



The ComNet Ethernet internal mounted media converters are designed to transmit and receive 10/100 Mbps data over multimode or single mode optical fiber. The electrical interface will Auto-Negotiate to a 10 Mbps, or 100 Mbps Ethernet rate without any adjustments. The optical interface operates at a 100 Mbps Ethernet rate. These media converters are environmentally hardened to operate in extreme temperatures. LED indicators are provided for rapidly ascertaining equipment operating status. The CNFE1/X do not have a metal enclosure and are designed to be incorporated within a device.

FEATURES

- › 10/100 Mbps Ethernet
 - 10/100 BASE-T/TX electrical port
 - 100 BASE-FX optical port
- › IEEE 802.3 compliant
- › Electrical port supports Auto-Negotiation for 10 Mbps or 100 Mbps, full duplex or half duplex data.
- › Optical port supports 100 Mbps full duplex data
- › Automatic MDI/MDI-X crossover
- › Distances up to: 3 km (2 miles) Multimode
20 km (12 miles) Single Mode

- › ST or SC optical connectors
- › 1 or 2 fiber design
- › No in-field optical adjustments required
- › LED Indicators
- › Lifetime Warranty

APPLICATIONS

- › 10/100 Mbps Ethernet Media Converter
- › High Speed Computer Links
- › Direct Fiber Optic Interface for IP Camera

SPECIFICATIONS

Data

| | |
|----------------|---|
| Data Interface | Ethernet |
| Data Rate | 10/100 Mbps IEEE 802.3 Compliant Full or Half Duplex Electrical Port/ Full Duplex Optical Port |

Connectors

| | |
|------------|-------------------------|
| Optical | ST or SC, 1 or 2 Fibers |
| Power | Screw Terminals |
| Electrical | RJ45 |

LED Indicators

- Optical Link/Data Activity - Power

Power

| | |
|-------------------------|-----------------------|
| Operating Voltage Range | 22-27 VAC or 8-24 VDC |
| Power Consumption | 3W AC or 6W VDC |

Electrical & Mechanical

| | |
|-----------------|--------------------------------------|
| Circuit Board | Meets IPC Standard |
| Size (L×W×H) | 1.9 × 1.9 × 1.1 in, (5 × 5 × 2.8 cm) |
| Shipping Weight | <1 lbs./0.9 kg |

Mounting Hardware (Not Included)

| | |
|----------------------|---|
| Screw Size | 2.5 mm |
| Min. Standoff Height | 8 mm |
| SAE requirements | #2-56 × 3/16" long Nylon Pan Head Screw as a minimum into a 3/16" Nylon Hex Standoff that is #2-56 thread × 3/8" long minimum |

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 |



ORDERING INFORMATION

| Part Number | Description | Connector | Fibers Required | Fiber | Optical Power Budget | Maximum Distance |
|-------------|----------------------------------|-----------|-----------------|------------|----------------------|------------------|
| CNFE1M1A/2 | 10/100 Mbps Ethernet 1310/1550nm | ST | 1 | Multimode | 10 dB | 3 km (2 miles) |
| CNFE1M1B/2 | 10/100 Mbps Ethernet 1550/1310nm | ST | 1 | Multimode | 10 dB | 3 km (2 miles) |
| CNFE1S1A/2 | 10/100 Mbps Ethernet 1310/1550nm | ST | 1 | Singlemode | 15 dB | 20 km (12 miles) |
| CNFE1S1B/2 | 10/100 Mbps Ethernet 1550/1310nm | ST | 1 | Singlemode | 15 dB | 20 km (12 miles) |
| CNFE1M2/3 | 10/100 Mbps Ethernet 1310nm | SC | 2 | Multimode | 10 dB | 3 km (2 miles) |
| CNFE1S2/3 | 10/100 Mbps Ethernet 1310nm | SC | 2 | Singlemode | 15 dB | 20 km (12 miles) |
| CNFE1M1A/4 | 10/100 Mbps Ethernet 1310/1550nm | SC | 1 | Multimode | 10 dB | 3 km (2 miles) |
| CNFE1M1B/4 | 10/100 Mbps Ethernet 1550/1310nm | SC | 1 | Multimode | 10 dB | 3 km (2 miles) |
| CNFE1S1A/4 | 10/100 Mbps Ethernet 1310/1550nm | SC | 1 | Singlemode | 15 dB | 20 km (12 miles) |
| CNFE1S1B/4 | 10/100 Mbps Ethernet 1550/1310nm | SC | 1 | Singlemode | 15 dB | 20 km (12 miles) |
| CNFE1M2/5 | 10/100 Mbps Ethernet 1310nm | ST | 2 | Multimode | 10 dB | 3 km (2 miles) |
| CNFE1S2/5 | 10/100 Mbps Ethernet 1310nm | ST | 2 | Singlemode | 15 dB | 20 km (12 miles) |

Options DC Plug-in Power Supply (not included)
 [1]Add suffix 'C' for Conformally Coated Circuit Boards to extend to condensation conditions (Extra charge, consult factory)
 Mounting Hardware (not included)

TYPICAL APPLICATION



— OPTICAL FIBER
 — CAT5e

Low Power Consumption