comnet
Communication Networks

INSTALLATION AND OPERATION MANUAL

CNFE2MCPOE[/M]

10/100 MBPS 2 PORT MEDIA CONVERTER
WITH POWER OVER ETHERNET

This manual serves the following ComNet Model Numbers:

CNFE2MCPOE/M
CNFE2MCPOE
CNFE2MCPOE2

The ComNet CNFE2MCPOE Ethernet 2 port media converter is designed to transmit and receive 10/100 Mbps data over optical fiber through user selectable SFP modules. These models require the ordering of sold-separately interchangeable SFP modules for fiber type, distance and connectors.

The CNFE2MCPOE transmits and receives a single channel of Ethernet data. It also supports IEEE 802.3at as Power Sourcing Equipment (PSE) with up to 30 Watts output, both Mode A or Mode B are supported. 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. It is environmentally hardened to operate in extreme conditions.

LED indicators are provided for confirming equipment operating status. See **Figure 10** on **Page 5** for LED indicator descriptions.

See **Figures 1 – 11** for complete installation details.

The CNFE2MCPOE operates as a standalone module. It can also be mounted in a ComNet Rack, but PoE operation is not supported in this application. See **Page 6** for mounting instructions.

FIGURE 1 – CNFE2MCPOE/M SMALL SIZE MEDIA CONVERTER

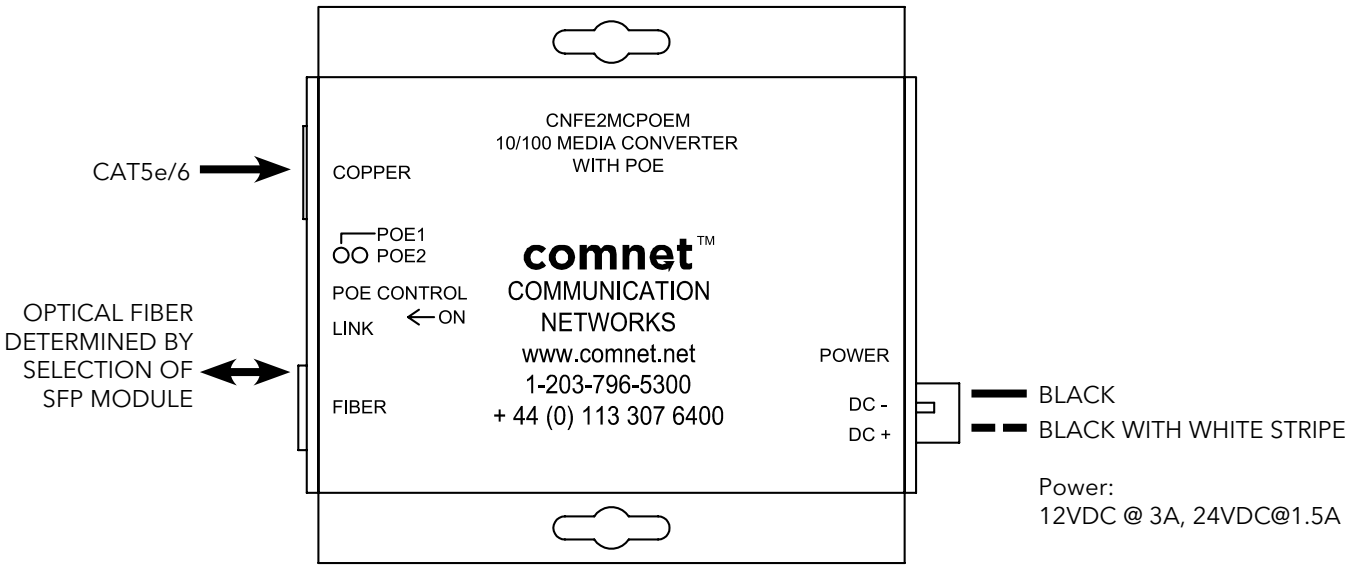


FIGURE 2 – CNFE2MCPOE/M

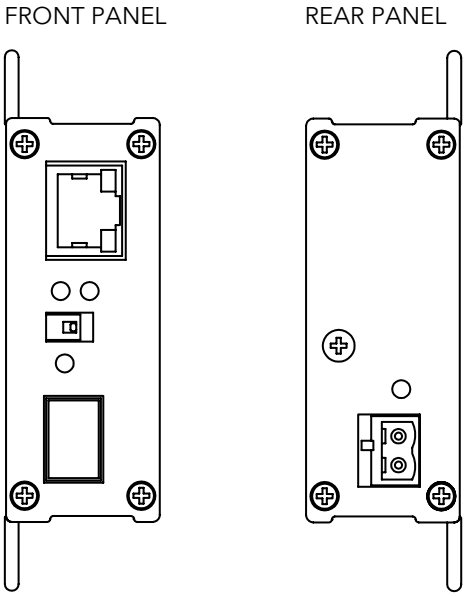
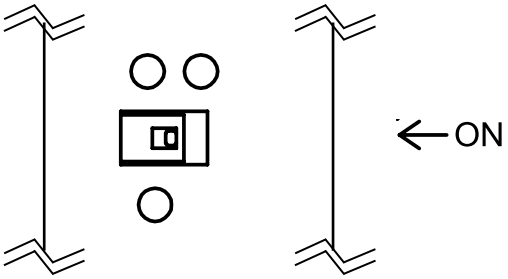


FIGURE 3 – SWITCH POSITIONS

Power over Ethernet is controlled by a switch based on fiber link.



SW1	LINK	PSE1 / PSE2	DESCRIPTION
ON	Yes (On or Flash)	ON	PoE is capable of being produced only when a good optical link exists
	No (off)	OFF	
OFF	–	ON	PoE is capable of being produced independent of the status of the optical link

FIGURE 4 – CNFE2MCPOE COMFIT MEDIA CONVERTER

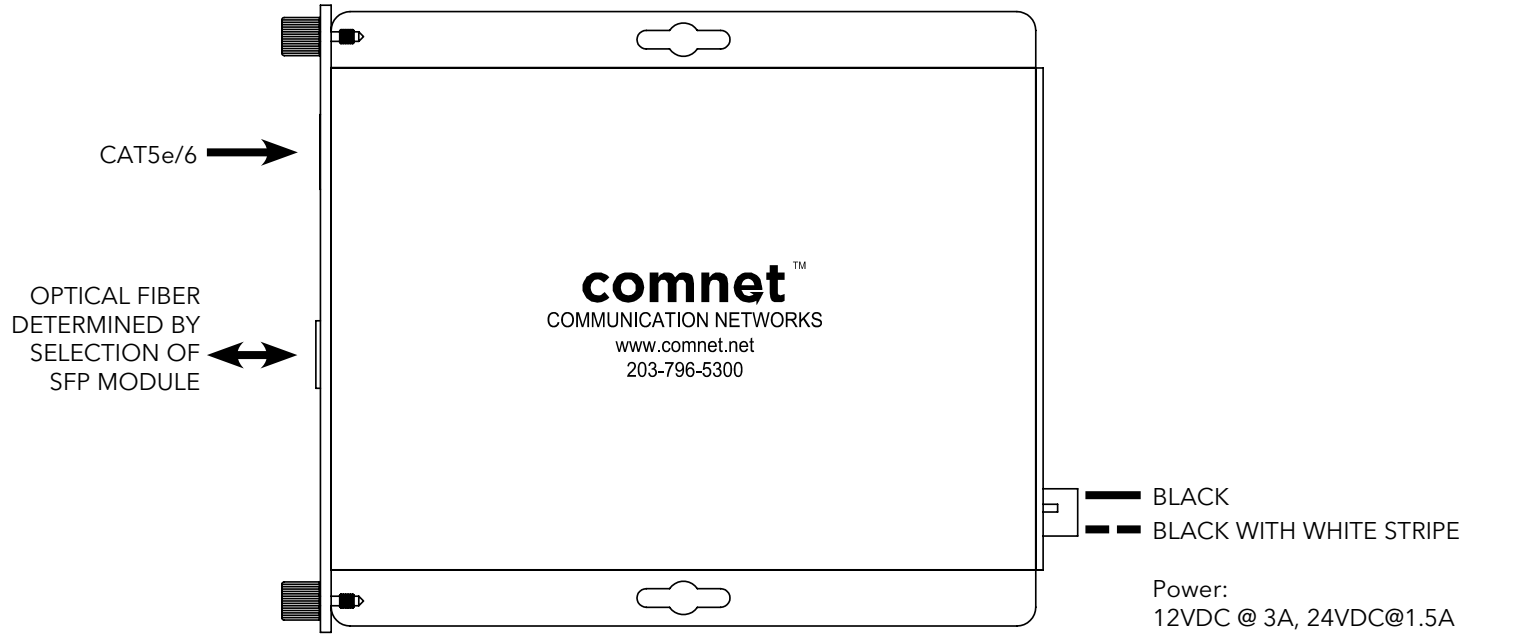


FIGURE 5 – MEDIA CONVERTER

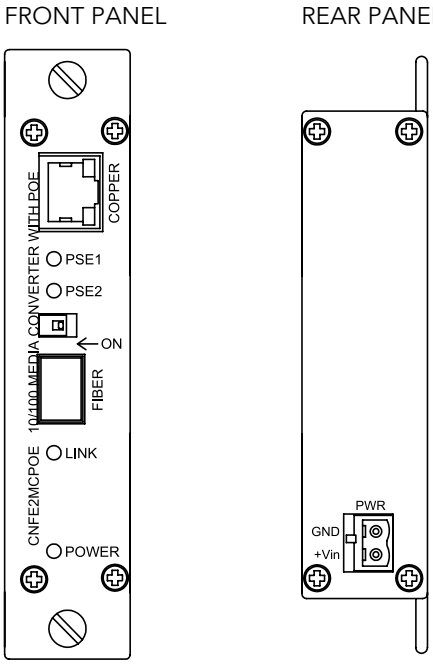
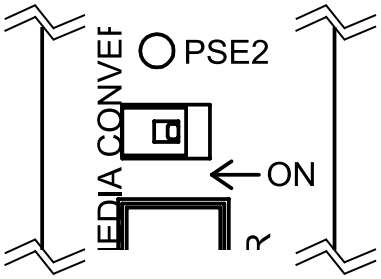


FIGURE 6 – SWITCH POSITIONS

Power over Ethernet is controlled by a switch based on fiber link.



SW1	LINK	PSE1 / PSE2	DESCRIPTION
ON	Yes (On or Flash)	ON	PoE is capable of being produced only when a good optical link exists
	No (off)	OFF	
OFF	–	ON	PoE is capable of being produced independent of the status of the optical link

FIGURE 7 – CNFE2MCPOE2 2-SWITCH COMFIT MEDIA CONVERTER

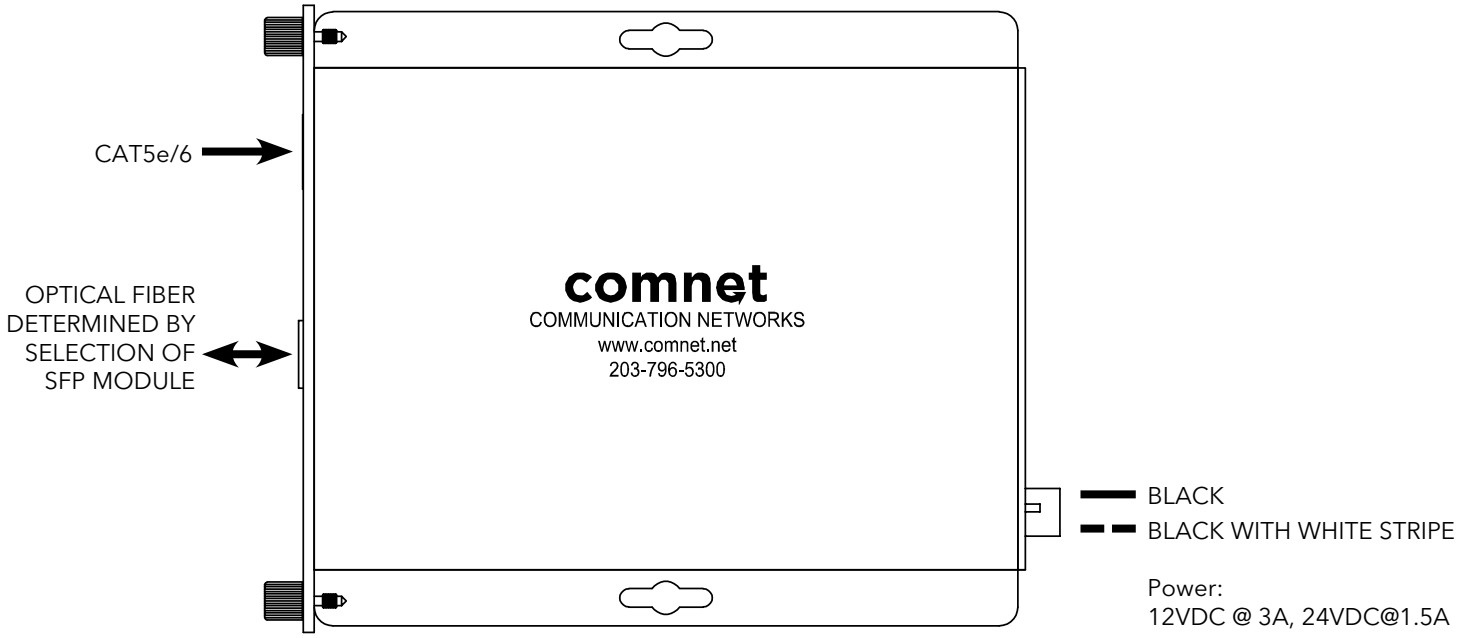


FIGURE 8 – CNFE2MCPOE2

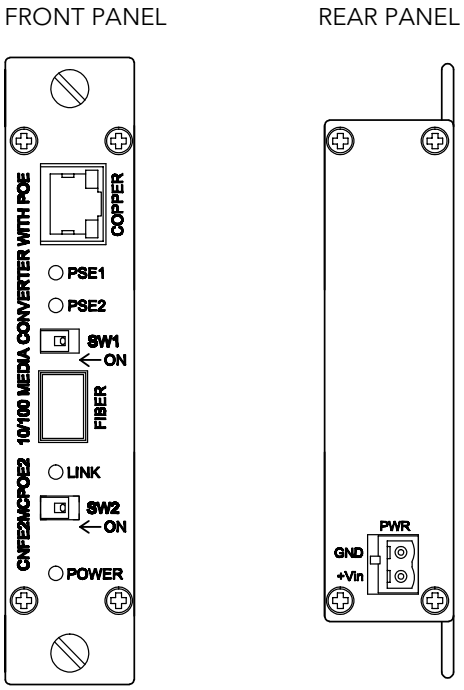
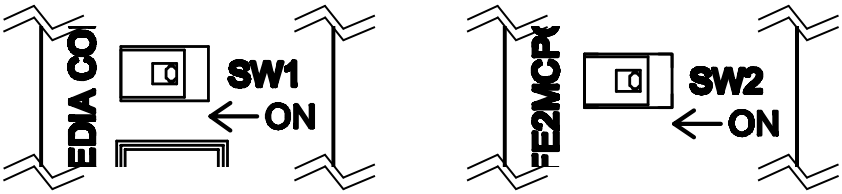


FIGURE 9 – SWITCH POSITIONS



Power over Ethernet is controlled by a switch based on fiber link.

SW1	LINK	PSE1 / PSE2	DESCRIPTION
ON	Yes (On or Flash)	ON	PoE is capable of being produced only when a good optical link exists
	No (off)	OFF	
OFF	–	ON	PoE is capable of being produced independent of the status of the optical link

The Fiber link is controlled by Switch "SW2" based on Copper Port

SW2	COPPER	FIBER	DESCRIPTION
ON	ON	ON	Optical link will be allowed only when a good Ethernet link exists between the CNFE2MCPOE2 and the network connection
	OFF	OFF	
OFF	–	ON	Optical link will be allowed independent of the status of the Ethernet link between the CNFE2MCPOE2 and the network conncetion

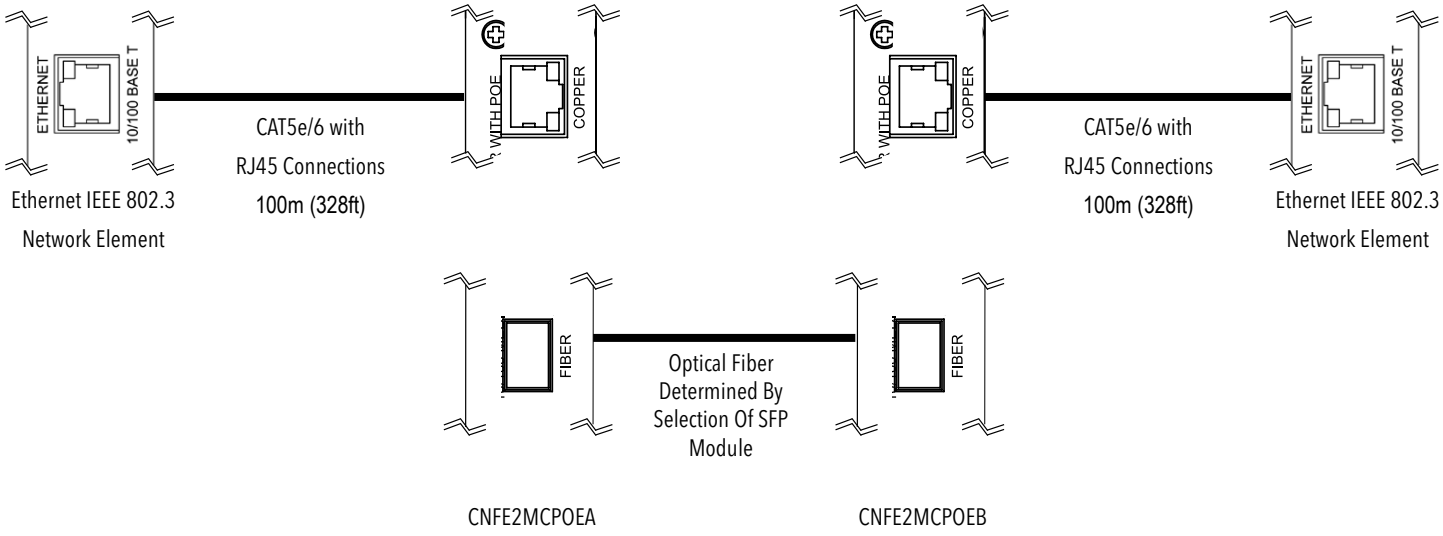
Note: The switches cannot both be set to ON at the same time, or the unit will not function.

FIGURE 10 – LED INDICATORS

	LINK	PSE1 or PSE2	POWER
GREEN	Fiber interface linked (when lit or flashing)	Power is being supplied by unit	Unit powered up
OFF	Fiber interface not linked.	Power not supplied by unit. (No PoE device)	Unit powered down

FIGURE 11 – POSSIBLE ETHERNET CONFIGURATION

Ethernet IEEE 802.3 Network Element determined by user.



INSTALLATION CONSIDERATIONS

Th CNFE2MCPOE is supplied as a Rack Mount/Surface mount module. In the ComNet Rack, PoE operation is not supported. The CNFE2MCPOEM is supplied as a Surface mount module. Units should be installed in dry locations protected from extremes of temperature and humidity.

WARNING: Unit is to be used with a Listed Class 2 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 (T_{ma}) 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

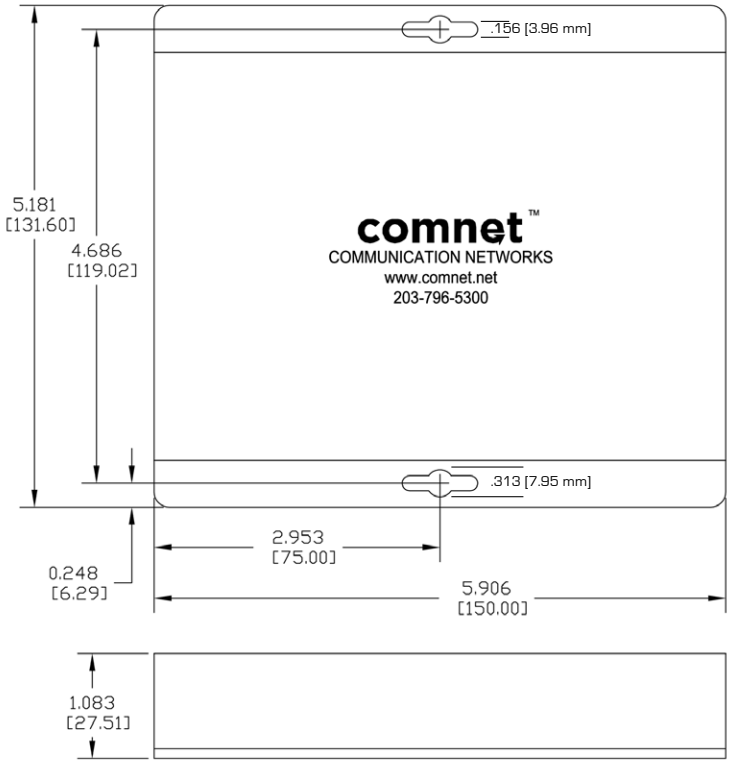
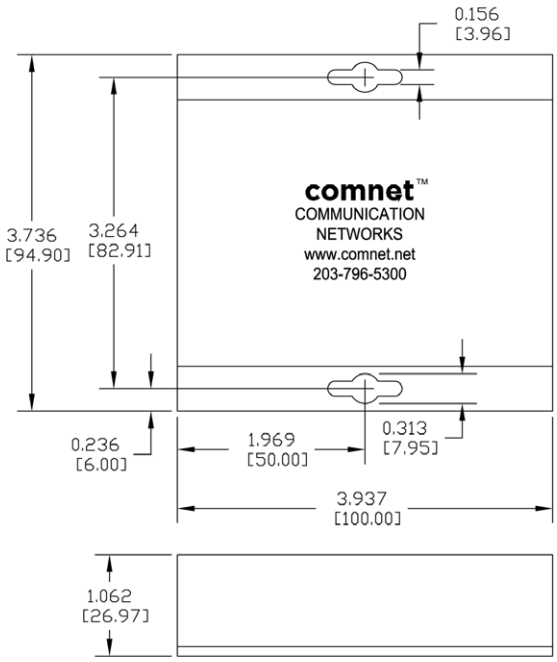


FIGURE B

Dimensions are for a small size ComNet™ surface mount module



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