

3 Port Gigabit Ethernet Access module

MICROSENS

Description

The media conversion technology has been developed for modern cabling concepts, mainly for usage in distribution centres in Fiber To The Office and Fiber To The Desk (FTTO/FTTD). High bandwidth of Gigabit Ethernet combined with high density of Access Module ports offers significant advantages and lowers significantly active equipment costs.

Apart from enterprise segment the module can be used effectively in optical access and optical multiplexing (xWDM) applications for economical transponding of Gigabit Ethernet ports directly from Twisted Pair to coloured channels (CWDM or DWDM).

Applications

The new access module allows for three-fold Gigabit Ethernet media conversion (3x 1000Base-T to 1000Base-X) and is based on modular SFP connections. This modular design makes the access module particularly flexible. Here MICROSENS offers a wide range of plug-in optical transceiver modules for multi-mode, single-mode and xWDM applications.

This Gigabit Ethernet converter is working complete transparent for the data and therefore also for the autonegotiation signals of the connected end devices. Thus the two end devices which are connected to this converter are still negotiating together the duplex mode of the connection. The converter forwards the negotiation information to the remote side.

An integrated link-through function guarantees additional link transparency for the whole connection. The components connected to the converter detect the whole connection status.

The module belongs to the wide assortment of modular Enterprise Access Platform modules. With usage in 4 HU chassis it enables very high port density – up to 54 Gigabit Ethernet converters in only 4HU height. Smaller configurations like f.ex. 1 HU chassis for up to 9 and 3 HU chassis for up to 30 conversion ports are also possible.

Apart from 19" chassis standalone adapters (single and double slot versions) are also available. The Access Module can be combined in one chassis with all other modules of the same series.

SNMP and webbased management is possible through optional management agent module (MS416020-B).

Device photo



Technical data

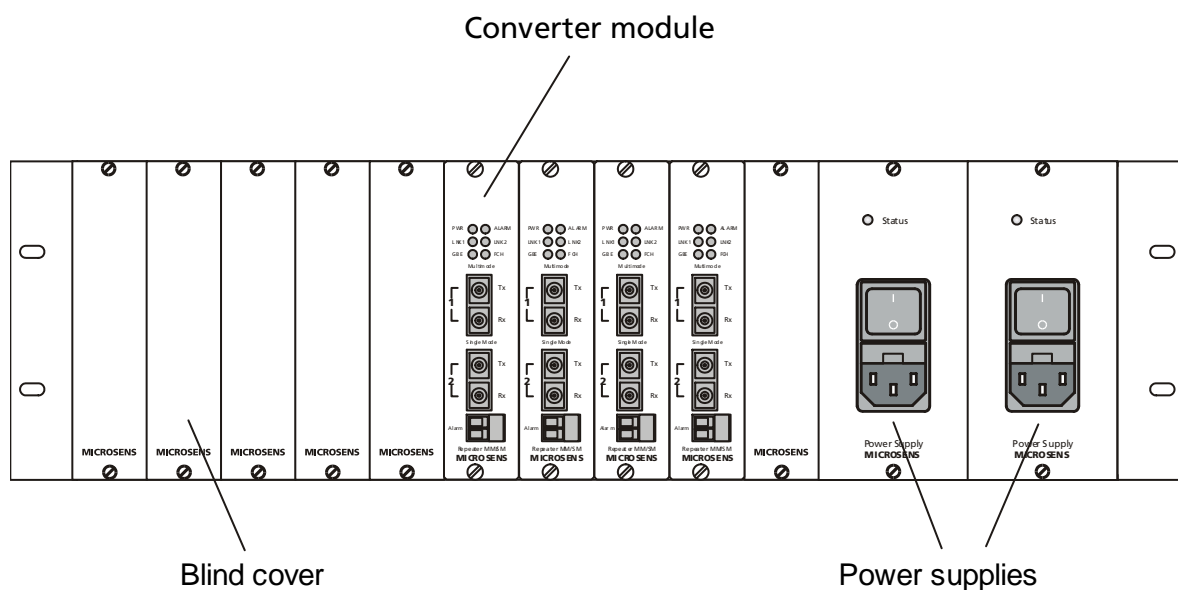
Type	3 port Gigabit-Ethernet Access module for transparent connection of Twisted-Pair (1000Base-TX) and fiber optic cable (1000Base-SX/LX)	
Connectors	3x SFP ports 3x RJ-45	
Data rates	Twisted-Pair port: 1 GBit/s (1000Base-T)	
	SFP-Ports: 1 GBit/s (1000Base-X, half-/full duplex configurable)	
LED displays	<i>PWR</i>	Module active
	<i>TX</i>	Data transmitted on TX port
	<i>RX</i>	Data received on RX port
Power supply	12 V DC / max. 1000 mA via Backplane	
Operating temperature	0°C to 55°C	
Storage temperature	-20°C to 80°C	
Rel. humidity	5% to 80% non condensing	
Dimensions	3 HU x 6 TU (128 x 31 mm)	

Configuration

The converter module is designed for the insertion into the MICROSENS modular chassis. It can be combined with all other converter modules of the same series.

The power supply is done by a central power supply via the backplane of the chassis. Together with the power supply (MS416004 or MS416004M – manageable version) it is possible to insert up to 12 modules into one 3 HU chassis (MS416001 or MS416001M – manageable version).

Optional it is possible to insert a second redundant power supply. Then the number of modules is then reduced to 10. Empty slots can be covered with the blind covers. The blind covers should be ordered separately.



Beside the 3HU chassis, a 1 HU chassis for three modules (horizontal mounted) is also available. This chassis (MS416006) has one integrated power supply, which can be redundant (MS416007) if required.

In addition to the 19" chassis, desktop chassis for the mounting of one (MS417001) or two (MS417041) modules are available. Together with the wall bracket (MS417001-WH) it is possible to fix these desktop chassis on the wall.

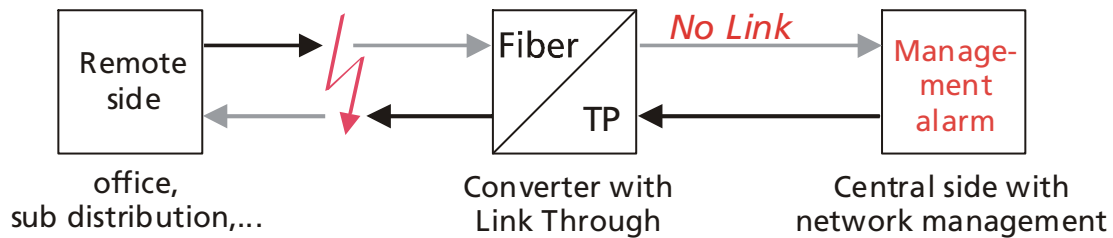
The SNMP and web based management features of the system is provided by the management master module (MS416020-B). Be Aware: it must be considered that the chassis (e.g. MS416001M) and the power supply (MS416004M) support the management too (ordered products with an "M").

To access the data of the modules with the SNMP management, it is necessary to integrate the structure of the data into the existing management platform using the MIB file. The MICROSENS-MIB can be downloaded with http download from the management master. The MIB file has an ASCII format.

Link Through

The Gigabit Ethernet Access Modul has the integrated "Link Through" functionality to support the connection control.

The connection status of the fiber segment is forwarded to the twisted pair segment. In due to this the twisted pair connection is switched off in a case of failure at the fiber segment.



Safety notes

WARNING: Infrared radiation as used for data transmission within the fiber optic, although invisible to the human eye, can nevertheless cause damage.

To avoid damage to the eyes

- never look straight into the output of fiber optic components – danger of blinding!
- cover all unused optical connections with caps.
- commission the transmission link only after completing all connections.

The active laser components used with this product comply with the provisions of **Laser Class 1**.

Further documentation

- Datasheet SFP-Transceiver

→ Newslink: 710109

Order Designation

Art.-Nr.	Description	Connectors
MS416195M	3 Port Gigabit Ethernet Access Modul, managebeable	3x SFP Ports 3x RJ-45

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