



The ComNet™ series of Ethernet media converters are designed to transmit and receive 10/100 Mbps data over one or two multimode or single mode optical fibers. They are designed to be mounted within an Aigis dome and provide optical Ethernet connectivity.

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. The series is environmentally hardened to operate in extreme temperatures. An LED indicator confirms equipment operating status.

FEATURES

- › 10/100 Mbps Ethernet
 - 10/100 BASE-T/TX electrical port
 - 100 BASE-FX optical port
- › 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
- › Distances up to 45 km (28 miles)
- › Designed to meet full compliance with the environmental requirements (ambient operating temperature, mechanical shock, vibration, humidity with condensation, high-line/low-line voltage conditions and transient voltage protection) of NEMA TS-1/TS-2 and the Caltrans Specification for Traffic Signal Control Equipment.
- › SC and ST optical connectors available
- › Voltage transient protection on power input lines provides unconditional protection from power surges and other voltage transient events
- › No in-field optical adjustments required
- › LED Indicators
- › IEEE 802.3 compliant
- › Lifetime Warranty

APPLICATIONS

- › 10/100 Mbps Ethernet Media Converter
- › Electrical to Optical Media Converter for Aigis Dome

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
- Power

Power

Operating Voltage Range	8 to 15 VDC
Power Consumption	4W

Electrical & Mechanical

Current Protection	Automatic Resettable Solid-State Current Limiters
Circuit Board	Meets IPC Standard
Size (L×W×H)	2.9 × 2.8 × 1.5 in (7.4 × 7.1 × 3.8 cm)
Shipping Weight:	< 1 lb/0.45 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



ORDERING INFORMATION

Part Number	Description	Wavelength	Connector	Fibers Required	Fiber	Optical Pwr Budget	Max. Distance
CNFE1002M1A-A	10/100 Mbps Ethernet	1310/1550 nm	ST	1	Multimode 62.5/125µm	10 dB	3 km (1.9 miles)
CNFE1002S1A-A	10/100 Mbps Ethernet	1310/1550 nm	ST	1	Single Mode 9/125µm	15 dB	37 km (23 miles)
CNFE1003M2-A	10/100 Mbps Ethernet	1310 nm	SC	2	Multimode 62.5/125µm	10 dB	3 km (1.9 miles)
CNFE1003S2-A	10/100 Mbps Ethernet	1310 nm	SC	2	Single Mode 9/125µm	15 dB	37 km (23 miles)
CNFE1004M1A-A	10/100 Mbps Ethernet	1310/1550 nm	SC	1	Multimode 62.5/125µm	10 dB	3 km (1.9 miles)
CNFE1004S1A-A	10/100 Mbps Ethernet	1310/1550 nm	SC	1	Single Mode 9/125µm	15 dB	37 km (23 miles)
CNFE1005M2-A	10/100 Mbps Ethernet	1310 nm	ST	2	Multimode 62.5/125µm	10 dB	3 km (1.9 miles)
CNFE1005S2-A	10/100 Mbps Ethernet	1310 nm	ST	2	Single Mode 9/125µm	15 dB	37 km (23 miles)

Options [1] Add suffix 'C' for Conformally Coated Circuit Boards to extend to condensation conditions (Extra charge, consult factory)