

# 10/100 Mbps Ethernet 2 Port Media Converter Electrical to ST/SC/SFP\* Optical with PoE+

CWFE100(X)POE/M Series

#### **APPEARANCE**





## **DESCRIPTION**

The ComNet™ CWFE100(X)POE/M Series 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 ST, SC or SFP optical connectors are available. They provide full compliance with IEEE 802.3at as Power Sourcing Equipment (PSE), with a maximum power 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 1.25A 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 two modes at 48 VDC, for high output demand applications of remote Ethernet equipment
- > 60 watt higher output version available
- > SC, ST or SFP optical connectors available
- Automatic resettable solid state current limiters for unconditional modem protection
- → Five Year Warranty
- \* SFP = Small Form-Factor Pluggable Module

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# **SPECIFICATIONS**

Data Interface: Ethernet Data Rate: 10/100 Mbps IEEE 802.3 Compliant

Full Duplex or Half Duplex Electrical Port/

**Full Duplex Optical Port** 

**Fibers** ST, SC or SFP Dependent (Requires

> selection of sold-separately SFP modules. See ComNet data sheet for number and description of SFP module options.)

**Connectors** 

Optical: ST, SC or SFP Power: **Terminal Block** 

Electrical: RJ45

RJ45 port supports IEEE802.3at **PoE Pin Assignment** 

> 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:

Surface Mount: 48VDC @ 1.25A **Current Protection: Automatic Resettable** Solid-State Current Limiters Meets IPC Standard

Circuit Board:

Size (in./cm) (L×W×H)

Standard Size  $4.0 \times 3.7 \times 1.0$  in.  $(10.4 \times 9.5 \times 2.7$  cm)

Shipping Weight: <1 lb./0.5 kg

**Environmental** 

MTBF: >100,000 hours

Operating Temp:  $0^{\circ}$  C to  $+50^{\circ}$  C @ 30W or 60W PoE output  $-20^{\circ}$  C to  $+60^{\circ}$  C @ 15W PoE output

Storage Temp: -40° C to +85° C

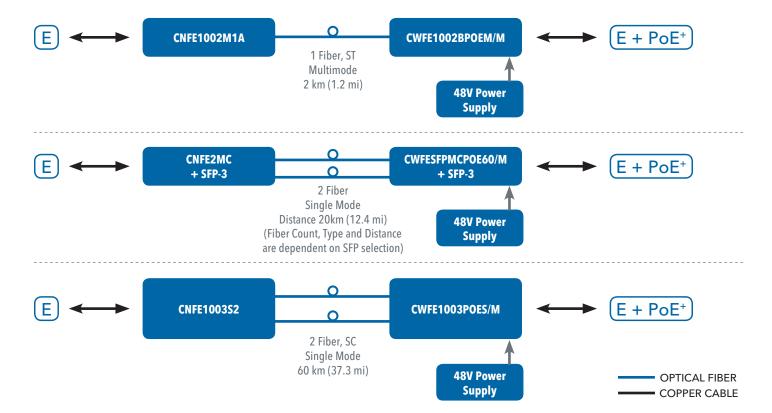
Relative Humidity: 0% to 95% (non-condensing)†

† May be extended to condensation conditions





# TYPICAL APPLICATIONS



# 10/100 Mbps Ethernet 2 Port Media Converter Electrical to SC/ST/SFP\* Optical with PoE+

File and

DCE

## ORDERING INFORMATION

Part Number	Description	Fibers Required	Fiber	Optic	PSE Output
CWFE1003POEM/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini	2	Multimode	SC	30W
CWFE1003POEMHO/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini	2	Multimode	SC	60W
CWFE1003POES/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini	2	Single Mode	SC	30W
CWFE1003POESHO/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini	2	Single Mode	SC	60W
CWFE1005POEM/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini	2	Multimode	ST	30W
CWFE1005POEMHO/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini	2	Multimode	ST	60W
CWFE1005POES/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini	2	Single Mode	ST	30W
CWFE1005POESHO/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini	2	Single Mode	ST	60W
CWFE1004APOEM/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "A" Unit‡	1	Multimode	SC	30W
CWFE1004BP0EM/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "B" Unit‡	1	Multimode	SC	30W
CWFE1004APOEMHO/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "A" Unit ‡	1	Multimode	SC	60W
CWFE1004BP0EMH0/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "B" Unit‡	1	Multimode	SC	60W
CWFE1004APOES/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "A" Unit ‡	1	Single Mode	SC	30W
CWFE1004BPOES/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "B" Unit‡	1	Single Mode	SC	30W
CWFE1004APOESHO/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "A" Unit ‡	1	Single Mode	SC	60W
CWFE1004BP0ESHO/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "B" Unit‡	1	Single Mode	SC	60W
CWFE1002APOEM/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "A" Unit ‡	1	Multimode	ST	30W
CWFE1002BP0EM/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "B" Unit‡	1	Multimode	ST	30W
CWFE1002APOEMHO/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "A" Unit ‡	1	Multimode	ST	60W
CWFE1002BPOEMHO/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "B" Unit <sup>‡</sup>	1	Multimode	ST	60W
CWFE1002APOES/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "A" Unit ‡	1	Single Mode	ST	30W
CWFE1002BPOES/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "B" Unit‡	1	Single Mode	ST	30W
CWFE1002APOESHO/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "A" Unit ‡	1	Single Mode	ST	60W
CWFE1002BP0ESH0/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "B" Unit‡	1	Single Mode	ST	60W
CWFESFPMCPOE30/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, SFP Required	§	§	SFP	30W
CWFESFPMCPOE60/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, SFP Required	§	§	SFP	60W
Accessories Options	Power Supply: For 30W order PS48VDC84A; For 60W order PS48VDC-1.25A  Add suffix '/C' for Conformally Coated Circuit Boards (Extra charge, consult factory)  DIN-Rail Mounting Adaptor Plate Kit – With mounting hardware (Optional, order model E	DINBKT1)			

<sup>‡&</sup>quot;A" units must be paired with corresponding "B" units, and "B" units paired with "A" units.

§ 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.

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.



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