

# Quick Start Guide

MC10010

## SFP to SFP Fiber media converter with 10/100/1000 Port

### 1. Unpack the Media Converter and Check Contents



Media Converter with 2 SFP ports and one RJ45 port



Documentation—*Quick Start Guide* (this document) and *Warranty Card*



Power Adapter



**Note:** Other documentation can be obtained from [www.signamax.com](http://www.signamax.com)

### Warning and Cautionary Messages



**Warning:** This product does not contain any serviceable user parts.

**Warning:** Installation and removal of the unit must be carried out by qualified personnel only.

**Warning:** When connecting this device to a power outlet, connect the field ground lead on the tri-pole power plug to a valid earth ground line to prevent electrical hazards.

**Warning:** This media converter uses lasers to transmit signals over fiber optic cable. The lasers are compliant with the requirements of a Class 1 Laser Product and are inherently eye safe in normal operation. However, you should never look directly at a transmit port when it is powered on.

**Warning:** When selecting a fiber SFP device, considering safety, please make sure that it can function at a temperature that is not less than the recommended maximum operational



temperature of the product. You must also use an approved Laser Class 1 SFP transceiver.

**Caution:** Wear an anti-static wrist strap or take other suitable measures to prevent electrostatic discharge when handling this equipment.

**Caution:** Do not plug a phone jack connector in the RJ-45 port. This may damage this device.

**Caution:** Use only twisted-pair cables with RJ-45 connectors that conform to FCC standards.

### 2. Connect DC Power

- 1 Plug the DC power cable into the socket on the rear of the media converter.
- 2 Plug the AC-DC power adapter into a nearby AC power outlet.



**Caution:** Only use the provided power adapter. Connecting a 3<sup>rd</sup> party power adapter could cause damage to the media converter.

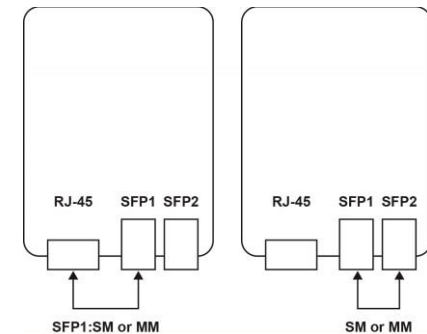
### 3. Connect Network Cables

- 1 For the SFP slots, first install SFP transceivers and then connect fiber optic cabling to the transceiver ports. The following transceivers are supported:
  - 100BASE-SX (065-79SXMG)
  - 100BASE-SX Extended Distance:(065-79SXEDMG)
  - 100BASE-LX (065-79LXMG)
  - 100BASE-EX (065-79LXEDMG)
  - 100BASE-ZX (065-79ZXMG)
  - 100BASE-EZX (065-79EZXMG)
  - 100BASE-FX (AS10010)
  - 100BASE-LX (AS10020)

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- 2 For RJ-45 ports, connect 100-ohm Category 5, 5e or better twisted-pair cable.
- 3 As connections are made, check the port status LEDs to be sure the links are valid.
  - On/Blinking Green — Port has a valid link. Blinking indicates network activity.

### 4. Media Conversion Operating Modes

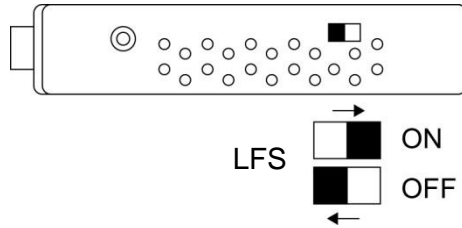


The MC10010 has 2 operating modes:

- 1 SFP to SFP:
  - Conversion between Singlemode and Multimode fibers.
  - Conversion between 62.5μ and 50μ Multimode fibers.
  - Conversion between Gigabit and 100Mb fibers (of any type).
- 2 RJ-45 to SFP:
  - SFP 1 Port must be used for the fiber.

If both SFP ports and the RJ-45 are connected the RJ-45 to SFP mode will be activated.

## 5. Link Fault Signaling (LFS)



Link Fault Signaling (LFS) is a feature that when enabled, if the media converter detects a link down condition on one of the active links, it will drop the other link. This can be used as a signaling mechanism so if there is a switch that is actively monitoring link status it can be informed that there is a fault that needs to be taken care of.

By default LFS is disabled on the media converter.

### To enable LFS:

- ① Change the DIP switch from the OFF to the ON position.
- ② Reset the media converter by unplugging it from the power, waiting 10 seconds and plugging it back in to the power source.

### To disable LFS:

- ① Change the DIP switch from the OFF to the ON position.
- ② Reset the media converter by unplugging it from the power, waiting 10 seconds and plugging it back in to the power source.

## 6. LED Description Table

LED	Status	Description
PWR	ON	Media Converter is powered
	OFF	No power is connected or the Media Converter has failed
SFP1 Link/Act	ON	Port has a valid link
	BLINKING	Port has network activity
	OFF	The link is down
SFP2 Link/Act	ON	Port has a valid link
	BLINKING	Port has network activity
	OFF	The link is down
1000 Link	ON	RJ-45 Port link is 1000Mb
	OFF	RJ-45 Port link is 10/100Mb
Link/Act	ON	Port has a valid link
	BLINKING	Port has network activity
	OFF	The link is down

## Hardware Specifications:

### Physical Characteristics

Dimensions (W x H x D)	102 x 74 x 22 mm (4.02 x 2.91 x 0.87 in.)
Weight	240g (0.53lb.)
Temperature	Operating: 0°C to 45°C (32°F to 113°F) Storage: -40°C to 85°C (-40°F to 185°F)
Humidity	10~90% (non-condensing)

### Power Specification

DC Input Power	5V 2A
Max Power Consumption	10W

### Standards

Standards	IEEE 802.3 10BaseT IEEE 802.3u 100BaseTX IEEE 802.3ab 1000BaseT IEEE 802.3z 1000BaseSX/LX IEEE 802.3x Flow Control
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### Regulatory Compliances

Emissions	CE Mark FCC Part 15 Subpart B Class B
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