



**The ComNet™ CNMCSFPbt is an industrial grade / environmentally hardened fiber optic Ethernet transceiver, capable of delivering up to 90 W of PoE.**

**The ComNet™ CNMCSFPbt is an industrial grade / environmentally hardened fiber optic Ethernet transceiver (media converter) that complies with the PoE standard as defined by the IEEE 802.3bt Type 4 while maintaining backward compatibility with the previous standards as defined by IEEE802.3at-2009 and IEEE802.3af-2003.**

The media converter consists of one DIP switch selectable 100/1000BASE-X SFP port, and one auto-negotiating 10/100/1000BASE-T(X) RJ-45 PSE port. When supplied with an operating power input of 52 to 56 VDC, PoE that is compliant with the PoE standard as defined by IEEE 802.3bt Type 4 is produced, capable of delivering up to 90 W of PoE to a compliant powered device (PD). CNMCSFPbt is designed to allow for optional redundant operating power inputs.

Link Fault Pass Through (LFPT) is DIP switch selectable. When engaged, LFPT disables the copper side signal on loss of optical link and disables the fiber signal on loss of electrical link.

## Typical Applications

- ✓ IP-addressable factory automation/process control devices
- ✓ Transportation/ITS systems
- ✓ Access control systems
- ✓ Intercom systems
- ✓ VOIP
- ✓ Camera surveillance networks
- ✓ Ethernet transmission to wireless LAN access points

## Key Features

- ✓ IEEE 802.3bt compliant Media Converter
- ✓ 10/100/1000BASE-T(X) Ethernet port supports auto-negotiation and automatic MDI/MDI-X
- ✓ 100/1000BASE-X SFP port
- ✓ No electrical or optical adjustments
- ✓ Designed for installation in harsh out-of-plant/unconditioned industrial or roadside operating environments (-40° to +75°C ambient)
- ✓ Fully compliant with the environmental requirements of NEMA TS-2 for Traffic Signal Control Equipment
- ✓ Voltage transient protection on all power and signal input/output line provide protection from voltage surges and other transient events
- ✓ Indicator LEDs confirm operating status

# CNMCSFPbt

## IEEE 802.3bt Media Converter

### Specifications

#### Inputs and Outputs

|                    |  |
|--------------------|--|
| Ethernet port      | 10/100/1000BASE-T(X) auto-negotiating Ethernet compliant with IEEE 802.3af/at/bt PoE |
| PoE Pin Assignment | 1(V-), 2(V-), 3(V+), 6(V+) 4(V+), 5(V+), 7(V-), 8(V-)                                |
| Optical port       | 100/1000BASE-X SFP transceiver, data rate DIP switch selectable                      |
| Operating power    | Redundant 52 to 56 VDC   |

#### Physical Interface Information

|                 |   |
|-----------------|---|
| Ethernet port   | 8P8C (RJ-45) modular jack (receptacle)  |
| Optical port    | MSA-compliant SFP port  |
| Operating power | 4-pin screw clamp terminal strip, 14 AWG to 22 AWG 2 (two) five-foot, 18/2 red/black pair included for operating power inputs |
| Dimensions      | Length (L): 4.1 in/103.5 mm<br>Width (W): 1.3 in/32 mm<br>Depth (D): 3.2 in/81.5 mm   |
| Weight          | Complete Package: 0.80lb/0.36kg<br>Module with Bracket Mount: 0.40lb/0.18kg   |

#### Operating Power Parameters

|                         |   |
|-------------------------|---|
| Operating voltage range | 52 VDC to 56 VDC  |
| Power consumption       | 3 W<br>Reverse polarity protection<br>Redundant operating power inputs<br>Environmentally hardened power supply, ComNet item number PS-MORD48240 is recommended |

#### Mounting

DIN rail and wall mount brackets included  
Mountable to standard 35 mm DIN rail (DIN 3), either profile - TS-35 x 7.5 or TS-35 x 15

#### Indicator LEDs

Operating power status  
Ethernet link/activity status  
SFP link/activity status  
PSE status

#### Environmental

|                               |  |
|-------------------------------|--|
| Operating Temp                | -40°C to +75°C<br>(-40°F to +167°F)  |
| Storage Temp                  | -40°C to +85°C<br>(-40°F to +185°F)  |
| Relative Humidity - Operating | 5 % to 95 %, non-condensing  |
| Relative Humidity - Storage   | 5% to 95 %, non-condensing   |
| Cooling                       | Convection cooled - user should provide sufficient space around the device for a passive convective cooling air path |
| MTBF                          | > 100,000 hr   |

#### Approvals & EMC Compliance

TAA  
NDAA  
UL/ULC  
CE  
FCC  
NEMA

