## Product Description

The KBC MCGN2 series is an industrial two channels 10/100/1000M Ethernet media converter. It supports transmission of two channel 10/100/1000 Base-T Ethernet over either one or two, multimode or single mode optical fibers with full duplex operation. Typically the two channels media converter is installed in remote end, in the head end compatible one channel media converter MCGN1 is installed. 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, DIN, and 2U passive rack FR2-12.



Wall & DIN Rail Mount Media Converter

FR2-12 W/12 Slots

## Product Features

- 2 channels 10/100/1000M auto sensing
- 2kV Surge Protection on RJ45 electrical Port
- Compatible with 1 channel 10/100/1000M media converter MCGN1 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

## Typical System Configuration



Typical Application -1 : Point to Point connection
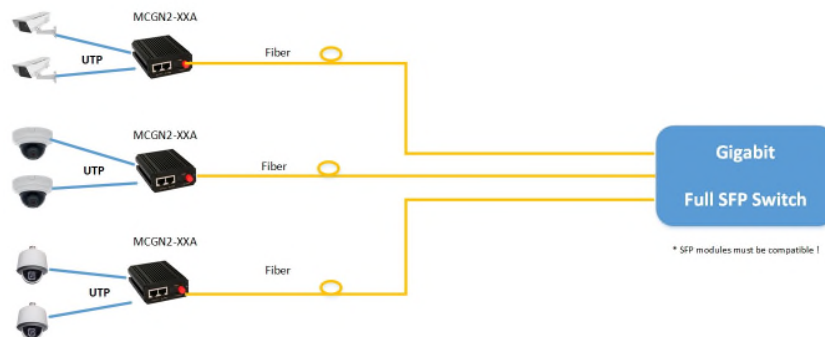


Typical Application -2 : Media converters directly connect to SFP switch

## Specifications

| **Standards** | | **Power** | |
|---|---|---|---|
| IEEE Standards | IEEE802.3, IEEE802.3U | Power Input | +12Vdc |
| | IEEE802.3ab, IEEE802.3z | Power consumption | 3W |
| | | Power Supply [2] | Input: 100 ~ 240Vac |
| **Electrical** | | | Output: +12Vdc |
| Data Port | 2 | | |
| Data Rate | 10/100/1000Mbps Auto-Sensing | **Environmental** | |
| | Half & Full Duplex | Operating Temperature | -40° ~ +75°C |
| Surge Protection | 2kV | Storage Temperature | -40° ~ +85°C |
| | | Operating Humidity | 0 to 95% non-condensing |
| **Optical** | | Mean Time Between Failure (MTBF) | > 100,000 Hours |
| Port | 1 | | |
| Wavelength | 1 fiber SM&MM:1310nm/1550nm | **Enclosure Protection** | IP40 |
| | 2 fibers SM&MM: 1310nm | | |
| Fiber | 1 or 2 | **Connectors** | |
| | MM (50/62.5/125μm) | 10/100/1000M Electrical | RJ-45 |
| | SM (9/125μm) | Fiber [3] | SC, FC or ST |
| | | Power [4] | Screw Block Terminal |
| Typical Loss Budget | 12dB | | |
| Typical Distance [1] | MM: 500m | **Others** | |
| | SM: 20km | Cable | CAT5 or CAT6, direct or cross cable |
| | Longer distance is available | LEDs | Connection status |
| | | | data sending & receiving |

## Part Number Configurator

<h1 style="text-align:center">MCGN2-S2N-WSA-B</h1>

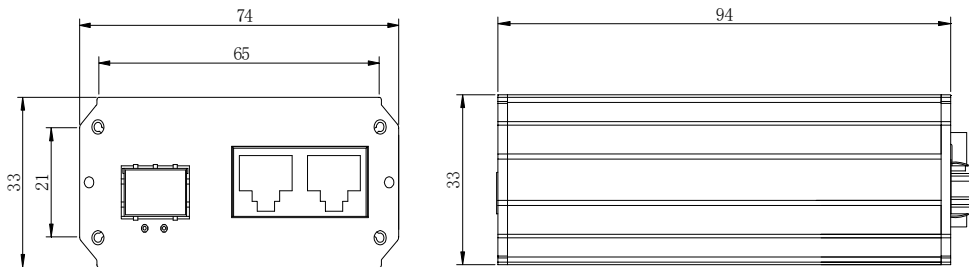| | |
|---|---|
| S: Single-mode<br>M: Multimode | Power Adapter Type<br>A: US<br>B: UK<br>C: Euro<br>E: Australian<br>F: China<br>N: No PSU |
| No of fibers : 1 ~ 2(*) | |
| A: Transceiver A End<br>B: Transceiver B End<br>N: N/A | |
| W: Wall Mount<br>D: DIN Rail | S: ST Connector<br>F: FC Connector<br>C: SC Connector |
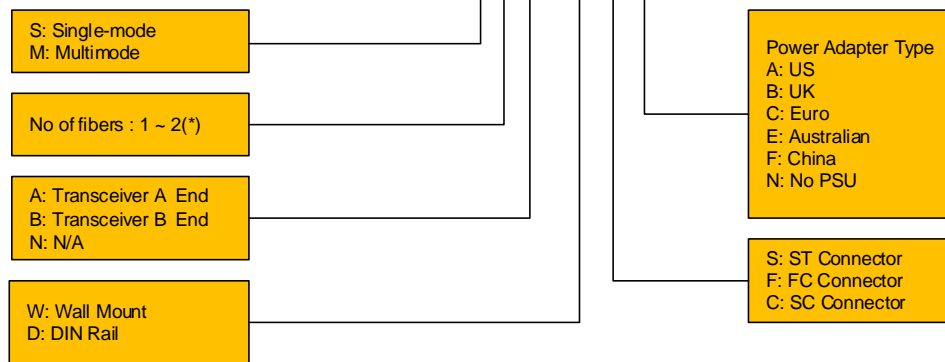
*: For two fibers,both ends are same , that is MCLG2-X2N-XXX-B

## 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.