

**M720D**  
**Multimode to Single Mode**  
**Fiber Optic Media Converter**  
**Installation Guide**

**General**

The M720D is a mode to mode optical fiber converter series which provide the following conversions:

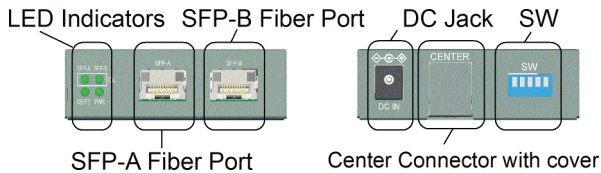
- 1000BASE-SX MM fiber to/from 1000BASE-LX SM fiber
- 100BASE-FX MM fiber to/from 100BASE-FX SM fiber



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**Specifications**



**Fiber Optic Interfaces (SFP-A & SFP-B Ports)**

Compliance	IEEE 802.3z 1000BASE-SX/LX std. IEEE 802.3u 100BASE-FX std.
Connectors	SFP for pluggable fiber transceiver
Data Speed	1000Mbps, full duplex (SW1-3: Off) 100Mbps, full duplex (SW1-3: On)
Cable Types	SFP-A MMF - 50/125, 62.5/125 μm SFP-B SMF - 9/125 μm
Eye Safety compliance	IEC825 Class 1

**Center Interface**

Interface	For center chassis mounting
Connector	FutureBus

**DC Power Input**

Interface	DC Jack (-D6.3mm/+D2.0mm)
Operating Voltages	DC input +5V ~ +12V
Power consumption	max 2W @+7.5VDC input

**SW (Configuration Switches)**

SW1	ON - Gigabit Ethernet MM to SM OFF - Fast Ethernet MM to SM
SW2 ~ SW5	Reserved

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**Features**

- Complies with IEEE 802.3z 1000Base-SX/LX and IEEE 802.3u 100Base-FX standard
- Provides media conversion between single mode and multimode optical fiber media types
- Supports both 1000Mbps Gigabit Ethernet fiber and 100Mbps Fast Ethernet fiber applications
- Provides two SFP slots to support standard SFP fiber transceivers
- Transparent conversion to any type of packet frame
- No packet length limitation
- Provides LEDs for easy network monitoring
- MCC-16 chassis installation : support installation in the MCC-16 series chassis with benefits of central software management, central power and redundant power backup.
- Diversified mounting support : desktop mounting, wall mounting, optional Din-Rail support
- Support wide range of single mode fiber options: short reach up to long reach, Bi-directional single fiber, and CWDM
- Low power consumption

**Mechanical**

Dimension (base)	4.25 x 2.85 x 0.90 inches
Housing	Enclosed metal with no fan
Weight	0.45 lb.

**LED Indicators**

PWR	ON	Power on
	OFF	Power off
GE/FE	ON	GE MM to GE SM
	OFF	FE MM to FE SM
SFP-A OL	ON	SFP-A port optical signal detected
	OFF	No optical signal
SFP-B OL	ON	SFP-B port optical signal detected
	OFF	No optical signal

**Environmental**

Operating Temperature	-5 ~ 55°C
Storage Temperature	-20 ~ 85°C
Relative Humidity	10% ~ 70%

**Design Compliance**

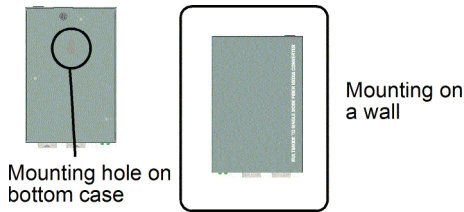
FCC Part 15 Class B, CE / CISPR 22 Class B, IEC60950 Safety

**Desktop Mounting**

The device can be mounted on a desktop or shelf. Make sure that there is proper heat dissipation from and adequate ventilation around the device. Do not place heavy objects on the device.

**Wall Mounting**

The device provides a mounting hole on the bottom case as shown in the figure. Use the hole for a wall mounting.



## Applying Power

Before you begin the installation, check the AC voltage of your area. The AC power adapter which is used to supply the DC power for the device should have the AC voltage matching the commercial power voltage in your area. The DC power input of the converter is: DC IN 0.24A min. @ 7.5V

## Installing SFP Fiber Transceiver

To install a fiber transceiver into an SFP slot, the steps are:

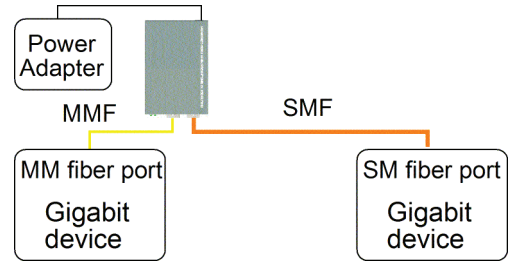
1. Turn off the power to the device unit.
2. Insert the SFP fiber transceiver into the slot. Normally, a bail is provided for every SFP transceiver. Hold the bail and make insertion.
3. Until the SFP transceiver is seated securely in the slot, place the bail in lock position.

Note that SFP-A is reserved for MM transceiver and SFP-B is reserved for Single mode transceiver.

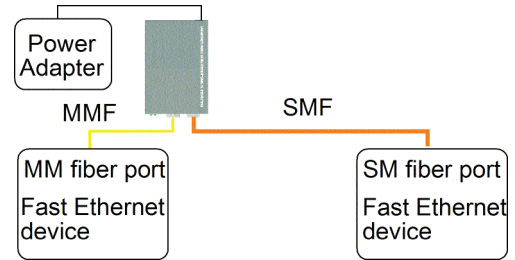
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## Typical Applications

### Gigabit Ethernet 1000Mbps MMF to 1000Mbps SMF



### Fast Ethernet 100Mbps MMF to 100Mbps SMF



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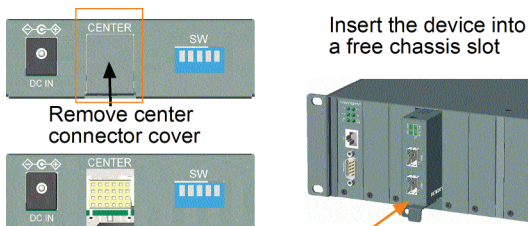
## DIN-Rail Mounting

For a Din-Rail chassis, the media converter can support mounting on a Din-Rail. An optional Din-Rail bracket, can be purchased separately. Consult VERSITRON for details. The following figures show an example after bracket installation:



## Center Chassis Installation

The media converter can also be installed in MCC-16 series chassis. The chassis provides the power supply to the converter also with optional power redundancy. Up to 16 units can be installed in one chassis. Unscrew and remove the cover of the chassis connector before inserting the converter into the chassis. Refer to the operation manual of MCC-16 chassis for more information.




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## FCC NOTICE

This device complies with Part 15 Class B the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including the interference that may cause undesired operation.

## CE NOTICE

Marking by the symbol  indicates compliance of this equipment to the EMC directive of the European Community. Such marking is indicative that this equipment meets or exceeds the following technical standards:

EMC Class B	
EN61000-6-3	IEC61000-6-1
EN55022	CISPR22
EN61000-3-2	IEC61000-3-2
EN61000-3-3	IEC61000-3-3
EN61000-6-1	IEC61000-6-1
EN55024	CISPR24
EN61000-4-2	IEC 61000-4-2
EN61000-4-3	IEC 61000-4-3
EN61000-4-4	IEC 61000-4-4
EN61000-4-5	IEC 61000-4-5
EN61000-4-6	IEC 61000-4-6
EN61000-4-8	IEC 61000-4-8
EN61000-4-11	IEC 61000-4-11

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