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.
CNFE100(X)POE/M Series

SPECIFICATIONS

Data
- Data Interface: Ethernet
- Data Rate: 10/100 Mbps
  - IEEE 802.3 Compliant
  - Full Duplex orHalf 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 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]

[1] May be extended to condensation conditions

TYPICAL APPLICATION

OPTICAL FIBER

COPPER CABLE

1 Fiber, ST
Multimode
2 km (1.2 mi)

2 Fiber, SC
Single Mode
Distance 20km (12.4 mi)
(Fiber Count, Type and Distance are dependent on SFP selection)

2 Fiber, SC
Single Mode
60 km (37.3 mi)
## ORDERING INFORMATION

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Fibers Required</th>
<th>Fiber</th>
<th>Optic</th>
<th>PSE Output</th>
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<tr>
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**Included Accessories Options**
- Power Supply: Model-appropriate 30W (ComNet PS48VDC-0.4A) 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.

**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.