



INCLUDED



IEEE 802.3at



FLEXIBILITY



CONVERTER



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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). 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.

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
- › Bi-color (Red/Green) status indicating LEDs provide rapid indication of critical operating parameters
- › 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 or DINBKT4 Adaptor plate kit.
- › Five Year Warranty

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

* SFP = Small Form-Factor Pluggable Module

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

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

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

Power

Operating Power 48VDC @ 1.25A

Electrical & Mechanical

Current Protection Automatic Resettable Solid-State Current Limiters
Circuit Board Meets IPC Standard
Size 4.0 × 3.7 × 1.0 in (10.4 × 9.5 × 2.7 cm)
Shipping Weight <1 lb./0.5 kg

Environment

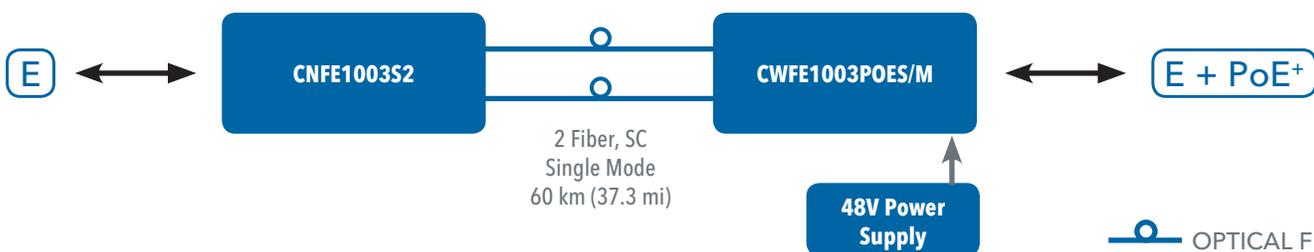
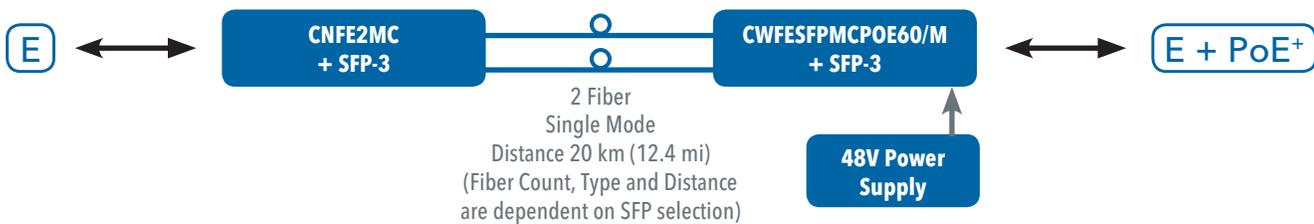
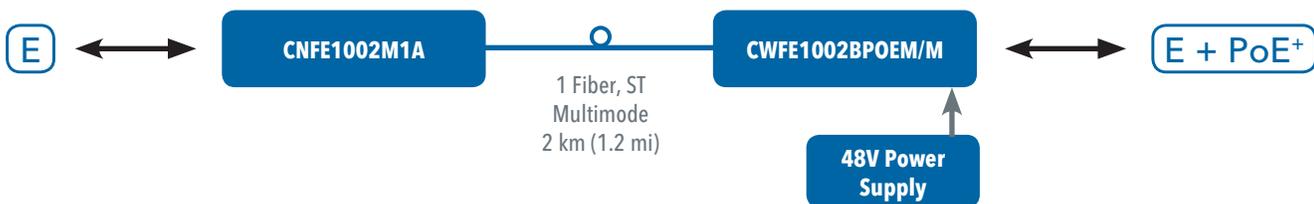
MTBF >100,000 hours
Operating Temp 0° C to +50° C @ 30W or 60W PoE output
-20° C to +60° C @ 15W PoE output
Storage Temp -40° C to +85° C
Relative Humidity 0% to 95% (non-condensing)*

AGENCY COMPLIANCE



MADE IN THE USA

TYPICAL APPLICATIONS



OPTICAL FIBER
 COPPER CABLE

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 ²	1	Multimode	SC	30W
CWFE1004BPOEM/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "B" Unit ²	1	Multimode	SC	30W
CWFE1004APOEMHO/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "A" Unit ²	1	Multimode	SC	60W
CWFE1004BPOEMHO/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "B" Unit ²	1	Multimode	SC	60W
CWFE1004APOES/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "A" Unit ²	1	Single Mode	SC	30W
CWFE1004BPOES/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "B" Unit ²	1	Single Mode	SC	30W
CWFE1004APOESHO/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "A" Unit ²	1	Single Mode	SC	60W
CWFE1004BPOESHO/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "B" Unit ²	1	Single Mode	SC	60W
CWFE1002APOEM/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "A" Unit ²	1	Multimode	ST	30W
CWFE1002BPOEM/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "B" Unit ²	1	Multimode	ST	30W
CWFE1002APOEMHO/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "A" Unit ²	1	Multimode	ST	60W
CWFE1002BPOEMHO/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "B" Unit ²	1	Multimode	ST	60W
CWFE1002APOES/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "A" Unit ²	1	Single Mode	ST	30W
CWFE1002BPOES/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "B" Unit ²	1	Single Mode	ST	30W
CWFE1002APOESHO/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "A" Unit ²	1	Single Mode	ST	60W
CWFE1002BPOESHO/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "B" Unit ²	1	Single Mode	ST	60W
CWFE5FPMCPOE30/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, SFP Required	§	§	SFP	30W
CWFE5FPMCPOE60/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, SFP Required	§	§	SFP	60W
Accessories:	Model-appropriate 30W (ComNet PS48VDC-.84A) or 60W (ComNet PS48VDC-1.25A) Power Supply Included				
Options:	48 Volt DC Plug-in Power Supply (extra charge, consult factory)				
	[1] Add suffix '/C' for Conformally Coated Circuit Boards to extend to condensation conditions (Extra charge, consult factory)				
	DIN-Rail Mounting Adaptor Kit - With Mounting Hardware (Optional, order model DINBKT2 or DINBKT4)				

[2] "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.

