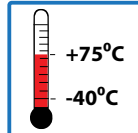# MERIDIAN TECHNOLOGIES

MX-1R-SFP | DigiNET

HARDENED 2 PORT MEDIA CONVERTER
1 PORT 10/100TX (RJ45) + 1 PORT SFP

+75°C
-40°C

FEATURES

- 10/100 Base-T Ethernet Auto-negotiation
- Full Duplex or Half-duplex Supported
- IEEE 802.3 Compliant
- Environmentally Hardened for Wide Temperature Applications
- LC, SC Optical Connectors - SFP dependent
- Distances Up To 50km
- Wide Optical Dynamic Range
- Supports one or two fibers with appropriate SFP modules
- 12 to 24VAC/VDC power operation

DESCRIPTION

The MX-1R-SFP (stand-alone module) is the Media converter designed for bi-directional transmission of 10Base-T Ethernet / 100Base-T Fast Ethernet data over multimode or single-mode fiber.

This product incorporates the industry standard Small Form Pluggable (SFP) optical modules. Various fiber types and wavelengths can be selected by simply plugging in the appropriate SFP module.

Auto-negotiation eliminates the need for any internal adjustments or settings. Distances of 50km can be obtained using single-mode fiber.

The MX-1R-SFP is environmentally hardened and will operate over the standard NEMA TS-2 temperature range suitable for outdoor installations.

LEDs on the module indicate the status of power, link speed, activity, laser current and optical signal.

Standard shielded RJ-45 connectors are provided for CAT5 compliance.

SPECIFICATIONS

Physical Ports	
10/100 Base-T(X) Port in RJ45 Auto MDI/MDIX	1
LC, SC - SFP dependent	1

Technology	
Ethernet Standards	IEEE 802.3 CSMA/CD IEEE 802.3i 10Base-T IEEE 802.3u 100Base-T
Data Rate	10/100 Mb/s
Fiber Data Rate	SFP dependent

LED indicators	
Rx Optic	Green – Optical signal Present
Tx Optic	Green - Laser driver Normal
RX100	Green – when receiving 100 Base-T data
TX100	Green – when transmitting 100 Base-T data
RX10	Green – when receiving 10 Base-T data
TX10	Green – when transmitting 10 Base-T data
RX Data	Green flashing (normal) when data is being received into module
TX Data	Green flashing (normal) when data is being transmitted out of module

Power	MX-1R-SFP	MX-1R-SFP-DC
Input Power	12~24 VAC/VDC power input at 2-pin terminal block (default)	5VDC power input at 2-pin terminal block (optional)
Power Consumption (Typ.)	4 Watts	3.5W
Power Supply ordering information	WP-24 Wall adapter (not included)	WP-5 Wall adapter (not included)

Physical Characteristic	
Dimension (W x D x H)	117(W) x 60 (D) x 25 (H) mm (3.5x 2.3 x1 inch)
Weight	213g (0.5lb)

Environmental	
Storage Temperature	-40 to 85°C (-40 to 185°F)
Operating Temperature	-40 to 75°C (-40 to 167°F)
Operating Humidity	5% to 95% Non-condensing

PART NUMBER DIAGRAM

MX – 1R – SFP – DC

| OPTICAL WAVELENGTH CONVERTER | SFP WAVELENGTHS | 5VDC INPUT POWER (OPTIONAL) |

Optical Specifications

The SFP series products are available for both single-mode and multimode fiber applications and ether one or two fiber versions.

Recommended optical speed for this product is 155 Mb/s.

For more specifications on a SFP optical devices go to **SFP data sheet** or go to:

WWW.MERIDIAN-TECH.COM -> PRODUCTS -> ACCESSORIES -> SFP OPTICAL DEVICES

Common SFP modules

Part #	Fiber type	# of Fibers
MM1313F2	Multimode	2
MM1315F2 & MM1513F2	Multimode	1
SM1313F20	Single-mode	2
SM1315F20 & SM1315F20	Single-mode	1

Ordering Information

Products	Part Number	Description	Power supply	Power supply description
	MX-1R-SFP	Hardened 2 Port Media Converter 1 Port 10/100TX (RJ45) + 1 Port SFP with 12~24 VAC/VDC power input	PSH24DC24 (not included)	24VDC @ 1 Amp (24 Watts)
			WP-24 Wall adapter (not included)	24VAC @ 20VA
	MX-1R-SFP-DC (optional)	Hardened 2 Port Media Converter 1 Port 10/100TX (RJ45) + 1 Port SFP with 5 VDC power input	WP-5 Wall adapter (not included)	5VDC @ 1 Amp (5 Watts)

Packing List

Media converter	1
Quick Installation Guide	1

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