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

CNFE100(X)POE/M Series

HARDENED | INCLUDED | CONVERTER | 60W PoE++ | FLEXIBILITY | 1 OR 2 CH

The ComNet™ CNFE100(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. 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. 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)
- The Ethernet electrical interface auto-negotiates to either 10 or 100 Mbps without the need for any user selection
- The optical interface operates at 100 Mbps (100-FX)
- 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 modem protection
- A power supply providing 48 VDC at 1.25A is provided with each converter
- Indicating LEDs provided for rapidly ascertaining the operating status of the device
- Lifetime 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

** Small Form-Factor Pluggable Module. Sold separately.*

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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 Voltage	48VDC
Power Consumption	1.25A

Electrical & Mechanical

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

Environmental

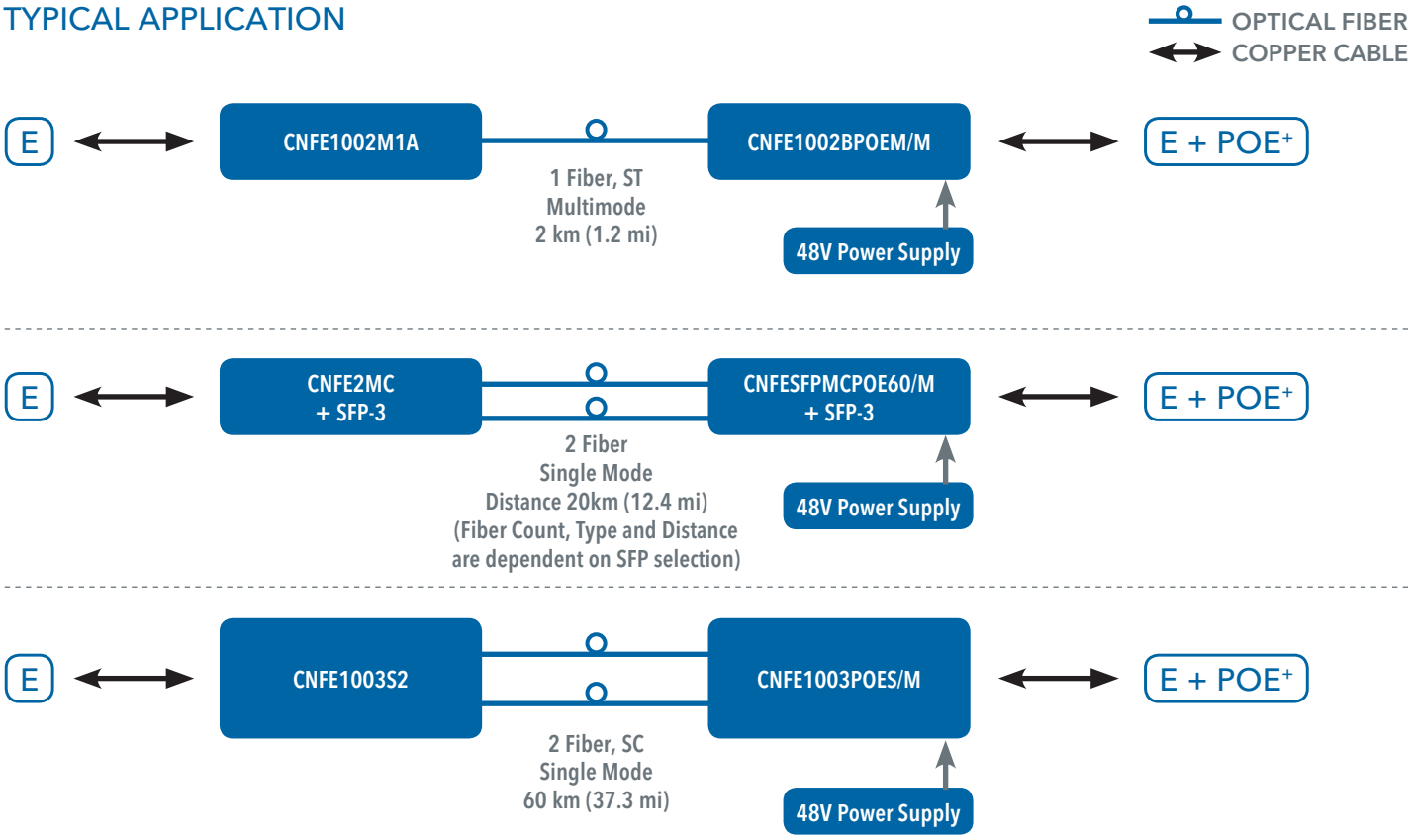
MTBF	>100,000 hours
Operating Temp	-40° C to +75° C
Storage Temp	-40° C to +85° C
Relative Humidity	0% to 95% (non-condensing)[1]

[1] May be extended to condensation conditions

AGENCY COMPLIANCE
PART 15 COMPLIANT · E322911 · N24621

MADE IN THE USA

TYPICAL APPLICATION



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ORDERING INFORMATION

Part Number	Description	Fibers Required	Fiber	Optic	PSE Output
CNFE1003POEM/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini	2	Multimode	SC	30W
CNFE1003POEMHO/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini	2	Multimode	SC	60W
CNFE1003POES/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini	2	Single Mode	SC	30W
CNFE1003POESHO/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini	2	Single Mode	SC	60W
CNFE1005POEM/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini	2	Multimode	ST	30W
CNFE1005POEMHO/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini	2	Multimode	ST	60W
CNFE1005POES/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini	2	Single Mode	ST	30W
CNFE1005POESHO/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini	2	Single Mode	ST	60W
CNFE1004APOEM/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "A" Unit[2]	1	Multimode	SC	30W
CNFE1004BPOEM/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "B" Unit[2]	1	Multimode	SC	30W
CNFE1004APOEMHO/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "A" Unit[2]	1	Multimode	SC	60W
CNFE1004BPOEMHO/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "B" Unit[2]	1	Multimode	SC	60W
CNFE1004APOES/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "A" Unit [2]	1	Single Mode	SC	30W
CNFE1004BPOES/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "B" Unit[2]	1	Single Mode	SC	30W
CNFE1004APOESHO/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "A" Unit[2]	1	Single Mode	SC	60W
CNFE1004BPOESHO/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "B" Unit[2]	1	Single Mode	SC	60W
CNFE1002APOEM/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "A" Unit[2]	1	Multimode	ST	30W
CNFE1002BPOEM/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "B" Unit[2]	1	Multimode	ST	30W
CNFE1002APOEMHO/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "A" Unit[2]	1	Multimode	ST	60W
CNFE1002BPOEMHO/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "B" Unit[2]	1	Multimode	ST	60W
CNFE1002APOES/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "A" Unit[2]	1	Single Mode	ST	30W
CNFE1002BPOES/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "B" Unit[2]	1	Single Mode	ST	30W
CNFE1002APOESHO/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "A" Unit[2]	1	Single Mode	ST	60W
CNFE1002BPOESHO/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, "B" Unit[2]	1	Single Mode	ST	60W
CNFESFPMCPOE30/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, SFP Required	See [3]	See [3]	SFP	30W
CNFESFPMCPOE60/M	Commercial Grade 100Mbps Media Converter with 48V POE, Mini, SFP Required	See [3]	See [3]	SFP	60W
Included Accessories Options	Power Supply: Model-appropriate 30W (ComNet PS48VDC-.84A) or 60W (ComNet PS48VDC-1.25A) Included Add suffix '/C' for Conformally Coated Circuit Boards (Extra charge, consult factory) DIN-Rail Mounting Adaptor Plate Kit – With mounting hardware (Optional, order model DINBKT2)				

[2] "A" units must be paired with corresponding "B" units, and"B" units paired with "A" units.
[3] 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.

Low Power Consumption

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