

10/100 Mbps Ethernet 2 port media converter  
Electrical ↔ SC/ST Optical with Power over Ethernet



## Description

The ComNet™ CWFE1003POE-M and CWFE1005POE-M 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. These converters exceed the requirements of the latest PoE standard (IEEE 802.3at). They provide full compliance as Power Sourcing Equipment (PSE), with a maximum power availability of 30 watts in Mode A or Mode B, making them ideal for those applications where the remote equipment draws significant power. A higher output 60 watt model is available. Mode A and mode B are 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). Packaged in a rugged, compact sized housing, these units are designed for shelf or stand-alone mounting, or may be DIN-rail mounted by the addition of ComNet model DINBKT2 Adaptor plate kit. LED indicators are provided for rapidly ascertaining the operating status of the device. A power supply providing 48 VDC at 1.5A is provided with each converter. Plug-and-play design ensures ease of operation, and no optical adjustments are ever required.

## Applications

- PoE operation of IP Cameras, with pan-tilt-zoom capability
- PoE operation of IP cameras with heated/cooled housings
- PoE operation of remote telemetry and sensing devices for industrial/SCADA networks
- PoE operation of transportation-specific/ITS field equipment
- PoE operation of any 10/100 Mbps Ethernet-compatible field device where high power consumption is required

## Features

- Exceeds the requirements of the latest PoE standard (IEEE 802.3at)
- Power Sourcing Equipment (PSE): Provides 30 watts in 2 modes at 48 VDC, for high output demand applications of remote Ethernet equipment
- 60 watt higher output version available (CWFE100XPOEHO Series)
- SC or ST optical connectors available
- Automatic resettable solid state current limiters for unconditional modem protection
- Five Year Warranty

# CWFE100XPOE-M 10/100 Mbps Ethernet 2 port media converter Electrical ↔ SC/ST Optical with Power over Ethernet

## specifications

### DATA

Data Interface: Ethernet  
 Data Rate: 10/100 Mbps  
 IEEE 802.3 Compliant  
 Full Duplex or Half Duplex Electrical  
 Port/Full Duplex Optical Port

### FIBERS

SC or ST

### FIBER CONNECTORS

SC or ST type fiber connectors

### CONNECTORS

Power: Terminal Block  
 Electrical: RJ45

### POE PIN ASSIGNMENT

RJ45 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)

### MAX. POE CURRENT

600mA continuous

### LED INDICATORS

- Optical Link/Data Activity
- Power
- PoE

### ELECTRICAL & MECHANICAL

Power: 48VDC @ 1A  
 Surface Mount:  
 Current Protection: Automatic Resettable  
 Solid-State Current Limiters  
 Meets IPC Standard  
 Circuit Board:  
 Size (in./cm) (L×W×H)  
 Standard 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: 0° C to +50° C @ 30W or 60W PoE output  
 -20° C to +60° C @ 15W PoE output  
 -40° C to +85° C  
 Storage Temp:  
 Relative Humidity: 0% to 95% (non-condensing)<sup>†</sup>

<sup>†</sup> May be extended to condensation conditions



PART NUMBER	DESCRIPTION	POE OUTPUT @ 48VDC
CWFE1003POEM-M	Medium Size 2 Port 10/100 Mbps Ethernet Media Converter with POE – Fixed SC Connector – Multimode	30W
CWFE1003POEMHO-M	Medium Size 2 Port 10/100 Mbps Ethernet Media Converter with POE – Fixed SC Connector – Multimode	60W
CWFE1003POES-M	Medium Size 2 Port 10/100 Mbps Ethernet Media Converter with POE – Fixed SC Connector – Single Mode	30W
CWFE1003POESHO-M	Medium Size 2 Port 10/100 Mbps Ethernet Media Converter with POE – Fixed SC Connector – Single Mode	60W
CWFE1005POEM-M	Medium Size 2 Port 10/100 Mbps Ethernet Media Converter with POE – Fixed ST Connector – Multimode	30W
CWFE1005POEMHO-M	Medium Size 2 Port 10/100 Mbps Ethernet Media Converter with POE – Fixed ST Connector – Multimode	60W
CWFE1005POES-M	Medium Size 2 Port 10/100 Mbps Ethernet Media Converter with POE – Fixed ST Connector – Single Mode	30W
CWFE1005POESHO-M	Medium Size 2 Port 10/100 Mbps Ethernet Media Converter with POE – Fixed ST Connector – Single Mode	60W
Accessories	48 Volt DC 1.25 Amp Plug-in Power Supply, 90-264 VAC, 50/60 Hz (Included)	
Options	Add suffix 'C' for Conformally Coated Circuit Boards (Extra charge, consult factory) DIN-Rail Mounting Adaptor Plate – With mounting hardware (optional, order model DINBKT2)	

NOTE: This product requires a fiber installation with a minimum 30 dB connector return loss.  
 The use of Super Polish Connectors is recommended.  
 Complies with FDA Performance Standard for Laser Products, Title 21, Code of Federal Regulations, Subchapter J  
 In a continuing effort to improve and advance technology, product specifications are subject to change without notice.



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