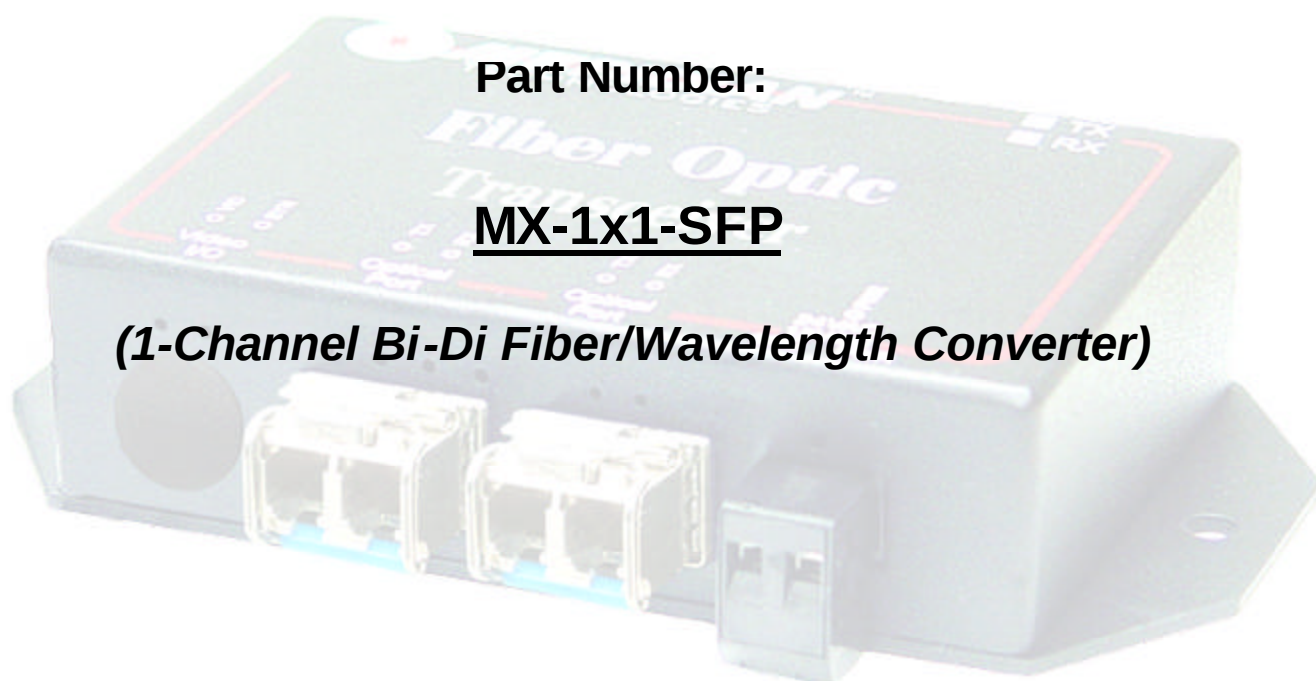




Optical Fiber/Wavelength Converter

Installation Instructions



Part Number:

MX-1x1-SFP

(1-Channel Bi-Di Fiber/Wavelength Converter)

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Document Version 1.2
03/06/2017

Table of Contents

1.0 Product Description.....	3
2.0 Installation.....	3
3.0 Optical Specifications	3
4.0 Product Part Number Variations	4
5.0 LED Status Indicators	4
6.0 Module pinout Diagram	5
7.0 Troubleshooting.....	6

MX-1x1-SFP

Fiber Optic Optical Wavelength Converter

Installation Instructions

1.0 Product Description

Meridian's MX-1x1-SFP product is an optical converter with the ability to convert one way or bi-directional transmission over various fiber types, fiber quantities and wavelength. This includes conversion from single-mode to multimode, multimode to single-mode, wavelength conversion as well as converting from one fiber to two or two fibers to one. Available for use with: OS1, OS2, OM1, OM2, OM3 and OM4 fibers. This product is extremely versatile with its various configuration options.

The MX-1X1-SFP is the stand-alone model. This product is powered by internal switching power supply and will accept 12-24VAC or DC (Part # WP-24). For the MX-1X1-SFP-A the power supply is 5VDC (Part # WP-5). This power input is optional for this module and it's available only if it is specified in the order. For the 5VDC power option add "A" on the end of the part number.

SFP optical modules are supported. Optional conformal coating provides an additional level of protection from environments with high humidity.

2.0 Installation

The MX-1x1-SFP is a shelf mount module and can be mounted in either a horizontal or vertical configuration. There are two mounting holes for # 8 (maximum) hardware. A 2-pin plug-in connector is located on the side of the module for power. For proper operation of this module Meridian recommends the WP-24 power supply for 12-24VAC/DC or WP-5 power supply for 5VDC (optional) power input.

3.0 Optical Specifications

The SFP series products are available for both single-mode and multimode fiber applications and ether one or two fiber versions. Refer to optical SFP table in for complete part and ordering information.

Optical Specifications	
Date Rate	SFP dependent
Optical input range	SFP dependent
LC, SC Connectors	SFP dependent

Note: User can select Wavelength and Data Rate at time of ordering.

For more specifications on a SFP optic devices refer to SFP data sheet on Meridian website:

http://www.meridian-tech.com/downloads/datasheets/datasheet_SFP_optical_devices-x.pdf

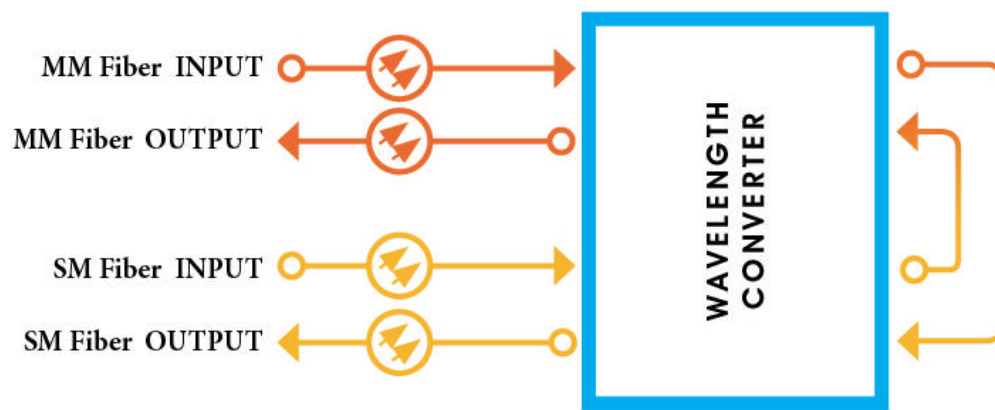


Figure 3.1
MX-1x1 Block Diagram

4.0 Product Part Number Variations

The table below lists the various part numbers and description that are available for this series of product.

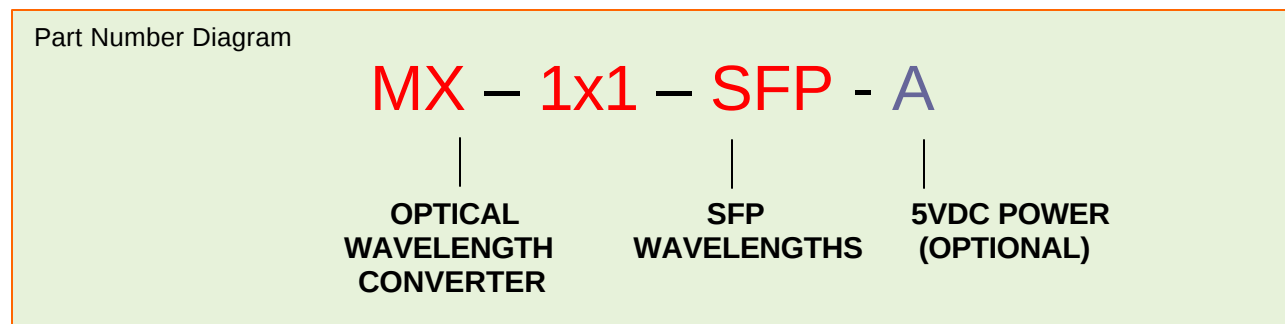


Figure 4.1
MX-1x1-SFP Part Number Diagram

5.0 LED Status Indicators

The modules diagram shown below. There are a number of indicator lights that provide visual operational status of the modules and link.

Not all of the LEDs apply to all versions of these modules. Please refer to the module's part number for the appropriate signals, description.

The function of these LED indicators is as follows:

Indicator	Function
PWR	Green – Power ON
RX1	Optical signal input Port 1 Green – OK
TX1	Optical laser driver output Port 1 Green – OK
RX	Optical signal input Port 2 Green – OK
TX	Optical laser driver output Port 2 Green – OK

6.0 Module Pinout Diagram

Figures 6.1 & 6.2 below show the module, LED lights and SFP optical ports location for MX-1x1-SFP.

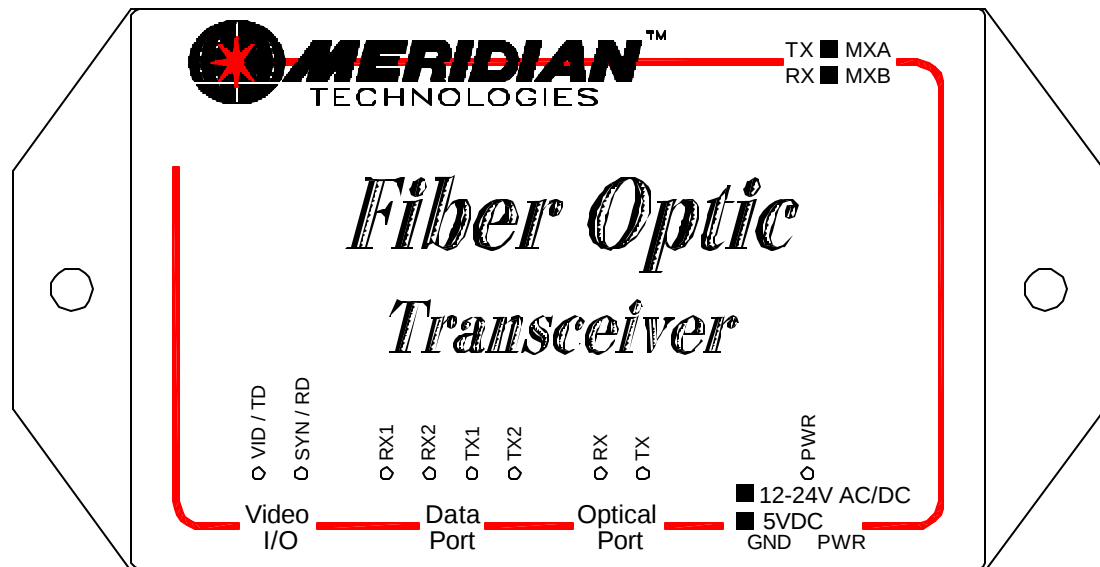
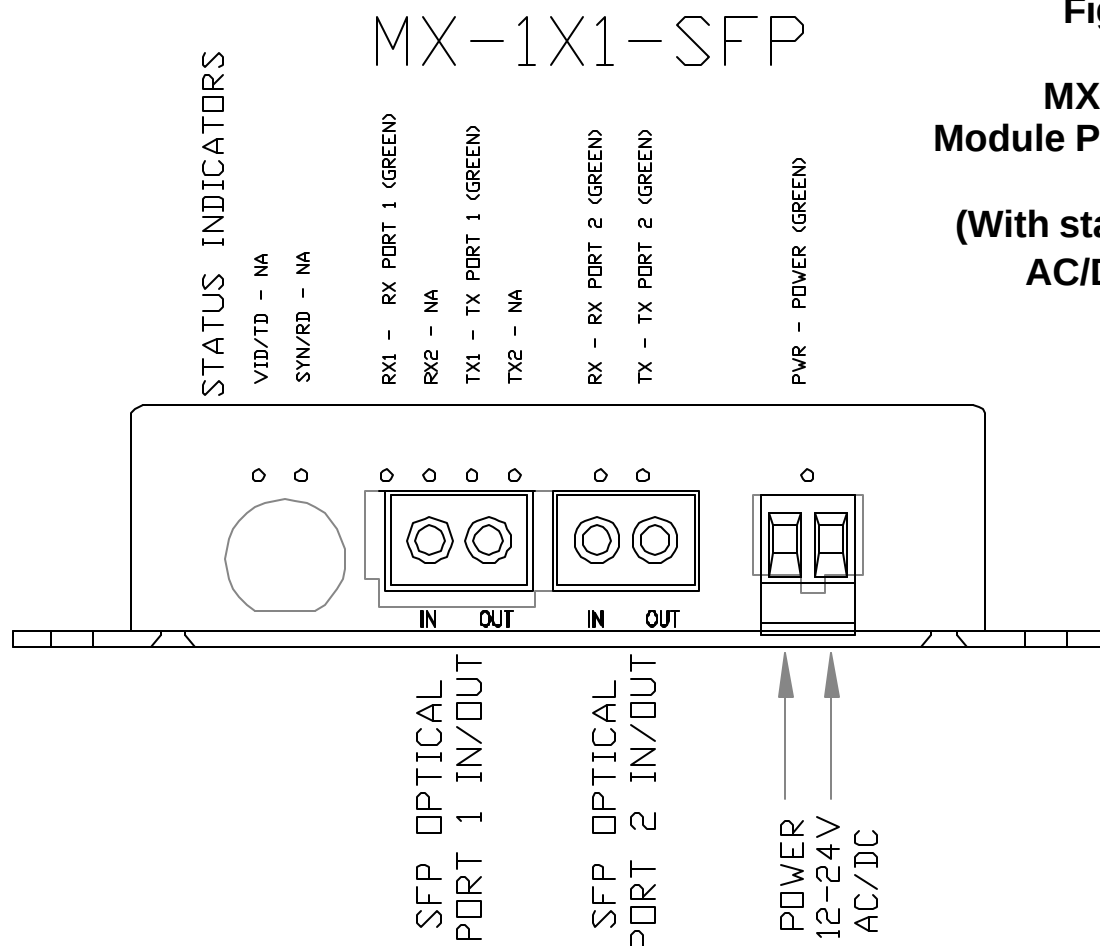


Figure 6.1

**MX-1x1-SFP
Module Pinout Diagram
(With standard 12-24V
AC/DC Power)**



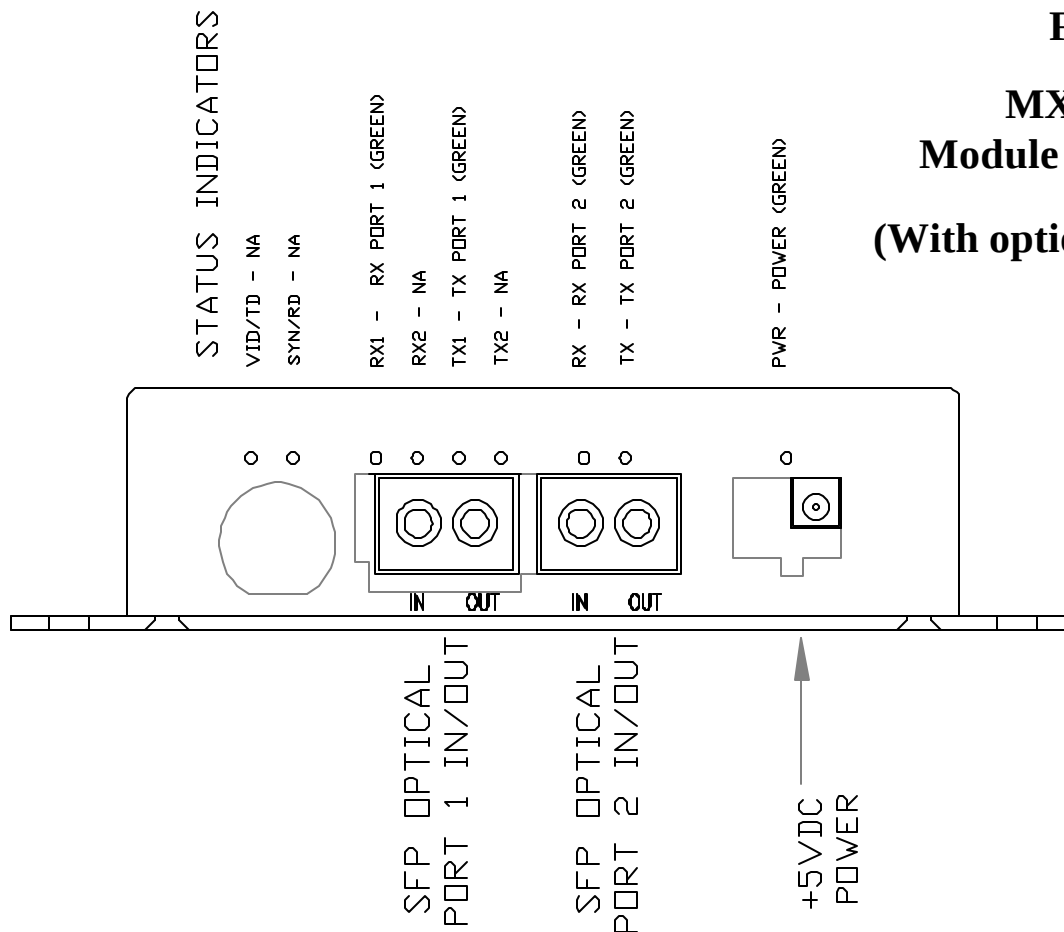


Figure 5.2
MX-1R-SFP-A
Module Pinout Diagram
(With optional 5V DC Power)

7.0 Troubleshooting

Below is a listing of several problems that may arise during the installation & operation of the modules. If you are having difficulty installing or operating the modules please refer to this list below.

Problem: *Module Power LED does not light when power to the module is applied or power indicator turns on and off*

Action: Check power supply to ensure that it is plugged in and turned on. if available.

Problem: *No Tx laser driver light*

Action: Check to see that the correct SFP module properly installed into socket.

Problem: *No Rx optical signal light*

Action: Received optical signal absent or low. Check fiber connection and optical power at receiver.

If the problem still persists after reviewing the above items, please contact Meridian technical support (516-285-0570).

Physical dimensions

Length3.6“ (9.2 cm)
Width 2.4“ (6 cm)
Depth..... 1“ (2.5 cm)
Weight0.34 lb (150 gm)

Notes:



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Document Version 1.2
03/06/2017