

Media converter module

10Base-FL/10Base-T

MS416105/50

MICROSENS

Description

Ethernet media converter for the direct repeaterless connection of twisted pair and fiber segments in an Ethernet network according IEEE 802.3. In due to the repeaterless connection there are no further limits regarding the maximum number of repeater in a network.

The converter is designed in the form of a modular insertion card which can be used in the MICROSENS 19" chassis with central power supply. Up to 12 converter modules and one power supply can be used in one chassis.

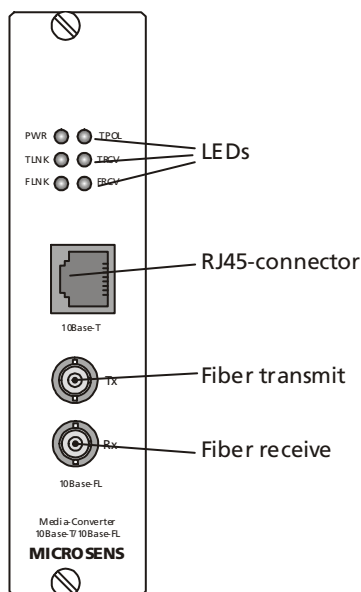
Main application for this converter is the cost effective conversion of multiple twisted pair ports to fiber for extension of the twisted pair segments over the limit of 100 m.

The link status of the segment is forwarded by the converter ("Link-Through"), that means in case of missing link on the fiber side there no link generated on the copper side (and vice versa).

Technical specifications

Type	Ethernet media converter for the repeaterless connection of twisted pair (10Base-T) and fiber (10Base-FL) segments according IEEE 802.3, for the mounting in the MICROSENS modular converter chassis.
Fiber type	Multimode 62,5/125µm or 50/125µm duplex, with ST/SC-connectors
Cable type	Shielded twisted pair cable, 100W, Category 5
Datarate	10 Mbit/s
Opt. power	-19 dBm (850 nm Multimode)
Opt. sensitivity	-32,5 dBm
LED displays	<i>PWR</i> Ready for operation <i>TPOL</i> Polarity of the twisted pair signal (crossed pairs) <i>TLNK</i> Twisted pair connection o.k. <i>TRCV</i> Data received on twisted pair port <i>FLNK</i> Fiber connection o.k. <i>FRCV</i> Data received on fiber port
Power supply	12 V DC / max. 400 mA via backplane
Operation temperature	0°C to 55°C
Dimensions	3 HU x 6 DU (128 x 31 mm)

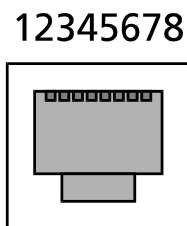
Connections



Pinout

The RJ-45 connector is for the direct connection to the 10Base-T side. The pinout is the same like an end device (PC adapter card, transceiver). In due to this the converter can be connected with a 1:1 patch cable to a repeater/switch.

Pin	Direction	Signal
1	Out	TX+
2	Out	TX-
3	In	RX+
4,5	-	-
6	In	RX-
7,8	-	-



LEDs

The LED displays of the converter have the following function:

PWR ● ● TPOL
TLNK ● ● TRCV
FLNK ● ● FRCV

<i>PWR</i>	Power	Ready for operation
<i>TPOL</i>	TP Polarity	Polarity error (crossed pairs)
<i>TLNK</i>	TP Link	Twisted pair connection o.k.
<i>TRCV</i>	TP Receive	Data received on twisted pair port
<i>FLNK</i>	Fiber Link	Fiber connection o.k.
<i>FRCV</i>	Fiber Receive	Data received on fiber port

Configuration

The converter is for the use in combination with the MICROSENS modular chassis. The converter can be combined with any other converter of the same series.

The power supply of the converter is done with a central power supply via the integrated backplane of the modular chassis. Up to 12 converter and one power supply can be mounted in one chassis.

A second redundant power supply can be mounted in the chassis. Using the second power supply up to 10 converter can be used with the same chassis. The unused slots are equipped with blank covers.

MICROSENS reserves the right to make any changes without further notice to any product to improve reliability, function or design. MICROSENS does not assume any liability arising out of the application or use of any product. 4000He