

MICROSENS



10G MICRO SWITCH

A revolutionary performance level for FTT0 networks

HIGHLIGHTS



Fanless design

No noise in the workplace



10G uplinks (IEEE 802.3ae)

2x 1/10G uplink for maximum performance in FTTO networks



1/2.5/5G downlink (IEEE 802.3bz)

Multi Gigabit port, optimized for rollout of Wi-Fi 6 networks



High power PoE++ port

Downlink with up to 60W PoE power



IT Security

MICROSENS SECURE feature set for a high level of IT security



Compact M45 form factor

Compact M45 form for easy installation in line with construction standards



Docker Virtualization Environment

Integrated Docker system for hands-free programming of special functions



Standardized network redundancy (ERPS according to G.8032v2)

Feature set for special redundancy topologies in FTTO network

TECHNOLOGICAL FEATURES

- 1 10G uplink ports**
2x 1/10GBase (SFP/SFP+ slots), for building redundant network topologies, as expansion port or for aggregation purposes
- 2 Power supply**
50..57VDC power supply connector 3-pin with a connected load of max. 130W (2.78A)
- 3 User Ports**
4x 10/100/1000Base-T PoE+ PSE ports for connection of IP-capable end devices with optional PoE+ power supply according to IEEE802.3af/at
- 4 Downlink Port**
1x 2.5/5GBase-T PoE++ PSE port for (concealed) connection of IP-capable end devices, typ. for local connection and supply of Wi-Fi APs with optional PoE++ supply according to IEEE802.3af/at/bt
- 5 Console port USB C**
(Hidden when installed) USB C console port for local administration of the switch
- 6 Configurable reset/system button**
Reset button for resetting the switch.
System button for requesting IP configuration via management or resetting to factory defaults.
- 7 Configurable LED display**
Clear display of the following functions:
Ready for operation, link status, data activity, PoE status, boot or reset process. Display configurable

MICROSENS 10G MICRO SWITCH

THE ORIGINAL

25 years after the first FTTO Switch, MICROSENS sets new standards in performance and applications for FTTO networks with the seventh hardware generation, the 7-port 10G Micro Switch, PoE++.

Parallel to the current Gigabit switch, Generation 7 also retains the M45 form factor introduced by MICROSENS in 2003, which is now the market standard.

Modern hardware designed for maximum performance and efficiency makes it possible to connect the workplace with 10G in proven MICROSENS quality.

10G uplinks for higher performance and flexibility

10G at the workplace not only provides FTTO users with more distributed performance, it also opens up new, versatile possibilities for the planning and expansion of FTTO networks.

Redundancy and expansion!

The connection of the micro switch to two separate central units with 10G each and the cascading of several switches to a redundant and cable-optimized ring structure are just two examples of the gain in flexibility combined with a high-performance network structure.



Modern standards in the building - Wi-Fi 6

The trend towards IoT, which is accompanied by a large number of new and mostly Wi-Fi connected network participants, requires high-performance Wi-Fi coverage. The access-protected downlink port of the Micro Switch delivers multi Gigabit performance and PoE++ to connect the decentralized Wi-Fi network IEEE802.3bz-compliant with 2.5G or 5G. At the same time, it supplies the access point with power. The existing, decentralized FTTO infrastructure automatically distributes multi-gigabit ports in the building, which means that a high-performance network infrastructure for a

comprehensive and optimally covered Wi-Fi network is also available.

Separate cabling for Wi-Fi networks? No more with FTTO and the new 10G Micro Switch!



Connection of the decentralized Wi-Fi network via access-protected downlink port.

SOFTWARE FEATURES

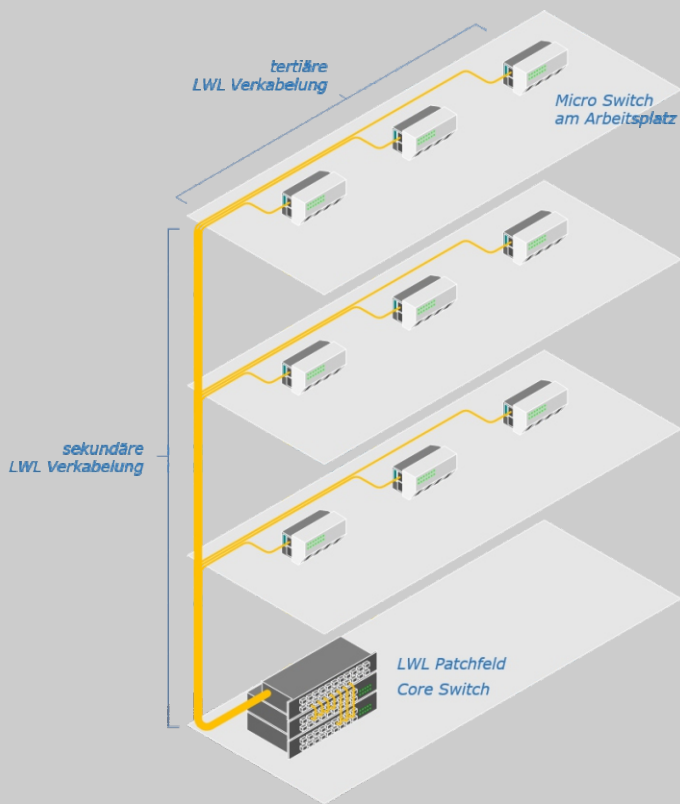
Security

- Port and MAC based NAC
- IEEE802.1X Supplicant
- Static/dynamic access control lists
- DHCP Snooping/Filtering/Flooding detection
- Dynamic ARP Inspection
- PPPoE Snooping

Performance

- Redundancy mechanisms, e.g. ERPS G.8032v2
- Static/dynamic LACP
- VLANs incl. MVRP and Q-in-Q
- IGMP/MLD snooping with integrated Querier
- DHCP Relay Agent
- Docker Virtualization Environment

THE NEW FLEXIBILITY

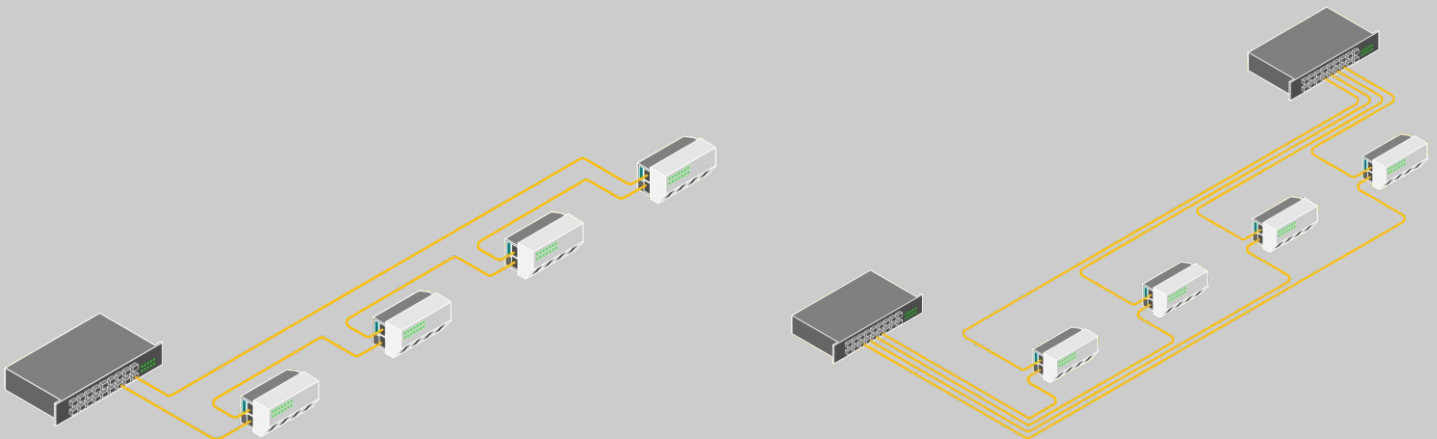


Fiber optic-based network topologies such as FTTO, use cabling with an extremely long product life cycle and a maximum of performance capacity.

FTTO also means

- an increase in available space due to the centralization of technology
- a significant reduction in cable volume and routing in the building
- the smallest possible dimensioning of fire partitioning and reduction of fire loads

Flexibility in planning and deployment, with the 10G Micro Switch from MICROSENS performance capacity is guaranteed: whether in a star topology, cascaded in a star topology or even in a redundant topology, the 10G Micro Switch offers maximum freedom in terms of network design thanks to its features and performance.



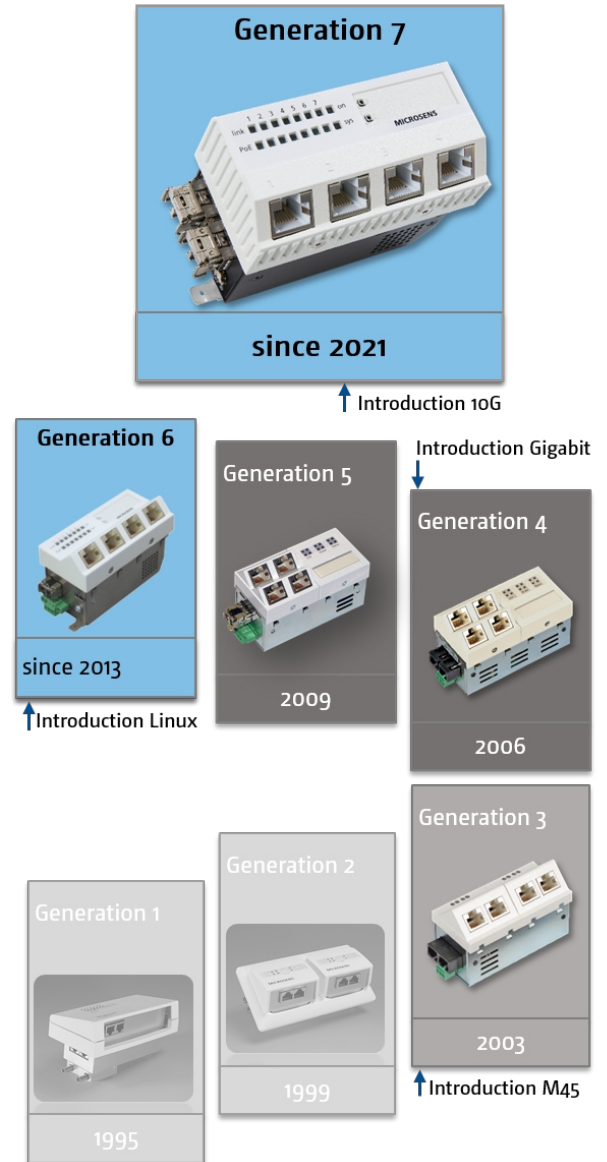
Redundant FTTO 10G network topologies

The application examples show typical redundancy forms of FTTO: in the illustrations on the left, micro switches are cascaded via a fiber cable and are connected redundantly to the central distributor in a ring topology. In the central redundancy concept on the right, the micro switches are connected with two distribution rooms individually at the same time.

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MICROSENS STANDS FOR COMPETENCE IN ACTIVE NETWORK SOLUTIONS

For more than 25 years the manufacturer MICROSENS focuses on communication via fiber optic based networks for enterprises, manufacturing plants, industry and access networks. The development and manufacturing "Made in Germany" contribute significantly to this.



www.microsens.com/10G-micro-switch

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