# communication Networks



## **INSTALLATION AND OPERATION MANUAL**

# CWFE100(X)POE(M,S)-M 10/100 MBPS ETHERNET

2 PORT MEDIA CONVERTER ELECTRICAL ↔ SC/ST OPTICAL WITH POWER OVER ETHERNET

The ComNet<sup>™</sup> CWFE1003POEM and CWFE1005POEM 2-port media converters provide full-duplex fiber optic transmission of a single channel of 10/100 Mbps Ethernet data (10/100 BASE-TX) through multimode or single mode optical fiber. Type SC or type ST optical connectors are available, providing the user with the flexibility to use these devices with virtually any multimode or single mode cable plant.

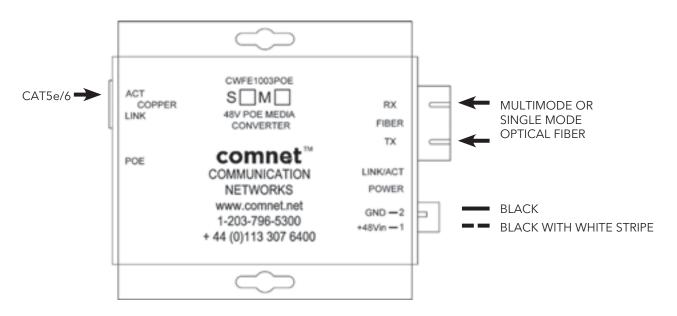
Both mode A and mode B of PoE operation are supported and selected by the media converter automatically. The Ethernet electrical interface auto-negotiates to either 10 or 100 Mbps without the need for any user selection, and the optical interface operates at 100 Mbps (100-FX).

LED indicators are provided for rapidly ascertaining the operating status of the device. See **Figure 9** on **Page 6** for an explanation of the LED Indicators.

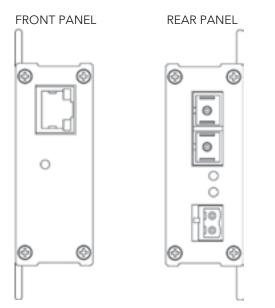
These units are designed for shelf or stand-alone mounting. See **Figure A** on **Page 7** for mounting instructions.

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

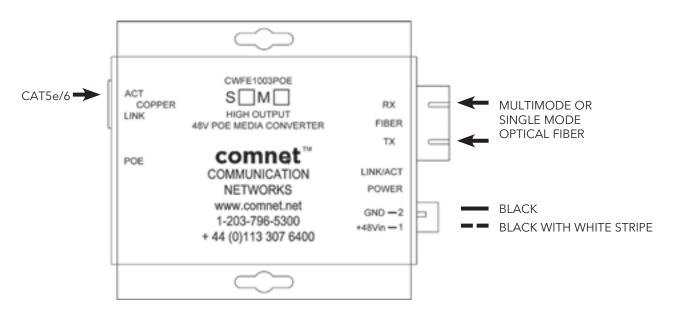
## FIGURE 1 - CWFE1003POE(M,S)-M MEDIA CONVERTER



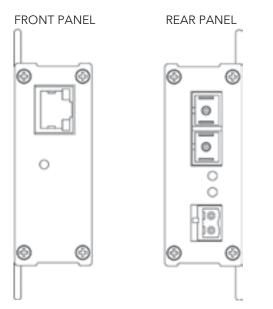
#### FIGURE 2 - CWFE1003POE(M,S)-M MEDIA CONVERTER



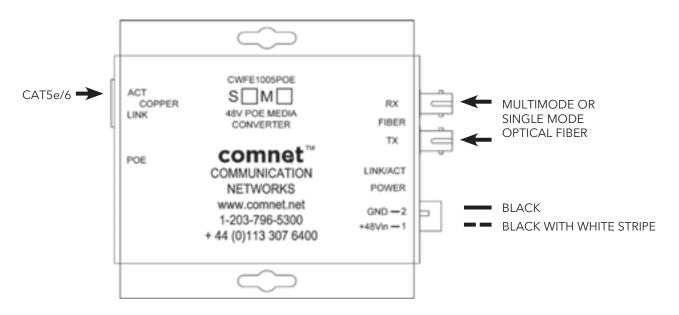
## FIGURE 2 - CWFE1003POE(M,S)HO-M MEDIA CONVERTER



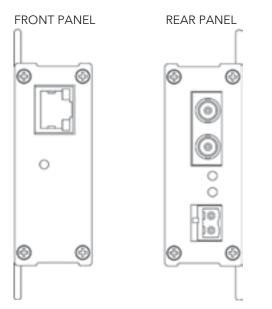
#### FIGURE 3 - CWFE1003POE(M,S)HO-M MEDIA CONVERTER



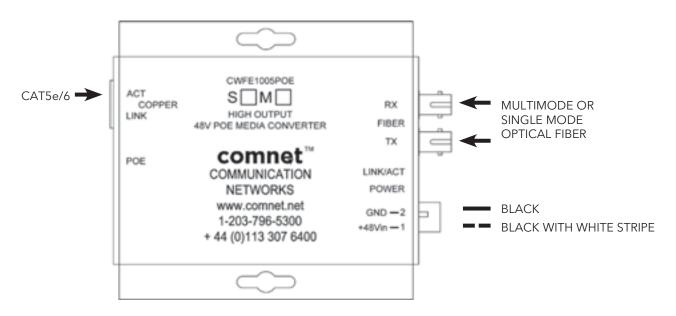
## FIGURE 5 - CWFE1005POE(M,S)-M MEDIA CONVERTER



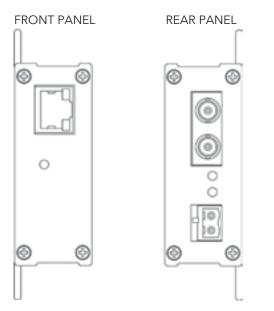
#### FIGURE 6 - CWFE1005POE(M,S)-M MEDIA CONVERTER



## FIGURE 7 - CWFE1005POE(M,S)HO-M MEDIA CONVERTER



#### FIGURE 8 - CWFE1005POE(M,S)HO-M MEDIA CONVERTER



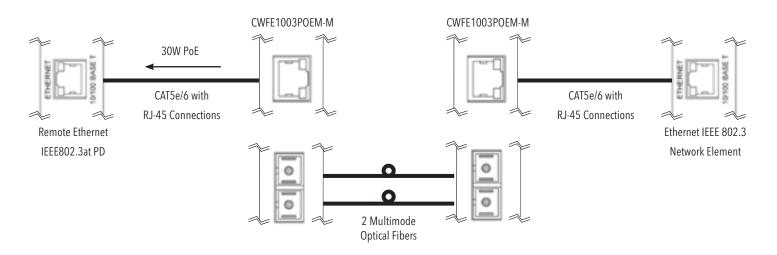
## **INSTALLATION AND OPERATION MANUAL**

#### FIGURE 9 - LED INDICATORS

	LINK/ACT	POE	POWER
GREEN	Fiber interface linked (when lit or flashing)	Power is being sup- plied by unit	Unit powered up
OFF	Fiber interface not linked.	Power not supplied by unit. (No PoE device)	Unit powered down

#### FIGURE 10 - POSSIBLE ETHERNET CONFIGURATION

Ethernet IEEE 802.3 Network Element determined by user.



#### FIGURE 11 - POE PIN ASSIGNMENT

RJ-45 port supports IEEE802.3at

End-point: Positive (VCC+): RJ45 pin 1, 2 or 4, 5 Negative (VCC-): RJ45 pin 3, 6 or 7,8 Data: (1, 2, 3, 6)

## **MECHANICAL INSTALLATION INSTRUCTIONS**

#### **INSTALLATION CONSIDERATIONS**

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

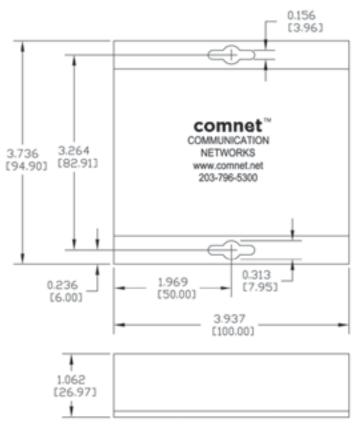
**WARNING**: Unit is to be used with a Listed Class 2 or LPS power supply rated 48VDC @ 1A.

#### **IMPORTANT SAFEGUARDS:**

- A) Elevated Operating Ambient 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 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 small size ComNet<sup>™</sup> surface mount module







3 CORPORATE DRIVE | DANBURY, CT 06810 | USA T: 203.796.5300 | F: 203.796.5303 | TECH SUPPORT: 1.888.678.9427 | INFO@COMNET.NET

8 TURNBERRY PARK ROAD | GILDERSOME | MORLEY | LEEDS, UK LS27 7LE T: +44 (0)113 307 6400 | F: +44 (0)113 253 7462 | INFO-EUROPE@COMNET.NET