

# MICROSENS

Multimode/Singlemode

Media Converter

Description

and

Installation

Order no. MS410504

## ■ General information

The MICROSENS media converter allows a transparent and bidirectional connection between multimode and singlemode optical fibers.

The connection is transparent, it means it is independent of the transmission protocol.

An active identification of the link prevents from the transmission of defective signals under a minimum reception level. The signals, which have to be transferred, must have an active link test function. A signal will always be transferred by this function.

The signals level are complete regenerated. The timing is however not influenced.

LED displays indicate the state of the converter and can be used for error diagnostics.

## ■ Technical specifications

<b>Type</b>	Media converter for a transparent connection between singlemode and multimode optical fibers.
<b>Connections</b>	2 x multimode ST*-connector 2 x singlemode ST*-connector 1 x energy supply jack 2,1 mm
<b>Cables</b>	Multimode optical fiber 62,5/125µm or 50/125µm, duplex with ST*-connector  Singlemode optical fiber 9/125µm, duplex with ST*-connector
<b>Sensitivity</b>	-33 dBm/0,5µW (typical)
<b>Transmitting power</b>	-13 dBm / 1µW (850 nm multimode, typical) -20 dBm /10 µW (1300 nm singlemode, typical)
<b>Max. data rate</b>	40 MBit/s Option: 155 MBit/s
<b>LED displays</b>	Power, Link 1, Link 2
<b>Energy supply</b>	Externe energy supply 5 V DC / 9,6 VA
<b>Operating temp.</b>	0°C to 55°C
<b>Storage temp.</b>	-20°C to 80°C

\* ST is a registered trademark of AT&T

## Connections

The illustration 1 shows the connectors of the media converter

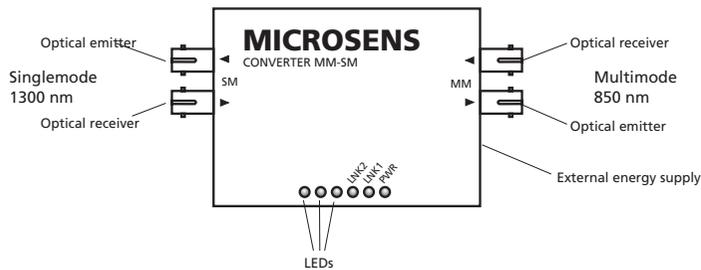


Illustration 1: Connections of the media converter

The energy supply of the converter is external with 9 V DC / 5 VA. The internal connector of the electric energy supply (illustration 2) is the contact for the positive energy supply and the external connector is the earth-connection.

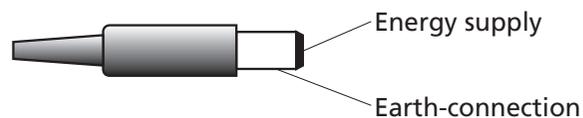


Illustration 2: Energy supply jack

## Installation

For the installation, the media converter is connected with the fibers on both sides (Illustration 3). The fibers, which have ST-connectors, are connected with the corresponding connectors of the converter. To bolt the fibers, you have to turn the bayonet socket.

The multimode side has the mark MM (Multi Mode) and the singlemode side the mark SM (Single Mode).

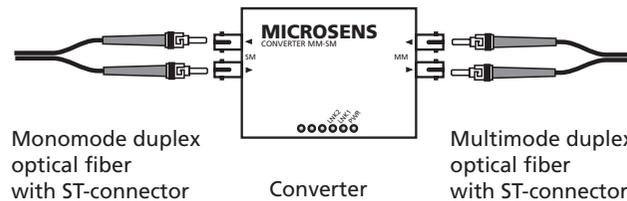


Illustration 3: Installation of the converter

The emitter must always be connected with the receiver and vice versa (Crossing). This can easily be tested with the link indicator.

## Signalisation

Three LEDs indicate the state of the converter. They can also be used as control function and to find errors in the linking up to the cable network system.

The LEDs have the following significations:

### PWR

*Power.* The converter is in working state.

### LNK1

*Link Multimode.* The link signal is received on the "multimode" side of the converter.

### LNK2

*Link singlemode.* The link signal is received on the "singlemode" side of the converter.

Because of the permanent development of our products, we reserve the right to make technical modifications.