



Product Description

The KBC MCGN1 series is an industrial 10/100/1000M Ethernet media converter. It supports transmission of one channel 10/100/1000Base-T Ethernet over either one or two, multimode or single mode optical fibers with full duplex operation. Plug-and-play design makes installation straightforward, with no electrical or optical adjustment needed. LED indicators are provided to show the operational status of the unit. Rugged design in both enclosure and electrical protection makes it suit for application in harsh environment.

The series is available in wall mount, DIN mount, and 2U passive rack FR2-12, or card version in 2U chassis FR2-16.



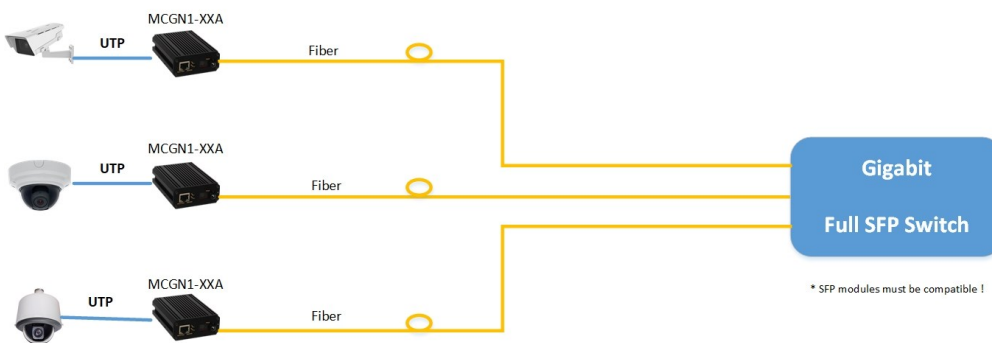
Product Features

- 10/100/1000M auto sensing
- 2kV Surge Protection on RJ45 electrical Port
- Compatible with SFP version of one channel MCGN1 series and two channels MCGN2 series
- SM(Single Mode) , and MM(Multi Mode)
- 1 fiber or 2 fibers
- SM&MM: 1310nm/1550m for 1 fiber; 1310nm for 2 fibers
- Typical SM and MM transmission distance are 20KM and 500m respectively. Longer distance is available
- IP40 enclosure
- DIN, Wall Mount
- FR2-12 passive Rack with 12 slots or Chassis card in FR2-16 with 16 slots

Typical System Configuration



Typical Application -1 : Point to Point connection



Typical Application -2 : Media converters directly connect to SFP switch

Specifications

Standards

IEEE Standards IEEE802.3, IEEE802.3u
IEEE802.3ab,IEEE802.3z

Electrical

Data Port 1
Data Rate 10/100/1000Mbps Auto-Sensing
Half & Full Duplex
Surge Protection 2kV

Optical

Port 1000Mbps
Wavelength 1 fiber SM&MM:1310nm/1550nm
2 fibers SM&MM: 1310nm
Fiber 1 or 2
MM (50/62.5/125µm)
SM (9/125µm)

Typical Loss Budget 12dB
Typical Distance ⁽¹⁾ MM: 500m
SM: 20km
Longer distance is available

Power

Power Input +12Vdc
Power consumption <3W
Power Supply ⁽²⁾ Input: 100 ~ 240Vac
Output: +12Vdc
Supplied from FR2 PSU
Chassis Card

Environmental

Operating Temperature -40° ~ +75° C
Storage Temperature -40° ~ +85° C
Operating Humidity 0 to 95% non-condensing
Mean Time Between Failure (MTBF) > 100,000 Hours

Enclosure Protection

IP40

Connectors

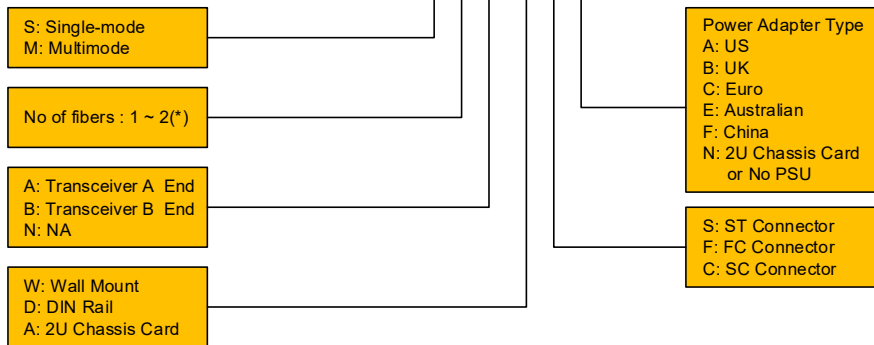
10/100/1000M Electrical RJ-45
Fiber ⁽³⁾ SC,FC or ST
Power ⁽⁴⁾ Wall Mount/DIN Rail Screw Block Terminal

Others

Cable CAT5 or CAT6, direct or cross cable
LEDs Connection status
data sending & receiving

Part Number Configurator

MCGN1-XXX-XXX-B

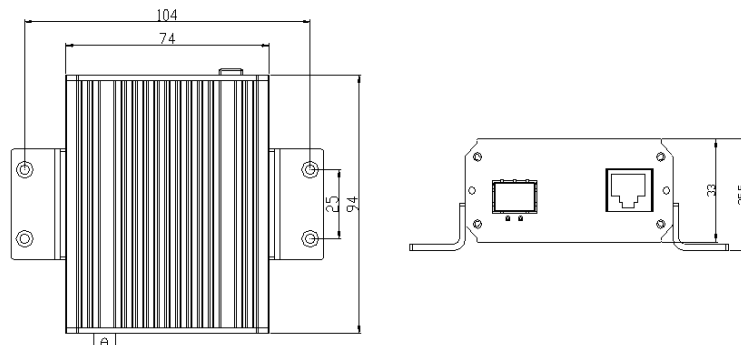


*: For two fibers, both ends are same, that is MCGN1-X2N-XXX-B

Dimension

L x W x H

94mm x 74mm x 33 mm



1. Transmission distance is limited by optical loss of the total fiber connection and fiber dispersion (fiber bandwidth).
2. Please select the power plug type when placing order..
3. Please select the fiber connector when placing order.
4. Power lines are crimped and fitted to screw block connector in factory.

Due to ongoing technological improvements, product specifications are subject to change without notice. KBC is not liable for any errors, omissions or changes of any description of the goods contained herein. This information is for the sole purpose of identifying the products and KBC makes no warranty that the products conform to any description contained herein. Do not rely solely on any representations, statements, or assertions concerning these Products contained herein.