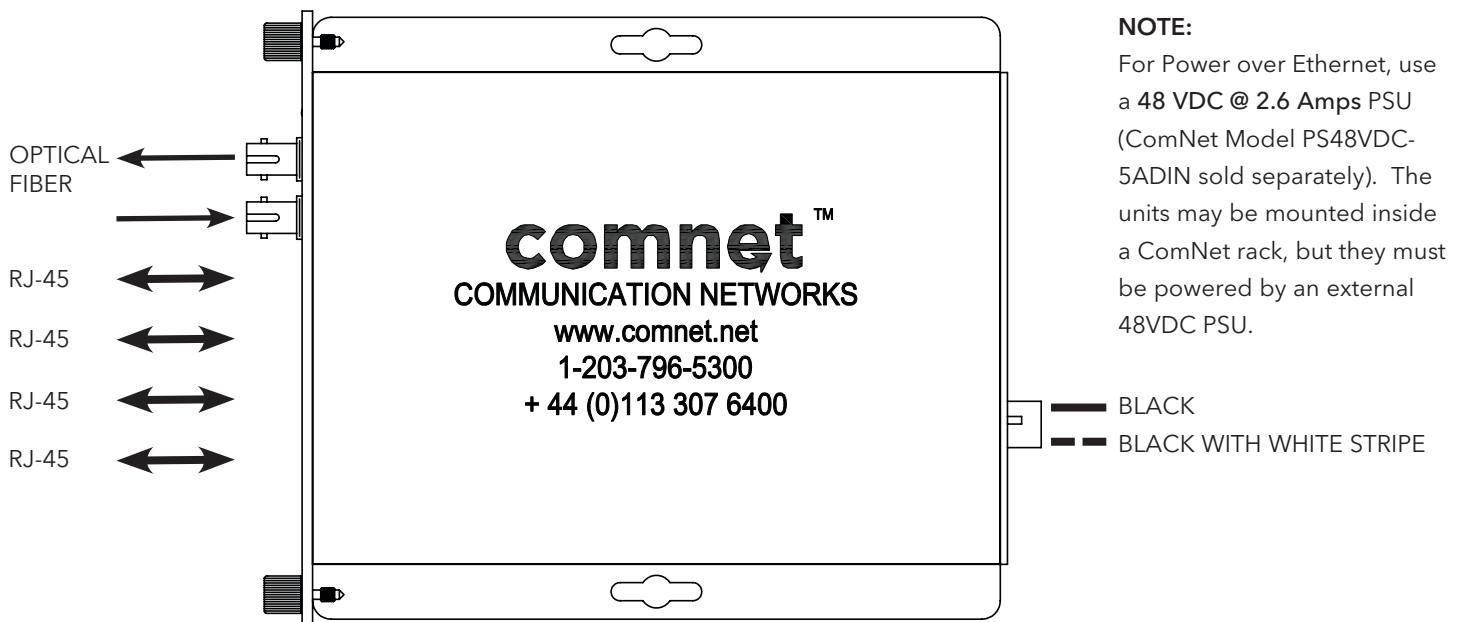
NOTE:

For Power over Ethernet, use a **48 VDC @ 2.6 Amps** PSU (ComNet Model PS48VDC-5ADIN sold separately). The units may be mounted inside a ComNet rack, but they must be powered by an external 48VDC PSU.

OPTICAL FIBER

RJ-45

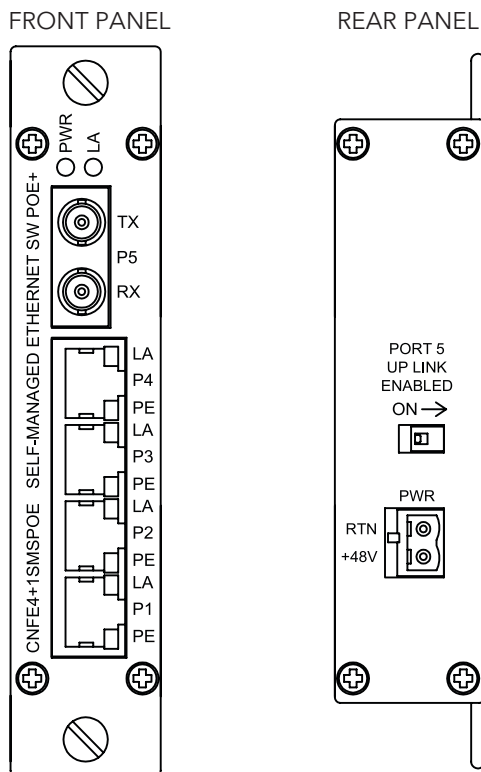RJ-45

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RJ-45

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━━ BLACK
┅┅ BLACK WITH WHITE STRIPE

FIGURE 2 – CNFE4+1SMSPOE

FRONT PANEL

REAR PANEL

PWR
LA

SELF-MANAGED ETHERNET SW POE+

TX
P5
RX

LA
P4
PE
LA
P3
PE
LA
P2
PE
LA
P1
PE

CNFE4+1SMSPOE

PORT 5
UP LINK
ENABLED
ON →

PWR
RTN
+48V

FIGURE 3 – UPLINK SWITCH SETTINGS

PORT 5
UP LINK
ENABLED
ON →

EFFECT	UPLINK
Uplink Enabled	ON
Uplink Disabled	OFF

FIGURE 4 – LED INDICATORS

	LINK (PORT 5)	LINK (PORT 1 – 4)	POE (PORT 1 – 4)	POWER
SOLID	Link Up	Link Up	Power Suppled to PD	Power Applied
BLINKING	Data Activity	Data Activity	POE Negotiating	–
OFF	No Data Link	No Data Link	No Power Supplied	Power Not Applied

FIGURE 5 – APPLICATION DIAGRAM WITH MULTICAST TRAFFIC
IGMP Enabled on CNGE2FE24MODMS, Uplink enabled on the units

CNGE2FE24MODMS

CNFE4SMSPOE

CNFE4+1SMSPOE

CNFE5SMSPOE

P4

P5

P1

P5

Camera Connections Providing PoE on Ports 1 – 3

Camera Connections Providing PoE on Ports 2 – 4

Camera Connections Providing PoE on Ports 1 – 4

LEGEND

Copper

Fiber Optic
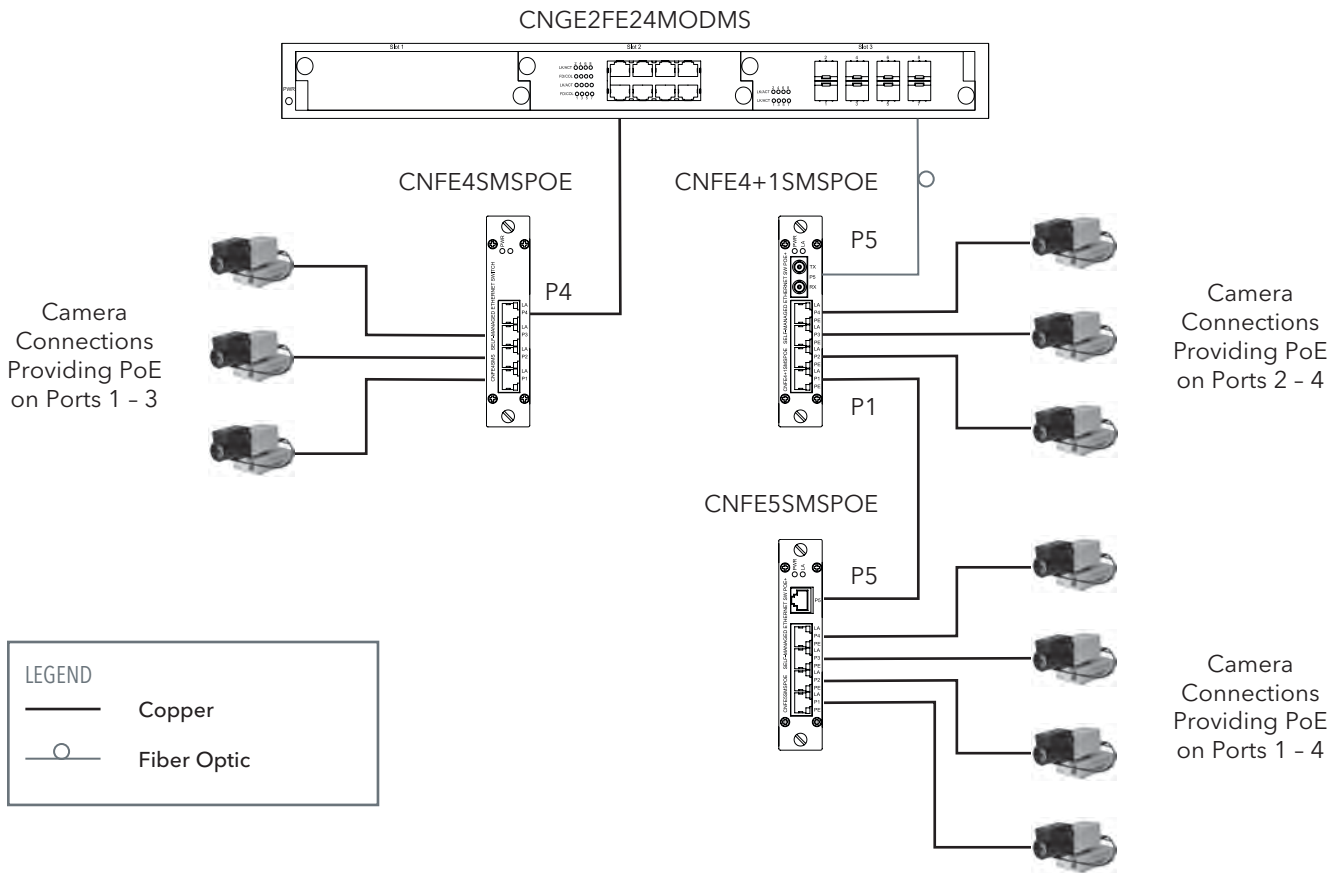
MECHANICAL INSTALLATION INSTRUCTIONS

INSTALLATION CONSIDERATIONS

This switch is supplied as a Standalone/Rack module. Units should be installed in dry locations protected from extremes of temperature and humidity.

NOTE: Although the units may be mounted inside a ComNet rack they cannot be powered from the built-in rack PSU; they must be powered by an external 48VDC PSU instead.

C1-US, C1-EU, C1-AU OR C1-CH CARD CAGE RACKS

CAUTION: Although the units are hot-swappable and may be installed without turning power off to the rack, ComNet recommends that the power supply be turned off and that the rack power supply is disconnected from any power source. **Note:** Remove electrical connector before installing in card cage rack.

1. Make sure that the card is oriented right side up, and slide it into the card guides in the rack until the edge connector at the back of the card seats in the corresponding slot in the rack's connector panel. Seating may require thumb pressure on the top and bottom of the card's front panel.

CAUTION: Take care not to press on any of the LEDs.

2. Tighten the two thumb screws on the card until the front panel of the card is seated against the front of the rack.
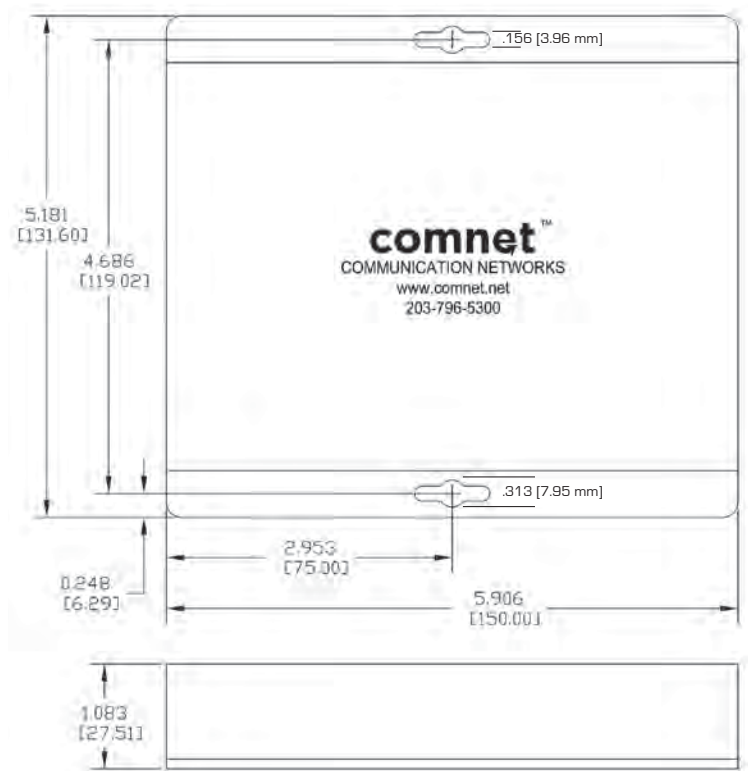
WARNING: Unit is to be used with a Listed Class 2 or LPS power supply.

IMPORTANT SAFEGUARDS:
A) Elevated Operating Ambient - If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (Tma) specified by the manufacturer.

B) Reduced Air Flow - Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.

FIGURE A

Dimensions are for a standard ComNet™ one slot module

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USA