



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) <sup>1</sup>



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

