



The comnet CNGE2MCPOE.BT 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 CNGE2MCPOE.BT transmits and receives over a single channel of Ethernet data. As power sourcing equipment (PSE), it also supports IEEE802.3bt with up to 90 Watts of operating power to the remote powered device (PD).

It requires the ordering of sold-separately interchangeable SFP modules for fiber type, distance, and connectors. The copper interface will Auto-Negotiate to a 10 Mbps, 100 Mbps or 1000 Mbps Ethernet rate without adjustment. The optical interface can either Auto-Negotiate at 1000 Mbps or configured to Forced 1000 Mbps Negotiation. The CNGE2MCPOE.BT is environmentally hardened to operate in extreme temperatures. LED indicators are provided for confirming equipment operating status.



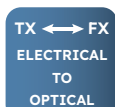
-40° TO +75°C



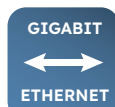
FLEXIBILITY



802.3BT



CONVERTER



1 CH

Applications

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



Key Features

- Redundant power supply input with 47V UVLO (under-voltage lockout) protection
- 10/100/1000BASE-T Ethernet connectivity to the network provided on an RJ45 Connector
 - Supports Auto-Negotiation for 10, 100 or 1000 Mbps through the RJ45 Interface
 - IEEE 802.3bt Class 1-8 (Type 4) 90W PoE sourcing capability
 - Backwards compatible with IEEE 802.3af and 802.3at
- 1000 Mbps Fiber Optic connectivity provided on SFP connector
- Local summary alarm (Form C relay) & fail-safe pass-through interface
 - Power, SFP link, and Ethernet link fault monitoring is customer selectable through DIP switch configuration
- Distances up to 120 km with optional SFPs
- Designed to meet full compliance with the environmental requirements of NEMA TS-1/TS-2 and the Caltrans Specification for Traffic Signal Control Equipment
- 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
- Limited Lifetime Warranty

Specifications

DATA

DATA INTERFACE	Ethernet
DATA RATE	10/100/1000 MBPS IEEE802.3.BT compliant Full duplex or half duplex operation
ELECTRICAL	90W (MAX)

FIBERS

FIBERS ¹	SFP Dependent
FIBER CONNECTORS	Requires Selection of Sold-Separately SFP Modules

CONNECTORS

POWER	Terminal Block
ELECTRICAL	RJ45

PoE

PoE PIN ASSIGNMENT	RJ45 Supports IEEE 802.3BT Class 1 - 80 <ul style="list-style-type: none">• End Point Positive Pairs (VCC+) Pairs 3 & 6, Pairs 4 & 5• End Point Negative Pairs (VCC-) Pairs 1 & 2, Pairs 7 & 8
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INDICATING LEDs

INDICATING LEDs	SFP LEDS RJ45 LEDS LED Tower (Power & Status)
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POWER

NOMINAL OPERATING POWER	< 3W
MAX OPERATING POWER (POE.BT)	90W
OPERATING POWER	52-57 VDC

ELECTRICAL & MECHANICAL

CURRENT PROTECTION	Automatic resettable solid-state current limiters
CIRCUIT BOARD	Meets IPC standard
SIZE	4.2 X 3.8 X 1.1 in (10.5 X 9.7 X 2.8 cm)
SHIPPING WEIGHT	<2 lbs./0.9 kg

Specifications (Continued)

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] 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	CNGE2MCPOE.BT
DESCRIPTION	2-port 10/100/1000 Mbps Ethernet-Fiber Media Converter w/ 90W PoE sourcing capabilities
OPTIONS	1) Add suffix '/C' for Conformally Coated Circuit Boards to extend to condensation conditions (extra charge, consult factory) 2) DIN-Rail Mounting Adapters: DINBKT1 or DINBKT4

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 Applications

