



The ComNet CNGE2MCPOEM Ethernet 2 port media converter is designed to transmit and receive 10/100/1000 Mbps data over optical fiber through user selectable SFP options. The CNGE2MCPOEM transmits and receives a single channel of Ethernet data. It also supports IEEE 802.3at Class 1 – 4 as power sourcing equipment (PSE) with up to 30 Watts of operating power to the remote powered device. It requires the ordering of sold-separately interchangeable SFP modules for fiber type, distance and connectors. Its electrical interface will Auto-Negotiate to a 10 Mbps, 100 Mbps or 1000 Mbps Ethernet rate without any adjustments. The optical interface operates at 1000 Mbps. The CNGE2MCPOEM is environmentally hardened to operate in extreme temperatures. LED indicators are provided for confirming equipment operating status.

## FEATURES

- › 10/100/1000 Mbps Ethernet
  - 10/100/1000 BASE-T/TX electrical port
  - 1000 BASE-FX optical port
- › Electrical port supports Auto-Negotiation for 10 Mbps, 100 Mbps or 1000 Mbps, full duplex or half duplex data.
- › Optical port supports 1000 Mbps full duplex data
- › IEEE 802.3at Class 1 – 4 Power over Ethernet (PoE)
- › Automatic MDI/MDI-X crossover
- › Distances up to 120 km with optional SFPs
- › Designed to meet full compliance with the environmental requirements (ambient operating temperature, mechanical shock, vibration, humidity with condensation, high-line/low-line voltage conditions and transient voltage protection) of NEMA TS-1/TS-2 and the Caltrans Specification for Traffic Signal Control Equipment.
- › Uses interchangeable SFP for fiber type, distance and connector (Ordered separately)
- › Voltage transient protection on all power and signal input/output lines provides unconditional protection from power surges and other voltage transient events.
- › No in-field optical adjustments required
- › LED Indicators
- › IEEE 802.3 compliant

## APPLICATIONS

- › 10/100/1000 Mbps Ethernet Media Converter
- › High Speed Computer Links

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

## SPECIFICATIONS

<b>Data</b>	
Data Interface	Ethernet
Data Rate	10/100/1000 Mbps IEEE 802.3 Compliant Full Duplex or Half Duplex Electrical Port/Full Duplex Optical Port
Electrical	30W (max)
<b>Fibers<sup>1</sup></b>	SFP Dependent
<b>Fiber Connectors</b>	Requires selection of sold-separately SFP modules. See ComNet data sheet for number and description of SFP modules
<b>Connectors</b>	
Power	Terminal Block
Electrical	RJ45
<b>PoE pin assignment</b>	RJ45 port #1 supports IEEE 802.3at Class 1 - 4 End-point Positive (VCC+): RJ45 pin 1, 2 Negative (VCC-): RJ45 pin 3, 6
<b>Indicating LEDs</b>	
	- Optical Link/Data Activity - Power - PSE

<b>Power</b>	
Operating Power	48VDC @ 1A
<b>Electrical &amp; Mechanical</b>	
Current Protection:	Automatic Resettable Solid-State Current Limiters
Circuit Board	Meets IPC Standard
Size	4.1 × 3.7 × 1.1 in (10.4 × 9.4 × 2.8 cm)
Shipping Weight	<2 lbs./0.9 kg
<b>Environmental</b>	
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) <sup>2</sup>

[1] 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



## ORDERING INFORMATION

Part Number	Description
CNGE2MCPOEM	2 Port 10/100/1000 Mbps Ethernet Media Converter with high power Power over Ethernet (PoE)
Included	48 Volt DC Plug-in Power Supply, 90-264 VAC, 50/60 Hz (Included)
Options	[2] 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 DINBKT1)

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.

## TYPICAL APPLICATION



Low Power Consumption