

March 2007



Dear Reader,
dear Business
Associate

It is CeBIT time again – on the 15th of March the CeBIT starts in Hanover.

As usual MICROSENS is showing a number of new product developments in the segments Enterprise Networking and Carrier Solutions.

Power over Ethernet is going to change the networking and communications technology totally.

On the CeBIT we are introducing our intelligent PoE-Injectors and Power-Splitters.

In the segment Industrial Networking we are corresponding to the customer requirements and are presenting the extremely cost efficient Industrial Ethernet "Entry Line".

The new MICROSENS 10G Transport Platform with several transponder, TDM and repeater modules for the access and carrier market is the absolute highlight on the MICROSENS CeBIT booth.

Please find us in **Hall 12, booth C75.**

Yours sincerely

Thomas Kwaterski
Marketing & Sales Director

Industrial Entry Line

The IP protocol has already left the in-house environment and is going to take all remaining communication areas. Industrial Ethernet already is an established idea, describing the reliable use of Ethernet components in harsh environments. Because of the large number of these applications the market requires simple and also reliable and cost effective products.

Therefore MICROSENS is presenting its new Industrial Entry Line on the CeBIT. The new product line includes Fast Ethernet and Gigabit Ethernet Switches as well as Media Converters and Terminal Servers for the conversion of serial interfaces like RS232/422/485 to IP.



Power-over-Ethernet – Power Supply for the IP World

The upgrading of existing data networks to the PoE technology must not always be related with the investment into new PoE backbone switches. The central edge switches can be connected with the powerful 24-Port-PoE-Injector of MICROSENS. This so called "plug&play" combination allows the further use of existing switches in the state-of-the-art PoE network. The PoE-Injector is connected between the switch and the patch panel and takes over the power injection according to the IEEE 802.3af standard.

- Compactest 19" and 1U Design
- 24x Power Injectors IEEE 802.3af
- SNMP/Telnet/Web Management
- Redundant Power Supply and UPS possible
- Also 1 Port-PoE-Injector available



Micro Switch with PD and PSE Functionality

The extremely compact Micro Switches with twisted pair uplink for cable duct and floor tank installation are enabling a quick enhancement of the access capacity in existing networks.

Passive access outlets can easily be replaced by the Micro Switches.

The power supply can be realized via the uplink port via PoE (PD). Thanks to low power consumption the switches can supply connected end devices with power using PoE (PSE).



The biggest part of the power supplied from the central side can be distributed to connected end devices.

This is only possible because many modern IP-phones only need 4W of electrical power. Therefore it can be easily connected to two devices. Beside IP-phones, further switches can also be cascaded, which are also powered via PoE. The only limitation is the total power of 15,4W per port and the maximum distance of 100m.

New Gigabit Office Switch

For the present and also future bandwidth requirements at the workplace MICROSENS offers a new generation of the Gigabit Office Switch. The switch is equipped with 8 twisted pair ports, which are adjusted automatically to the relevant data rate (10/100/1000Base-T

autonegotiation). Additionally there are two modular SFP-transceiver ports for the connection to the central distribution device available. This feature offers the user a special flexibility regarding the connectivity.

- SNMP/SSH/Web-Management
- 802.1X Port-Based Network Access Control (Authentication)
- Spanning Tree and Rapid Spanning Tree according to 802.1d und 802.1w
- IGMP-Snooping



New Optical Transport Platform for 10 Gigabit Data Transfer

Telecom carriers need to increase the core networks capacities constantly in order to meet the growing requirements of their customers. CWDM or DWDM optical multiplexing is a common choice and the 10G transmission speed per individual channel is more and more required.

High performance optical transport solutions are coming closer to the end user. Today not only carriers but also companies need to take the advantage of the 10G transmission.



10G Optical Transport Platform 2 U

The new 10G Transport Platform is corresponding the expectations of both carriers and enterprises offering industry leading system flexibility and performance combined with cost effectiveness.

Basic System

As a high performance and flexible carrier-class transmission system, the MICROSENS 10G Transport Platform enables to increase transport capacities in CWDM, DWDM and SDH networks.

A wide range of TDM modules is available and permits reducing the number of necessary wavelengths in order to decrease the overall cost of the application and therefore to provide the direct support of lower speed protocols. Moreover several Ethernet over SDH modules permit using the existing SONET/SDH infrastructure for IP-transmission.

Different Modules

MICROSENS offers a wide range of functional modules for the installation into different chassis types (2U and 6U



10G Optical Transport Platform 6 U

version). The modules portfolio of the 10G Transport Platform includes:

- **TDM 8x GBE or 8x GFC to 10G/OC-192/STM-64**
- **TDM 5x GBE or 5x 2GFC to OC-192/STM-64**
- **TDM 4x OC-48/STM-16 to 10G/OC-192/STM-64**
- **TDM 2x GBE or 2x GFC to OC-48/STM-16**
- **TDM 4x GBE or 4x GFC to OC-48/STM-16 (1 or 2 lines)**
- **TDM 4x STM1/ESCON/ Fast Ethernet to GbE**
- **10G Transponder with 3R, XFP and fixed Laser Versions**
- **10G Long Haul Transponder with 3R, FEC - fixed Laser Versions**
- **10G Protocol Converter 10G LAN to 10G WAN (OC-192/STM-64)**
- **DWDM MUX/DeMUX, OADMs, EDFAs**

