



INCLUDED



HARDENED



POWERED



CONVERTER



The ComNet™ Ethernet CNFE200X media converter series are two-channel Ethernet electrical to optical media converters. These auto-negotiating devices accept two 10/100 Mbps electrical inputs and convert this to a single 100 Mbps optical output. This series of media converters are available as multimode or single-mode and one and two fiber SC and ST optical connectors. The ComNet exclusive Demux feature allows for port isolation, replicating two media converters over one fiber. The ComNet exclusive Mux feature prevents network video flooding of multicast traffic with DIP switch selection of the fiber port as a dedicated uplink path. The units can be powered by wide range AC or DC input and include a DC power supply.

FEATURES

- › 10/100 Mbps Ethernet
 - 2 × 10/100 BASE-T/TX electrical ports
 - 100 BASE-FX optical port
- › Electrical ports support 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 mi) Multimode
20 km (12 mi) Single Mode
- › Link Fault Pass-Through feature detects if either of the copper ports are down and triggers the optical port to switch states to indicate the failure to the head-end.
- › Designed to meet full compliance with the environmental requirements (ambient operating temperature, mechanical shock, vibration, humidity with condensation, high-line/lowline voltage conditions and transient voltage protection) of NEMA TS-1/TS-2 and the Caltrans Specification for Traffic Signal Control Equipment.
- › ST or SC optical connectors
- › 1 or 2 fiber design
- › AC/DC powered
- › Voltage transient protection on all power and signal input/output lines provides protection from power surges and other voltage transient events.
- › No in-field optical adjustments required
- › Full size units feature a contact closure output for remote side link failure detection
- › Standard size is hot-swappable rack module
- › Standard size is interchangeable between stand-alone or rack mount use - ComFit
- › IEEE 802.3 compliant
- › Lifetime Warranty

APPLICATIONS

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

SPECIFICATIONS

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	Terminal Block
Electrical	RJ45

LED Indicators

- Optical Link/Data Activity	- Electrical Link/Data Activity
- Power	- Unit Status

Power

Operating Voltage Range	Mini AC: 22 to 27 VAC
	Mini DC: 8 to 24 VDC
	Standard: 8 to 24 VDC

Power Consumption	3W
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Fault Relay (Full Size Units Only)

Response Time	25 msec typical
Output Channels	1
Rating	0-36V, 190mA (AC or DC)

Electrical & Mechanical

Current Protection	Automatic Resettable Solid-State Current Limiters
Circuit Board	Meets IPC Standard
Size (L×W×H)	Standard: 6.1 × 5.3 × 1.1 in (15.5 × 13.5 × 2.8 cm)
	Mini: 4.1 × 3.7 × 1.1 in (10.4 × 9.4 × 2.8 cm)
Shipping Weight:	<2 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) ¹

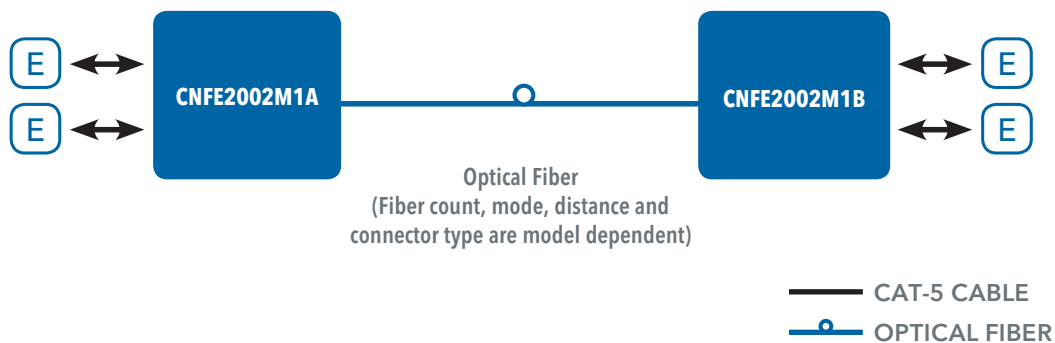
[1] May be extended to humidity with condensation conditions by adding suffix '/C'

AGENCY COMPLIANCE



MADE IN THE
USA

TYPICAL APPLICATION



ORDERING INFORMATION – Standard Mount DC-Only Media Converter

Part Number	Description	Connector	Fibers Req'd	Fiber	Optical Pwr Budget	Max Distance	# Rack Slots
CNFE2002M1A	2 Channel 10/100 Mbps Ethernet 1310/1550nm	ST	1	Multimode	10 dB	3 km (2 miles)	1
CNFE2002M1B	2 Channel 10/100 Mbps Ethernet 1550/1310nm	ST	1	Multimode	10 dB	3 km (2 miles)	1
CNFE2002S1A	2 Channel 10/100 Mbps Ethernet 1310/1550nm	ST	1	Singlemode	15 dB	20 km (12 miles)	1
CNFE2002S1B	2 Channel 10/100 Mbps Ethernet 1550/1310nm	ST	1	Singlemode	15 dB	20 km (12 miles)	1
CNFE2003M2	2 Channel 10/100 Mbps Ethernet 1310nm	SC	2	Multimode	10 dB	3 km (2 miles)	1
CNFE2003S2	2 Channel 10/100 Mbps Ethernet 1310nm	SC	2	Singlemode	15 dB	20 km (12 miles)	1
CNFE2004M1A	2 Channel 10/100 Mbps Ethernet 1310/1550nm	SC	1	Multimode	10 dB	3 km (2 miles)	1
CNFE2004M1B	2 Channel 10/100 Mbps Ethernet 1550/1310nm	SC	1	Multimode	10 dB	3 km (2 miles)	1
CNFE2004S1A	2 Channel 10/100 Mbps Ethernet 1310/1550nm	SC	1	Singlemode	15 dB	20 km (12 miles)	1
CNFE2004S1B	2 Channel 10/100 Mbps Ethernet 1550/1310nm	SC	1	Singlemode	15 dB	20 km (12 miles)	1
CNFE2005M2	2 Channel 10/100 Mbps Ethernet 1310nm	ST	2	Multimode	10 dB	3 km (2 miles)	1
CNFE2005S2	2 Channel 10/100 Mbps Ethernet 1310nm	ST	2	Singlemode	15 dB	20 km (12 miles)	1
Accessories Options	DC Plug-in Power Supply, 90-264 VAC, 50/60 Hz (Included) Add 'C' for Conformally Coated Circuit Boards (Extra charge, consult factory) DIN-Rail Mounting Adaptor Plate Kit – With mounting hardware (Optional, order model DINBKT1 or DINBKT4)						

ORDERING INFORMATION – Mini AC/DC Power Media Converter

Part Number	Description	Connector	Fibers Req'd	Fiber	Optical Pwr Budget	Max Distance	# Rack Slots
CNFE2002M1A/M	2 Channel 10/100 Mbps Ethernet 1310/1550nm	ST	1	Multimode	10 dB	3 km (2 miles)	N/A
CNFE2002M1B/M	2 Channel 10/100 Mbps Ethernet 1550/1310nm	ST	1	Multimode	10 dB	3 km (2 miles)	N/A
CNFE2002S1A/M	2 Channel 10/100 Mbps Ethernet 1310/1550nm	ST	1	Singlemode	15 dB	20 km (12 miles)	N/A
CNFE2002S1B/M	2 Channel 10/100 Mbps Ethernet 1550/1310nm	ST	1	Singlemode	15 dB	20 km (12 miles)	N/A
CNFE2003M2/M	2 Channel 10/100 Mbps Ethernet 1310nm	SC	2	Multimode	10 dB	3 km (2 miles)	N/A
CNFE2003S2/M	2 Channel 10/100 Mbps Ethernet 1310nm	SC	2	Singlemode	15 dB	20 km (12 miles)	N/A
CNFE2004M1A/M	2 Channel 10/100 Mbps Ethernet 1310/1550nm	SC	1	Multimode	10 dB	3 km (2 miles)	N/A
CNFE2004M1B/M	2 Channel 10/100 Mbps Ethernet 1550/1310nm	SC	1	Multimode	10 dB	3 km (2 miles)	N/A
CNFE2004S1A/M	2 Channel 10/100 Mbps Ethernet 1310/1550nm	SC	1	Singlemode	15 dB	20 km (12 miles)	N/A
CNFE2004S1B/M	2 Channel 10/100 Mbps Ethernet 1550/1310nm	SC	1	Singlemode	15 dB	20 km (12 miles)	N/A
CNFE2005M2/M	2 Channel 10/100 Mbps Ethernet 1310nm	ST	2	Multimode	10 dB	3 km (2 miles)	N/A
CNFE2005S2/M	2 Channel 10/100 Mbps Ethernet 1310nm	ST	2	Singlemode	15 dB	20 km (12 miles)	N/A
Accessories Options	DC Plug-in Power Supply, 90-264 VAC, 50/60 Hz (Included) Add 'C' for Conformally Coated Circuit Boards (Extra charge, consult factory) DIN-Rail Mounting Adaptor Plate Kit – With mounting hardware (Optional, order model DINBKT2 or DINBKT4)						

