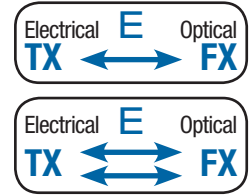


10/100/1000 Mbps Ethernet media converters



Applications

- Optical transmission of Ethernet-compatible industrial security access control systems, intercom systems, VOIP (Voice over IP) telephony networks, and IP-compatible CCTV camera surveillance networks
- Optical Ethernet transmission to wireless LAN access points
- Industrial Security, Transportation/ITS, and Industrial Control/Factory Automation IP Networks
- Optical transmission of any Ethernet-compatible equipment with a maximum data rate of 1000 Mbps

Description

The ComNet CNGE2MC is a single (1) channel Ethernet converter from electrical to optical and optical to electrical. The CNGE22MC is a two (2) CHANNEL Ethernet converter in a single package. These devices accept a 10/100 or 1000 Mbps (Megabits Per Second) electrical input and converts this to a 1000 Mbps (1Gbps) optical output and the 1 Gbps optical input back to the 10/100/1000 Mbps electrical output. This conversion is called "Auto-Negotiating" and is automatically performed by the electronics. These devices use either one or two optical fibers, depending upon the specific optical module used. The optical module is called a Small Form Factor Pluggable (SFP) and typically uses a ComNet SFP-6 module. The LED (light emitting diode) indicators display that the Optical Link is connected and that there is Data activity on the channel.

The CNGE2MC product line is designed to operate in harsh industrial environments with no electrical or optical adjustments required (Plug and Play). The CNGE2MC and the CNGE22MC may be mounted in the rack, directly onto a wall or on a DIN-rail using the ComNet DINBKT1 adapter (ComFit packaging). Power supplies are always provided with the product. The CNGE2MC also comes in a "Mini" package where space is at a premium.

Features

- Full-duplex transmission of 10/100/1000 Mbps Ethernet
- 10/100/1000 BASE-TX electrical port
- 1000 BASE-FX optical port when used with suitable ComNet SFPs
- IEEE 802.3 compliant
- 10/100/1000 BASE-TX port supports auto-negotiation and automatic MDI/MDI-X crossover for full and half-duplex operation
- Uses customer-installed ComNet SFPs for compatibility with a wide range of optical fibers, optical connector types, and optical transmission distances of up to 120 km (SFPs ordered separately)
- Designed for installation in harsh out-of-plant/unconditioned industrial or roadside operating environments (-40° to +75°C ambient). Fully compliant with the environmental requirements of NEMA TS-2 for Traffic Signal Control Equipment
- Voltage transient protection on all power and signal input/output line provide unconditional protection from voltage surges and other transient events
- CNGE2MC and CNGE22MC are packaged in the exclusive ComNet ComFit housing, and may be shelf, rack, or DIN-rail mounted, and are hot-swappable when rack-mounted
- The 4-port count of the CNGE22MC makes this unit ideal for those applications where rack density or shelf-space may be limited.
- Mini-package size of the CNGE2MC-M allows the unit to be installed in those locations where space is at a premium.
- LED status indicators for rapidly ascertaining the operating status of the media convertor and the link
- Lifetime warranty
- Made in the U.S.A.

SFP = Small Form-Factor Pluggable Module



specifications

DATA

Data Interface:
Data Rate:

Ethernet
10/100/1000 Mbps
IEEE 802.3 Compliant
Full Duplex or Half Duplex Electrical
Port/Full Duplex Optical Port

FIBERS

FIBER CONNECTORS*

SFP Dependent

Requires selection of sold-separately
SFP modules. See ComNet data sheet
for number and description of SFP
modules

CONNECTORS

Power:
Electrical:

Terminal Block
RJ45

LED INDICATORS

- Optical Link/Data Activity
- Power

ELECTRICAL & MECHANICAL

Power:
Surface Mount: 2 Port: 8–15 VDC @ 350 mA
4 Port: 8–15 VDC @ 700 mA
From Rack
Rack Mount:
Number of Rack Slots: 1
Current Protection: Automatic Resettable
Solid-State Current Limiters
Meets IPC Standard

Circuit Board:
Size (in./cm) (L×W×H) 6.1 × 5.3 × 1.1 in.,
(15.5 × 13.5 × 2.8 cm)
Standard Size: 3.3 × 2.5 × 1.1 in.,
(8.4 × 6.4 × 2.8 cm)
Small Size:
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)[†]



* Multimode fiber needs to meet or exceed fiber standard ITU-T G.651. Single mode
fiber needs to meet or exceed fiber standard ITU-T G.652

[†] May be extended to condensation conditions

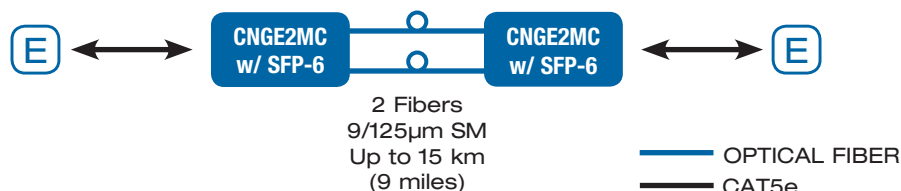
PART NUMBER	DESCRIPTION
CNGE2MC	2 Port 10/100/1000 Mbps Ethernet Media Converter
CNGE2MC-M	2 Port 10/100/1000 Mbps Ethernet Media Converter, Small Size
CNGE22MC	4 Port 10/100/1000 Mbps Ethernet Media Converter
Accessories	9 Volt DC Plug-in Power Supply, 90-264 VAC, 50/60 Hz (Included)
Options	Add 'C' for Conformally Coated Circuit Boards (Extra charge, consult factory) DIN-Rail Mounting Adaptor Plate Kit – With mounting hardware (Optional, order model DINBKT1) See ComNet "SFP Modules" data sheet for number and description of Small Form Factor Pluggable Modules

NOTE: This product requires a fiber installation with a minimum 30 dB connector return loss.

The use of Super Polish Connectors is recommended.

Complies with FDA Performance Standard for Laser Products, Title 21, Code of Federal Regulations, Subchapter J

In a continuing effort to improve and advance technology, product specifications are subject to change without notice.



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