

Fiber To The Office

The bandwidth requirements of todays communication services require future-proof network concepts enabling a flexible connection between the existing office infrastructure and fiber optic networks. MICROSENS' leading new switch generation allows the integration of voice and data services within one fiber optic network.

Voice/Data Integration

A significant performance improvement and cost reduction when compared with the conventional structured cabling – this is the MICROSENS **Fiber To The Office** concept.

Standard devices like desktop computers, laptops as well as printers are linked to a fiber optic uplink via a switch. The connection between the switch and computer is based on standard twisted pair cable.

Performance Improvement

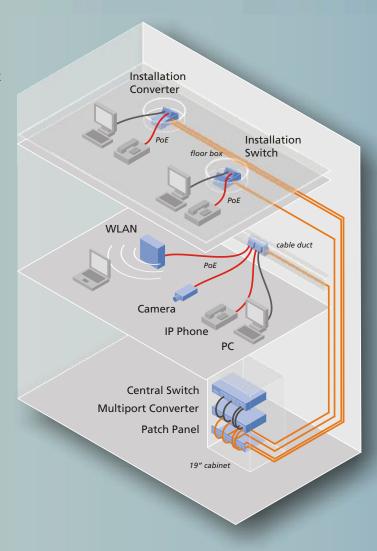
IP phones, cameras or WLAN access points without external power supply can be connected to the switch directly, utilizing the Power-over-Ethernet capability. An optimum **QoS** (Quality of Service) combines the **Voice and Data** infrastructure into a common high performance fiber optic network. Merging the two types of services assures the optimum usage of the overall technology platform.

Cost Reduction

The integration of voice and data into a common fiber optic network eliminates the need for separate telephone wiring, reducing cable infrastructure requirements and consequently minimizing the capital and operational expenditures.

Future-proof Investment

A fiber-only network enables fast migration to new technologies without the need for expensive changes to the cable infrastructure. The investment is long term protected and exceeds the typical facility management **investment cycles**.





Power-over-Ethernet

The new IEEE® Std. 802.3af® standard enables the parallel sourcing of data and electrical power to connected devices. The electrical power is transmitted via the twisted pair data cable.

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Providing the electrical power required via the data network link eliminates the need of additional power supply outlets. This is a crucial aspect when installing IP cameras, WLAN access points or IP phones.

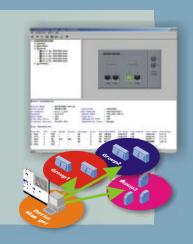
Easy Installation

The installation of the world's most compact switches is extremely simple. No tools are required for installation (snap-in). Universal adapters guarantee compatibility to all major electrical installation systems.

Management

The **Device Manager** software allows the configuration, monitoring and administration of MICROSENS switches from a central workstation.

- Clear Graphical User Interface
- Simple administration of device groups
- Automized detection and device handling
- Supported protocols: Telnet, SNMP/Traps, Syslog, Device Manager (GUI software)



Quality of Service

Time sensitive applications like Voice-over-IP telephony or video streaming require special transmission quality. MICROSENS products are equipped with optimized data prioritisation mechanisms.

- Content based prioritisation
 - VLAN priority (IEEE 802.1p/Q)
 - IPv4/IPv6 DiffServ
- Hardware port prioritisation



Security

IEEE 802.1X Authentication

The port-based control mechanism prevents unauthorized network access on port level. Users must be successfully authorized by a RADIUS server to get full access to the network.

VLANs

The use of Virtual LANs offers additional security by the logical separation of individual services like network management, telephony or internet access.



MICROSENS fiber optic solutions

Gigabit Switch

- Gigabit Ethernet 5 port Installation Switch,
 2x 10/100/1000Base-T, 2x 10/100Base-TX with PoE,
 1x 100/1000Base-SX/LX
- Integrated management agent, SNMP/Telnet/web
- VLAN support and Quality of Service (QoS)
- Power-over-Ethernet according to IEEE802.3af integrated
- MAC address authentication according to IEEE 802.1X
- Version with pluggable optical transceiver (SFP) available



Fast Ethernet Switch

- Fast Ethernet 5 port Installation Switch 4x 10/100Base-TX, 1x 100Base-FX
- Integrated management agent, SNMP/Telnet/web
- VLAN support and Quality of Service (QoS)
- Power-over-Ethernet option
- MAC address authentication according IEEE 802.1X
- Version with Twisted Pair uplink available



Installation Converter

- Double Converter 2x 100Base-TX/100Base-FX
- Power-over-Ethernet compliant with IEEE 802.3af on both twisted pair ports
- Support of full and half duplex mode
- 10/100 bridge mode for speed adaptation



Central Media Converter

- Compact design, lowest port-costs
- 12 or 24 ports per 19" / 1HU device
- Easy handling/installation
- Optional management and redundant power supply
- Link transparency via Link Through



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