

**Introduction**

MS400234 operates as transparent media converter. It is equipped with two SFP slots. The device is suited to couple fiber segments which operates at the same speed. MS400234 can be used as Multimode (MM) to Single Mode (SM) converter, power regenerator or wavelength converter.

MICROSENS offers a wide range of SFP transceivers for different data rates, transmission distances, wavelength (850 nm, 1310 nm, CWDM or DWDM...) and fiber types (MM or SM).

**Packing list**

Please check the following items in the package before installing the media converter:

- SFP media converter 1 pc.
- AC/DC adapter 1 pc.
- User manual 1 pc.

Please contact your reseller immediately for any loss or damage to the above items.

**Installation**

Fiber interface:

Standard SFP transceivers are equipped with LC duplex connectors. One connector is used for the optical transmitter (marked as TX), the other one is used for the receiver (RX). To establish an optical link the duplex fiber between two transceivers has to be crossed. The TX connector of the first transceiver is connected with the RX connector of the second one and vice versa.

Please ensure that the SFP transceiver matches with the used fiber (Multimode or Single Mode). Furthermore

the optical power budget and the dispersion budget of the transceivers have to be considered. Please refer to the data sheets of the SFP modules to get the required information.

Power interface:

The power connector is placed at the rear side of the device. Here you can connect the DC port of the power adapter which is shipped with the device.

**Connection**

The SFP slots and the LED indicators are placed at the front side of the media converter. At first you have to insert both SFP modules. Now the optical fiber can be connected. Finally the media converter must be powered by connecting the power plug.

Observe the corresponding LEDs to check the connection. After successful installation all LEDs should light green. Please check the connection of TX and RX ports if the Link LEDs are off.

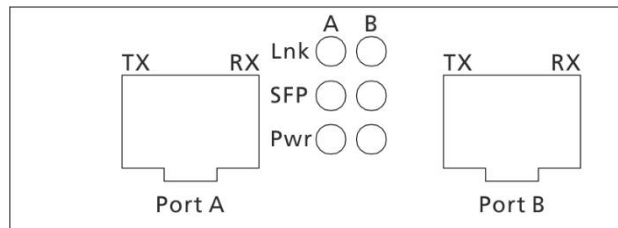


Rear View: Power Interface

**Description for LEDs**

LED indicator lamps serve as device monitoring and for trouble shooting. The functions of the LEDs are described in the following table:

LED	Status	Function
<b>PWR</b>	On	Power supplied
<b>SFP</b>	On	SFP transceiver inserted
	Off	No SFP transceiver inserted
<b>Lnk</b>	On	Link signal detected
	Off	No link signal detected



Front View: SFP Slots and LED Interface

## Safety Notes

Danger! Optical components may emit laser light. Infrared emissions used for fiber optic data transmission is invisible for the human eye but can cause long term damage to the eyes.

To avoid damages to the eyes:

- Never look directly at the connectors of optical components or optical fibers. Risk of blinding!
- Put covers on all unused connectors
- Get device under operation only if all connections are made correctly.

Warning: For indoor use only!

## Technical Specifications:

**Type:** Transparent SFP to SFP Media Converter

**Fiber type:** Multimode fiber 50 or 62,5/125 µm, single mode fiber 9/125 µm, duplex LC-connector (optional SC simplex)

**Power supply:** 5 V DC / max. 1 A via external power supply (included at delivery)

**Operating temperature:** 0° C to 55° C

**Storage temperature:** -20° C to 70° C

**Humidity:** 5 % to 90 % non-condensing

**Dimensions:** 26 x 70 x 94 mm (H x B x T)

## Order Information

Article-No	Description
MS400234	SFP to SFP Media Converter, 2x SFP ports, ext. power supply

## Accessories\*

Article-No	Description
MS100190	SFP Transceiver, Fast Ethernet, 1310 nm Multimode, LC duplex
MS100191	SFP Transceiver, Fast Ethernet, 1310 nm single mode, LC duplex
MS100200	SFP Transceiver, Gigabit Ethernet, 850 nm Multimode, 1000Base-SX, LC duplex
MS100210	SFP Transceiver, Gigabit Ethernet, 1310 nm single mode, 1000Base-LX, LC duplex

\* CWDM/DWDM and further wavelength on request

# MICROSENS

## SFP to SFP Media Converter

### MS400234

## User Manual

(Do not use this device until you read  
this manual carefully!)

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