

10/100 Mbps Ethernet Electrical ↔ Optical
media converter for internal mounting



Description

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.

Applications

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

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

CNFE1(M,S)/(X) SERIES

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specifications

DATA

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

ELECTRICAL & MECHANICAL

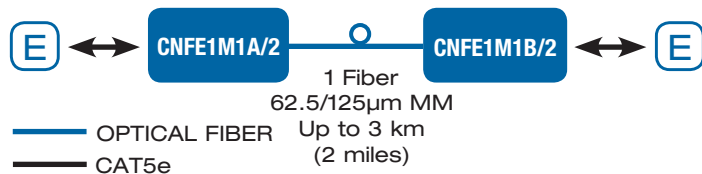
Power: 22-27 VAC @ 100mA or
 8-24 VDC @ 220 mA
 Circuit Board: Meets IPC Standard
 Size (in./cm) (L×W×H): 1.9 × 1.9 × 1.1 in.,
 (5 × 5 × 2.8 cm)
 Shipping Weight: <1 lbs./0.9 kg

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)[†]

MOUNTING

(Mounting Hardware not included)
 Screw Size: 2.5mm
 Minimum Standoff Height: 8mm or longer
 Where SAE is required: #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



[†] May be extended to condensation conditions



| PART NUMBER | WAVELENGTH | CONNECTOR | FIBERS REQUIRED | FIBER | OPTICAL PWR BUDGET | MAX. DISTANCE | # RACK SLOTS |
|-------------|----------------------------------|-----------|-----------------|------------|--------------------|------------------|--------------|
| CNFE1M1A/2 | 10/100 Mbps Ethernet 1310/1550nm | ST | 1 | Multimode | 10 dB | 3 km (2 miles) | N/A |
| CNFE1M1B/2 | 10/100 Mbps Ethernet 1550/1310nm | ST | 1 | Multimode | 10 dB | 3 km (2 miles) | N/A |
| CNFE1S1A/2 | 10/100 Mbps Ethernet 1310/1550nm | ST | 1 | Singlemode | 15 dB | 20 km (12 miles) | N/A |
| CNFE1S1B/2 | 10/100 Mbps Ethernet 1550/1310nm | ST | 1 | Singlemode | 15 dB | 20 km (12 miles) | N/A |
| CNFE1M2/3 | 10/100 Mbps Ethernet 1310nm | SC | 2 | Multimode | 10 dB | 3 km (2 miles) | N/A |
| CNFE1S2/3 | 10/100 Mbps Ethernet 1310nm | SC | 2 | Singlemode | 15 dB | 20 km (12 miles) | N/A |
| CNFE1M1A/4 | 10/100 Mbps Ethernet 1310/1550nm | SC | 1 | Multimode | 10 dB | 3 km (2 miles) | N/A |
| CNFE1M1B/4 | 10/100 Mbps Ethernet 1550/1310nm | SC | 1 | Multimode | 10 dB | 3 km (2 miles) | N/A |
| CNFE1S1A/4 | 10/100 Mbps Ethernet 1310/1550nm | SC | 1 | Singlemode | 15 dB | 20 km (12 miles) | N/A |
| CNFE1S1B/4 | 10/100 Mbps Ethernet 1550/1310nm | SC | 1 | Singlemode | 15 dB | 20 km (12 miles) | N/A |
| CNFE1M2/5 | 10/100 Mbps Ethernet 1310nm | ST | 2 | Multimode | 10 dB | 3 km (2 miles) | N/A |
| CNFE1S2/5 | 10/100 Mbps Ethernet 1310nm | ST | 2 | Singlemode | 15 dB | 20 km (12 miles) | N/A |

Options: 9 Volt DC Plug-in Power Supply, 90-264 VAC, 50/60 Hz
 Add suffix '/C' for Conformally Coated Circuit Boards (Extra charge, consult factory)
 Mounting Hardware (not included)



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