PUBLIC WiFi HAMBURG
FAST SURFING THANKS TO LONG-TERM PARTNERSHIP

REFERENCE

Client: wilhelm.tel GmbH

Sector: Telekommunication

Product: Ruggedized Micro Switch

In a few words:

MobyKlick, the public WiFi for the metropolitan region of Hamburg, is set up via more than 4,500 access points and is already available in many public areas in Hamburg. Since 2017, the number of registered devices has grown to 2,200,000 and more than 15,000 users use MobyKlick in parallel. In order to have sufficient bandwidth available in the long term, all locations are connected via Gigabit. wilhelm.tel, one of the operators of the network, made a name for itself in 2004: In just five years, this telecommunications provider had set up a comprehensive fiber optic network in the city of Norderstedt with 71,000 inhabitants at the time, which was a premiere in Germany.

The Story:

Hamburg is somewhat ahead of many German cities. We are not talking about the Elbphilharmonie or the harbour as a gateway to the world. Thanks to MobyKlick, free public WiFi is available in many places in the Hamburg metropolitan region. The operators, willy.tel and wilhelm.tel, are continuously investing in the rapid expansion of the network. For decentralized network technology, they rely - also for their commercial projects - on switches from MICROSENS GmbH & Co. KG, a subsidiary of euromicron AG. The partnership is bearing many fruits. In order to meet the special requirements of wilhelm.tel, the German technology company integrated new software functions and revised the hardware of its switches.

MICROSENS

High-speed for Hamburg

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Individual solutions for smaller businesses

The concept of the MobyKlick operators combines commercial offers for Internet, network construction and communication services with the development of a free public WiFi. Numerous access points are installed directly by MobyKlick. In addition, dedicated access points are used by business customers to expand the public WiFi. To date, there have been two challenges for small businesses and restaurants/cafés: 1. Higher investments: Two switches were required to set up an internal company network with location couplings, if necessary, and to operate access points for the public WiFi in parallel.

2. Noise disturbance: The switches used with Power over Ethernet functionality required a built-in fan.

Malte Kock, Manager Systems Engineering at wilhelm.tel, turned to MICROSENS with this problem: „We were looking for a simple solution to make an interesting offer especially for small companies. We had already gained good experience with the MICROSENS Micro Switches and wanted to proceed without the additional switch of another manufacturer". The MICROSENS development department at the company's headquarters in Hamm/Westphalia then designed a switch with Power of Ethernet functionality that does not require an additional fan. The functions required by wilhelm.tel, such as Quality of Service with Priority Queues for the networking of locations and PPPoE for the identification of Ethernet ports during network dial-in, were integrated into the firmware on the software side by MICROSENS.

For wilhelm.tel, this micro switch offers the optimal solution for small businesses, cafés and entrepreneurs to be able to provide interesting complete network offers.

Multifunctional housing for residential construction

Another advantage for wilhelm.tel is that the firmware changes are available on all MICROSENS switches. This allows the company to flexibly choose between different types of switches for projects. For a residential construction project with 100,000 to 130,000 fiber-to-the-home connections in Hamburg, the telecommunications provider chose Gigabit Ethernet Office Switches from MICROSENS because of their functionality and the favorable price-performance ratio. However, all components were to be installed in 19 inch racks. MICROSENS quickly designed a stable mounting so that the more than 1000 switches could be easily and quickly integrated into the racks.

Robust Switches for Mobility

The range of switches used is rounded off by ruggedized micro switches, which MobyKlick uses, for example, to connect access points in Hamburg's underground stations, suburban trains and buses or for outdoor installations. In addition to the economic efficiency and performance of the switches on their own, the reliability and flexibility clearly speak for MICROSENS, as Malte Kock explains: „Our projects run over many years. We are interested in long-term cooperation with our suppliers and always seek direct contact with the manufacturer. The cooperation with MICROSENS as a German manufacturer runs very smoothly and their technical solutions really convince us. We can be sure that the products we have chosen will be produced in Hamm for a long time to come".

MICROSENS
euromicron group