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

CNFE100(X)POE/M Series

The ComNet CNFE100(X)POE/M Series 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, 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

› 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[3]
Power	Terminal Block
Electrical	RJ-45
PoE Pin Assignment	RJ-45 port supports IEEE802.3at End-point Positive (VCC+): RJ45 pin 1, 2 (RJ45 pin 1,2 and 4,5 on 60W ports) Negative (VCC-): RJ45 pin 3, 6 (RJ45 pin 3,6 and 7,8 on 60W ports)

Power

Operating Voltage	48 to 57 VDC
Power Consumption	3W (without PoE)
Current Protection	Automatic Resettable Solid-State Current Limiters

Electrical & Mechanical

LED Indicators	Optical Link/Data Activity Power PoE
Circuit Board	Meets IPC Standard
Size (L×W×H)	4.0 × 3.7 × 1.0 in (10.4 × 9.5 × 2.7 cm)
Shipping Weight	<1 lb / 0.5 kg

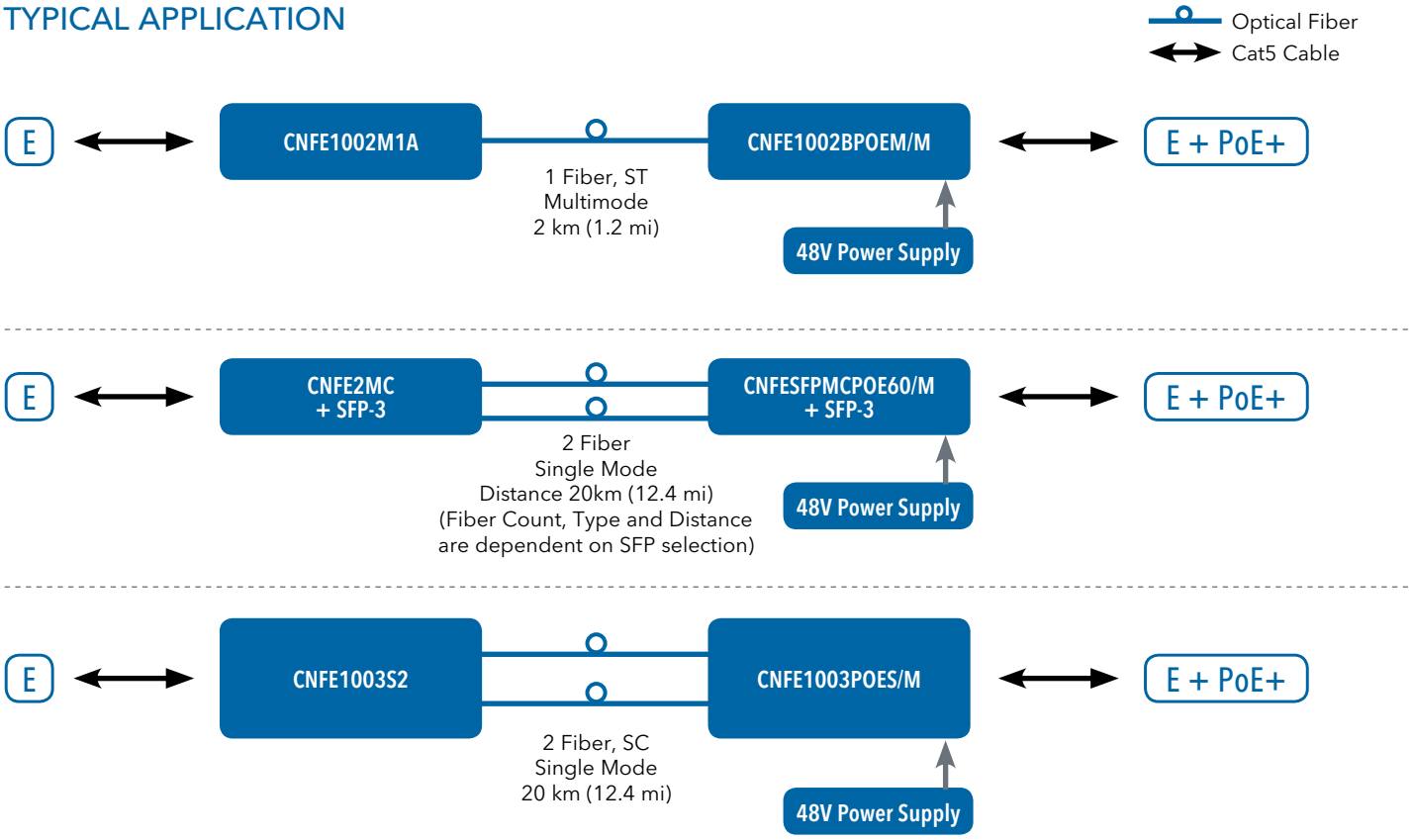
Environmental

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]

AGENCY COMPLIANCE

MADE IN THE USA

TYPICAL APPLICATION



ORDERING INFORMATION

Part Number	Description	Fibers Required	Cable	Optic	PSE Output
CNFE1003POEM/M	Industrially Hardened 100Mbps Media Converter with PoE+, Mini	2	Multimode	SC	30W
CNFE1003POEMHO/M	Industrially Hardened 100Mbps Media Converter with PoE++, Mini	2	Multimode	SC	60W
CNFE1003POES/M	Industrially Hardened 100Mbps Media Converter with PoE+, Mini	2	Single Mode	SC	30W
CNFE1003POESHO/M	Industrially Hardened 100Mbps Media Converter with PoE++, Mini	2	Single Mode	SC	60W
CNFE1005POEM/M	Industrially Hardened 100Mbps Media Converter with PoE+, Mini	2	Multimode	ST	30W
CNFE1005POEMHO/M	Industrially Hardened 100Mbps Media Converter with PoE++, Mini	2	Multimode	ST	60W
CNFE1005POES/M	Industrially Hardened 100Mbps Media Converter with PoE+, Mini	2	Single Mode	ST	30W
CNFE1005POESHO/M	Industrially Hardened 100Mbps Media Converter with PoE++, Mini	2	Single Mode	ST	60W
CNFE1004APOEM/M	Industrially Hardened 100Mbps Media Converter with PoE+, Mini, "A" Unit[2]	1	Multimode	SC	30W
CNFE1004BPOEM/M	Industrially Hardened 100Mbps Media Converter with PoE+, Mini, "B" Unit[2]	1	Multimode	SC	30W
CNFE1004APOEMHO/M	Industrially Hardened 100Mbps Media Converter with PoE++, Mini, "A" Unit[2]	1	Multimode	SC	60W
CNFE1004BPOEMHO/M	Industrially Hardened 100Mbps Media Converter with PoE++, Mini, "B" Unit[2]	1	Multimode	SC	60W
CNFE1004APOES/M	Industrially Hardened 100Mbps Media Converter with PoE+, Mini, "A" Unit [2]	1	Single Mode	SC	30W
CNFE1004BPOES/M	Industrially Hardened 100Mbps Media Converter with PoE+, Mini, "B" Unit[2]	1	Single Mode	SC	30W
CNFE1004APOESHO/M	Industrially Hardened 100Mbps Media Converter with PoE++, Mini, "A" Unit[2]	1	Single Mode	SC	60W
CNFE1004BPOESHO/M	Industrially Hardened 100Mbps Media Converter with PoE++, Mini, "B" Unit[2]	1	Single Mode	SC	60W
CNFE1002APOEM/M	Industrially Hardened 100Mbps Media Converter with PoE+, Mini, "A" Unit[2]	1	Multimode	ST	30W
CNFE1002BPOEM/M	Industrially Hardened 100Mbps Media Converter with PoE+, Mini, "B" Unit[2]	1	Multimode	ST	30W
CNFE1002APOEMHO/M	Industrially Hardened 100Mbps Media Converter with PoE++, Mini, "A" Unit[2]	1	Multimode	ST	60W
CNFE1002BPOEMHO/M	Industrially Hardened 100Mbps Media Converter with PoE++, Mini, "B" Unit[2]	1	Multimode	ST	60W
CNFE1002APOES/M	Industrially Hardened 100Mbps Media Converter with PoE+, Mini, "A" Unit[2]	1	Single Mode	ST	30W
CNFE1002BPOES/M	Industrially Hardened 100Mbps Media Converter with PoE+, Mini, "B" Unit[2]	1	Single Mode	ST	30W
CNFE1002APOESHO/M	Industrially Hardened 100Mbps Media Converter with PoE++, Mini, "A" Unit[2]	1	Single Mode	ST	60W
CNFE1002BPOESHO/M	Industrially Hardened 100Mbps Media Converter with PoE++, Mini, "B" Unit[2]	1	Single Mode	ST	60W
CNFESFPMCPOE30/M	Industrially Hardened 100Mbps Media Converter with PoE+, Mini, SFP Required	See [3]	See [3]	SFP	30W
CNFESFPMCPOE60/M	Industrially Hardened 100Mbps Media Converter with PoE++, Mini, SFP Required	See [3]	See [3]	SFP	60W
Included Accessories	Power Supply: Model-appropriate 30 W (ComNet PS48VDC-.84A) or 60 W (ComNet PS48VDC-1.25A) Included, for benign 0 to 50°C applications only. Hardened power supply available, consult factory)				
Options	[1] Add suffix '/C' for Conformally Coated Circuit Boards to extend to condensation conditions (Extra charge, consult factory) DIN-Rail Mounting Adaptor Plate 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.

[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

comnet Communication Networks

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