

# Gigabit Ethernet TDM Multiplexer Module

- **Module for 19" Access and Metro Platform**
- **3 Optical Ports with pluggable SFPs**
- **Providing Diagnostic Info from SFPs**
- **2x Gigabit Ethernet on 2.5 Gbps**
- **Full capacity of the GbE channels**
- **Performance Monitoring**
- **Remote Link Indication**



## 2x Gigabit Ethernet

The new Gigabit Ethernet Multiplexer offers to transmit two Gigabit Ethernet datastreams (2x 1.25 Gbps) together via one optical fiber pair with a 2.5 Gbps data rate. The aggregation of channels is realized fully transparent. This means, that switching features e. g. VLANs, stacked VLANs, flow control, buffermanagement etc. are not influenced.

## Flexible and safe

The Gigabit Ethernet TDM is equipped with flexible SFP slots. This modular design makes the TDM extremely flexible. MICROSENS offers a wide range of pluggable optical transceiver modules for multimode, single mode and WDM applications. For the most interesting applica-

tion the TDM Module can be equipped with the relevant CWDM transceivers. This allows the direct connection with the passive CWDM Multiplexer module. The integrated diagnostic functionality of the transceiver modules are supported from the MICROSENS network management system.

An additional diagnostics and performance monitor offers the network administrator a lot of analyse possibilities regarding the data stream.

Further features like remote link identification, link through and remote configuration of the device at the far end are included in order to complete the performance.

## Combination with CWDM

The interconnection of different locations in MANs is widely realized with CWDM Systems in order to use the existing fiber cables more efficient. With the new TDM Module of MICROSENS this efficiency can easily be increased to the double transmission capacity.

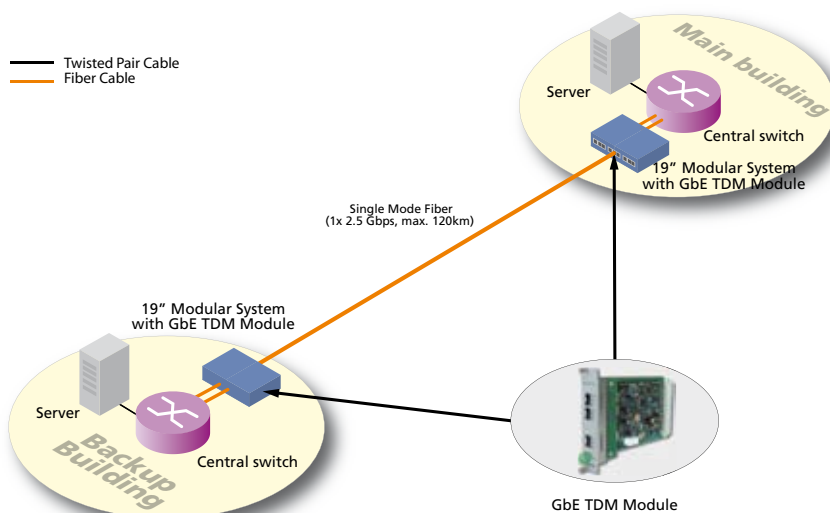
In combination with the MICROSENS CWDM System it is possible to reach the highest density of Gigabit Ethernet channel transmission. The maximum equipment with TDM Modules allows the transmission of 32 GbE channels via one duplex fiber. Because of using the third optical window (1470-1610nm) for the transmission it is possible to reach distances of up to 80 km.

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## Application

The main advantage of the multiplexer module lies in the doubling of the capacity of existing fiber infrastructure, by bundling two Gigabit Ethernet channels à 1.25 Gbps

over one fiber optic line. In combination with the CWDM system it is possible to transmit 32 GbE channels over one duplex fiber.



## Technical Specifications

### Type

MICROSENS Gigabit Ethernet TDM multiplexer module for transmitting two 1.25 Gbps channel over one fiber optic line with 2.5 Gbps

### Fiber type

SFP (modules)

### Bandwidth

2x 1.25 Gbps

### LED displays

Power  
Alarm  
On  
LL (Local Link)  
RL (Remote Link)

### Mounting

3 HU insertion card for modular Access System

### Diagnostics

Diagnostic and Performance Monitoring

### Power supply

12 V DC via backplane

### Operating temperature

0°C to 40°C

### Storage temperature

-20°C to 70°C

### Rel. humidity

5% to 80% non condensing

### Dimensions

3HU x 6DU (128 x 31 mm)

## Ordering Information

Article no.	Description	Connectors
MS416440MR	Gigabit Ethernet TDM Module, 2x 1.25 Gbps, 2x SFP local, 1x SFP line, manageable	3x SFP slot
MS100200*	Local Interface (SFP), 850nm multi-mode, LC connector, max. 1.25 Gbps	2x LC
MS100210*	Local Interface (SFP), 1310nm single mode, LC connector, max. 1.25 Gbps	2x LC
MS100250*	Line Interface (SFP), short reach 2km, 1310nm, LC connector, 2.488 Gbps, OC-48/STM-16	2x LC
MS100260*	Line Interface (SFP), intermediate reach 15km, 1310nm, LC connector, 2.488 Gbps, OC-48/STM-16	2x LC

\*) Option "D" for Diagnostic Function (e.g. MS100200D)

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