Introduction

TechLogix media converters adapt fiber signals to a variety of different formats and/or cable types.

The TL-MC-1S1S features two SFP ports (SFP module sold separately), effectively adapting signals between different fiber types. In most applications, the TL-MC-1S1S adapts single mode fiber to multimode fiber and vice versa.

The MC-1S1S supports multimode fiber when paired with a multimode SFP module and single mode fiber when paired with a single mode SFP module.

Features

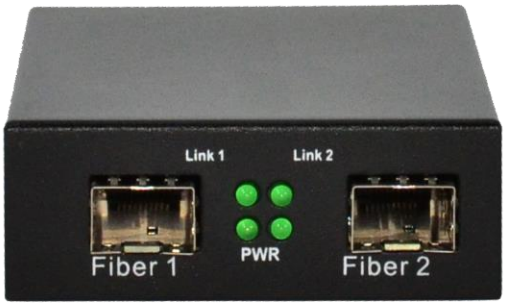
- Convert signals between different fiber types (single mode to multimode and vice versa)
- Two SFP (fiber) ports
- 100Mbps to 1250Mbps data rates
- 850nm/1310nm/1490nm/1550nm supported wavelengths
- Single mode and multimode fiber compatible (SFP module dependent)
- SFP module sold separately
- Suggested multimode module: TL-1GSFP-MM550
- Multimode max distance: 550m (1,805 ft.)
- Suggested single mode module: TL-1GSFP-SM20K
- Single mode max distance: 20km (12.4 miles)
- 0 degree to 60 degree C operating temperature
- 1.0" x 2.75" x 3.6" (26mm x 70mm x 93mm)
- 5V power supply (included)
- IEEE 802.3z & 802.3ab compliant
- 1000Base - SX/LX/EX/ZX
- Diagnostic LEDs
- Plug-and-play compliant

Package Contents

- [1] TL-MC-1S1S media converter
- [1] Power Supply with International Pins

Panel Description

Front



- Fiber 1 - Insert an SFP module (1G bandwidth) according to the fiber type (single mode or multimode).
- Fiber 2 - Insert an SFP module (1G bandwidth) according to the fiber type (single mode or multimode).

LED	Status	Operational Status
Link 1	On	Fiber connection is Normal
	Off	Fiber connection FAULT (Fiber 1)
Link 2	On	Fiber connection is Normal
	Off	Fiber connection FAULT (Fiber 2)
F1~2 PWR	On	Power Supply is connected and energized
	Off	Power supply is either not connected or not energized

Rear

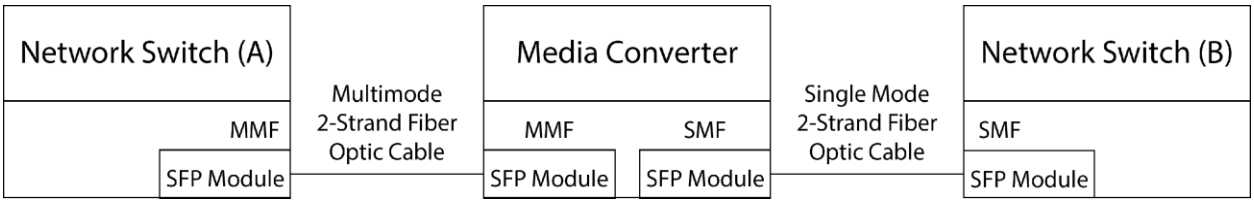
DC 5V - Connect included DC 5V/1A power adaptor

System Connection

There are several applications suitable for the TL-MC-1S1S, here are a few examples:

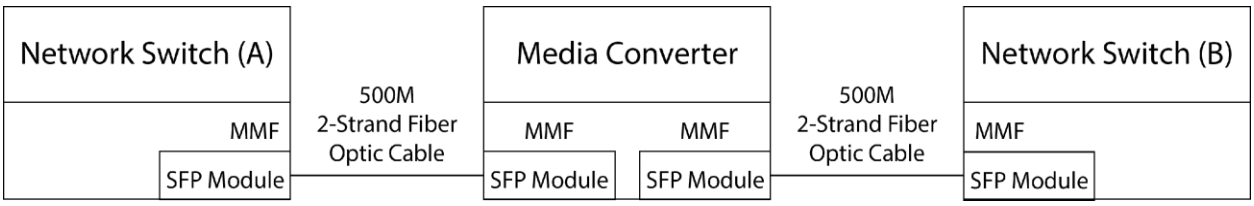
Example 1 - convert from Multimode FO cable to Single Mode FO Cable (or vice versa)

In this example, two network switches need to be connected using fiber optic cable, but there some of the cable is MMF and some is SMF.



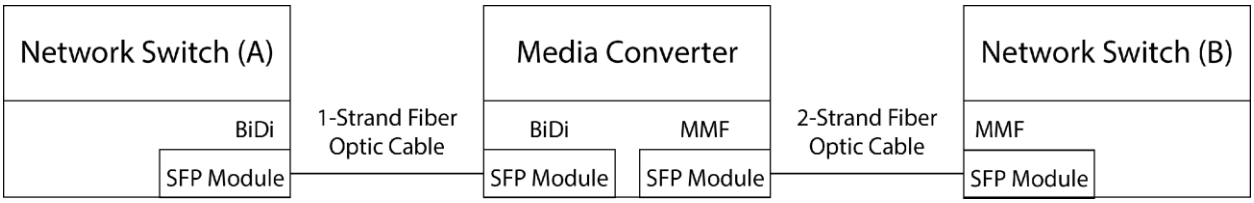
Example 2 - extend LAN signal using a media converter.

In this example, the total length of the MMF fiber optic cable exceeds the maximum length for a single link using SFP modules. In this case, the media converter is acting as a range extender for the fiber optic cable link.



Example 3 - change from single strand cable link to 2 strand cable link

In this example, a portion of the cable has only a single strand fiber available. Using a standard BiDi SFP module in conjunction with the media converter will allow this portion to work with the cable available. Currently, TechLogix Networx does not offer a BiDi module, but they are available from other sources. Just be sure to match the SFP specifications with the standards of the TL-MC-1S1S (IEEE 802.3z/AB 1000Base-T/SX/LX/ZX)



Specifications

I/O Connections

Fiber Module Port [2] SFP (small form-factor pluggable) connector port

DC 5V Female coaxial barrel connector - 5.5mm O.D. x 2.5mm I.D.

Signal Characteristics

SFP compatibility IEEE 802.3z/AB 1000Base-T/SX/LX/ZX

TLN Part #s:

TL-1GSFP-MM550 - Multimode Fiber

TL-1GSFP-SM20K - Single Mode Fiber

Link Support IEEE 802.3X Full Duplex and Half Duplex with flow control

MDI/MDI-X automatic switching

Jumbo Frame Supported Jumbo frame (64-9216 byte)

Chassis and Environmental

Enclosure Painted Steel

Dimensions 1.0" x 2.75" x 3.6" (26mm x 70mm x 93mm)

Dimensions (Shipping)	7.25" x 6" x 2" (184mm x 70 x 51mm)
Weight (Shipping)	355g
Working Temperature	0°C~60°C
Operating Humidity	5%~90%
Power Supply	
Input Voltage	100~240v AC, 50~60Hz, 0.3A
Output Voltage	5VDC Center Positive 1.2A
Regulatory	CE, FCC, RoHS, WEE, UL-US, UL-C, CCC, JET, C-TICK, UL-DE/GS
Efficiency	Level VI
Other	
Warranty	3 Years
Package Contents	[1] TL-MC-1S1S

[1] 5VDC Power Supply (USA, AUS, EU, UK Pins)