

## Fast Ethernet Bridge 10/100Base-TX / 100Base-FX

### General

The new Mini Bridge of MICROSENS offers an easy and cost effective integration of 10Mbit/s and 100Mbit/s Ethernet equipment into modern fiber based Fast Ethernet networks. In addition to the media conversion a speed adjustment is done.

This adjustment includes the 10 and 100 Mbps speeds as well as half and full duplex modes. Existing length restrictions for half duplex Ethernet (5 km) and Fast Ethernet segments (412 m) are eliminated by the bridge (segment splitting).

Beside the multimode version there are several single mode versions available. With the standard 10/100Base-TX interface, the end-user can use internet services, Video on Demand and VoIP applications.

### Features

- Compact desktop chassis
- Segment splitting and speed adaptation
- Auto-Negotiation 10/100Base-TX
- Half- and full duplex mode
- Multimode max. 2 km, SC connector
- Single mode versions up to 20 km

### Power supply

The bridge is supplied with an external AC power supplying 5 V DC. Because of warranty reasons, it is only allowed to use the original MICROSENS power supply.

### Optical parameters

<b>Multimode</b>	<i>Wavelength:</i>	1310 nm MM
	<i>min. optical power:</i>	-20 dBm
	<i>min. sensitivity:</i>	-34 dBm
	<i>max. distance:</i>	2 km
<b>Single Mode</b>	<i>Wavelength:</i>	1310 nm SM
	<i>min. optical power:</i>	-15 dBm
	<i>min. sensitivity:</i>	-34 dBm
	<i>max. distance:</i>	20 km

**Technical data**

<b>Type</b>	Fast Ethernet Bridge to connect Twisted-Pair-(10/100Base-TX) and FO (100Base-FX) segments
<b>Fiber type</b>	Multimode 62.5/125 or 50/125µm, Single Mode 9/125µm, duplex
<b>Cable type</b>	Shielded Twisted Pair Cable, 100 Ohm, min. Cat. 5e
<b>Max. TP cable length</b>	100 m
<b>Data rate</b>	10/100 Mbps
<b>LED displays</b>	<i>PWR</i> ON: power supply ok <i>100M</i> ON: TX at 100 Mbps OFF: TX at 10 Mbps <i>LINK/ACT (FX)</i> ON: fiber link FLASHING: data activity fiber port OFF: no fiber link <i>LINK/ACT (TX)</i> ON: TX link FLASHING: data activity fiber port OFF: no TX link <i>SD</i> ON: optical signal input OFF: No optical signal input <i>FDX/COL</i> ON: full duplex on TX port OFF: half duplex on TX port
<b>Power supply</b>	5 V DC / with external power supply
<b>Power consumption</b>	< 1 W
<b>MTBF time</b>	> 100,000 h
<b>Dimensions</b>	94 mm x 71 mm x 26 mm
<b>Operating temp.</b>	0°C to 55°C
<b>Storage temperature</b>	-20°C to 70°C
<b>Relative humidity</b>	5% to 90% non condensing

**Construction**

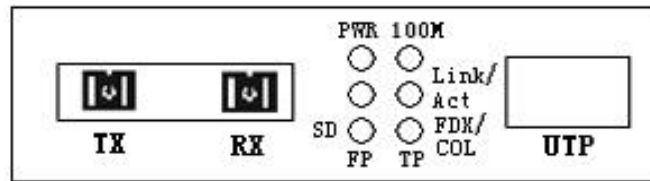


Fig. 1: Front View



Fig. 2: Rear View

**Order information**

Article no.	Description	Connectors
MS400210	Fast Ethernet Bridge 10/100Base-TX/100Base-FX, 1310 nm Multimode	2 x SC 1 x RJ-45 1x Power
MS400212	Fast Ethernet Bridge 10/100Base-TX/100Base-FX, 1310 nm Single Mode, 20 km	2 x SC 1 x RJ-45 1x Power

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