

# 6/12 Port Media Converter 100Base-FX/100Base-TX for 19" mounting, 1HU

# MICROSENS

## Description

The MICROSENS Fast Ethernet Media Converter enables the direct repeaterless coupling of twisted pair and fiber optical segments in an Fast Ethernet network.

### The compact design

It is designed as a 19" unit with a mounting height of 1 HU. All 12 converters and a 230V ac power supply are inside of the chassis..

Main applications are especially in economic conversion of TP ports to FO and extension of several TP segments.

The flat design permits a high port density in a distribution rack.

### Full duplex

The converter supports half as well as full duplex connections. In full-duplex operation can transfer and receive data simultaneously. The effective data rate increases to 200 Mbps.

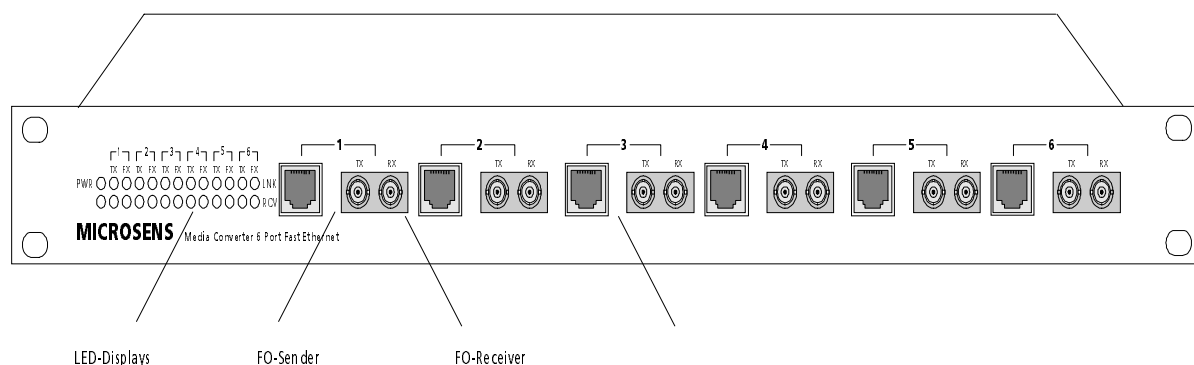
### Link-Transparency

The Link status of the segment is transmitted by the converter ('Link-Through'), which means that in case of a link failure on the optical side, no link on the twisted pair side is generated.

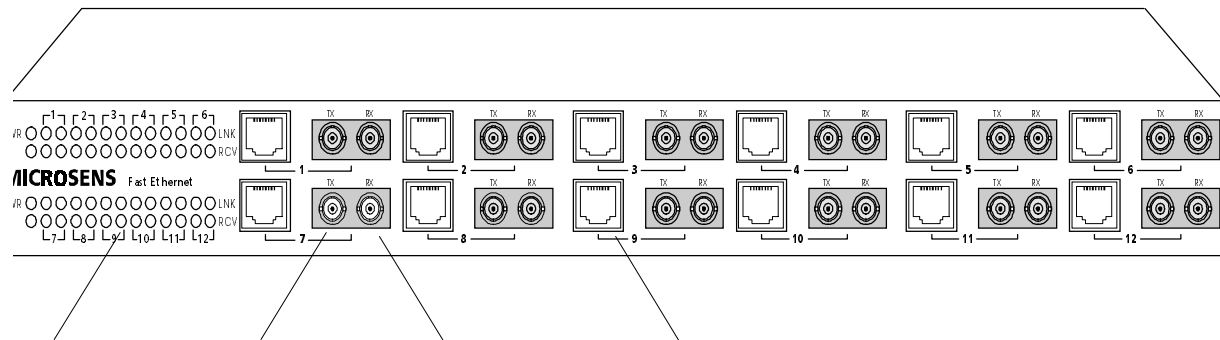
### Max. Distance

In the full duplex mode distances of up to 2 km can be covered (single mode: depending on version 15 km to 40 km\*) Die Verwendung von Single mode-Glasfasern ermöglicht die Überbrückung von Distanzen bis zu 15 km (Standardversion) oder bis zu 40 km (erweiterte Version) im Vollduplex-Betrieb.

## Connectors / 6 Port Media Converter



## Connectors /12 Port Media Converter



## Technical Specifications

<b>Type</b>	Fast-Ethernet Media Converter for repeaterless connection of Twisted-Pair (100Base-TX) to FO-cable (100Base-FX)
<b>Fibre type</b>	Multimode 50 or 62,5/125µm optional Single mode 9/125µm duplex with ST-/SC-connectors
<b>Cable typ</b>	Shielded Twisted Pair Kabel, 100 Ohm, Category 5
<b>Data rate</b>	100 Mbps
<b>Opt. Power</b>	-19 dBm (1300 nm (Multimode)) -19 dBm (1300 nm (Single mode))
<b>Sensitivity</b>	-30 dBm (1300 nm (Multimode)) -31 dBm (1300 nm (Single mode))
<b>Max. Distance</b>	Full duplex: 2 km (Multimode) 15 km (Single mode) 40 km (Single mode extend) Half duplex: 412 m
<b>LED Displays</b>	<i>PWR</i> Standby <i>LNK</i> FX- connection intact <i>RCV</i> Data are over FX-port received
<b>Power supply</b>	230VAC, max. 40 VA
<b>Operating temperature</b>	0°C to 55°C /
<b>Storage temperature</b>	-20°C to 80°C
<b>Rel. humidity</b>	5% to 80% non condensing.
<b>Dimensions</b>	1 HU x 84 DU x 245 mm

\* full duplex

## Lengths reduction

### Half duplex segment

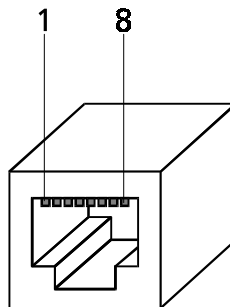
The converter has a signal delay from a maximum of 50 bit times. As a result, the maximum segment length of 412m decreases by approx. 50 m for fiber optic.

### Full duplex Segment

In Full duplex-segments, the signal delay of the converter has no influence to the maximum segment length.

## Pin reservation

The RJ45 connector has the reservation of a non-crossed TX port.



Pin	Direction	Signal
1	out	TD+
2	out	TD-
3	in	RD+
4,5	-	unused
6	in	RD-
7,8	-	unused

- it can be connected with a 1:1 patch cord to a hub and/or switch connector.
- For the connection to a end device (e.g. PC card or transceiver) must be used a crossed RJ45 patch cord.

## Order information

Art.-Nr.	Description	Connectors	
MS416850	6 Port Fast Ethernet Media Converter 1300nm Multimode ST	6x RJ45 12x ST	100Base-TX 100Base-FX
MS416851	6 Port Fast Ethernet Media Converter 1300nm Multimode SC	6x RJ45 12x SC	100Base-TX 100Base-FX
MS416856	6 Port Fast Ethernet Media Converter 1300nm Single mode SC	6x RJ45 12x SC	100Base-TX 100Base-FX
MS416870	12 Port Fast Ethernet Media Converter 1300nm Multimode ST	12x RJ45 24x ST	100Base-TX 100Base-FX
MS416871	12 Port Fast Ethernet Media Converter 1300nm Multimode SC	12x RJ45 24x SC	100Base-TX 100Base-FX
MS416875	12 Port Fast Ethernet Media Converter 1300nm Single mode ST	12x RJ45 24x ST	100Base-TX 100Base-FX
MS416876	12 Port Fast Ethernet Media Converter 1300nm Single mode SC	12x RJ45 24x SC	100Base-TX 100Base-FX

## Connection / Startup

The equipment becomes complete connection ready supplied.

For initiation, the converter is connected over the power supply (disconnected net switch) with 230 V / 50Hz adapter . The powerconsumption 20 VA (6 port converters) and/or 40VA (12 port converter).

The Power-LED may only light up after switch-on of the mains switch (provided that no further acting equipment is still connected to the net ports).

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