**Medical Switch with Power Supply over PoE – Economically Efficient and Secure Network Technology in Medical Facilities**

PRESS RELEASE

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**Hamm, March 28, 2017** – The new Medical Switch of the euromicron subsidiary MICROSENS offers performance, security, and economic efficiency for data networks in medical environments. Instead of installing new cabling with a high effort, the Medical Switch permits the extension of existing twisted pair networks in hospitals, clinics, and medical practices in a simple and cost-effective way. The retrofitting can be performed with running operational processes in the clinic and only minimal restrictions and provides performance and security where they are needed: at the outer boundaries of the network, at the access of the end device.

Instead of copper cables with four external network insulators as they are required in conventional network concepts, the Medical Switch offers a compact, fully integrated, robust, and secure solution. A special feature is the power supply via Power-over-Ethernet directly from the data network. In this case, the connection of a 230 VAC power supply is no longer necessary.

The Medical Switch is designed for the application in medically used rooms according to the IEC 60364-7-710 (VDE 0100 Part 710) Standard for the galvanic separation of signal lines according to Chapter 16 of the IEC/EN 60601-1. The switch ensures the security for patients and medical facilities by means of four galvanically separated 10/100/1000 Mbps accesses with integrated network insulators. Two Gigabit uplink accesses provide top-level performance and network availability with redundancy, so that the huge data volumes generated by IT-based diagnostic and medical attendance systems are transferred quickly, reliably, and in secure mode.

The Medical Switch fulfils the requirements of patient protection with 2 MOPP (Means of Patient Protection) and and exceeds the strict requirements according to IEC/EN 60601-1 (at least 4 kV minimum ­­electric strength) for medical devices.

By using these switches, the operating units (e.g. hospitals or medical practices) at the same time fulfil the requirements of Chapter 16 of the IEC/EN 60601-1 Standard relating to the required separation of signals in patient environments. In this way, the corresponding national stipulations for the installation, operation, usage, and maintenance of medical products and their combination with other components, such as IT networks, are also complied with.

The protection of sensitive data is ensured by means of port security according to IEEE 802.1X. The switch can be integrated into a Radius solution and is compatible with all conventionally available NAC solutions. The snap-in assembly with an internationally standardised installation measure of 45 mm permits the fast and tool-less assembly in all conventional installation systems, as well as the integrated assembly in ceiling supply units. The surface of the Medical Switch is made up of robust plastic and permits effective cleaning and disinfection. It is available with an antibacterial coating.

For further information, please see the Website of the vendor at [www.microsens.com](http://www.microsens.com/)

**About MICROSENS**

Since 1993, MICROSENS GmbH & Co. KG has stood for fiber optic solutions. As one of the pioneers of fiber optic transmission systems, the internationally active company covers all performance sectors of fiber optic technology. Starting with solutions for future-proof office networking and high-availability in rough environments, the product portfolio ranges from large-scale site networking and interconnection of computing centres up to high-performance Wide Area Networks (WANs). In all these fields of application, MICROSENS provides and ensures efficient, fast, and secure data transfer. As an internationally successful manufacturer, MICROSENS distributes its products on a worldwide scale. In addition to the company headquarters in Hamm in Westphalia (Germany), MICROSENS also has sales subsidiaries in France and Poland to optimally fulfil the diverse requirements of its customers on-site.

**About euromicron AG:**

As a company group, euromicron AG ([www.euromicron.de](http://www.euromicron.de/)) combines medium-scale high-tech companies from the sectors of digitalized buildings, critical infrastructure, and Industry 4.0. As a German specialist for the Internet of Things, euromicron enable their customers to network business and production processes and to successfully venture the path to a digital future. From the design and implementation over the operation up to combined services, euromicron implement customer-specific solutions and, thus, provide the necessary IT, network and security infrastructures. In this way, euromicron enable their customers to migrate the existing infrastructures to the digital age in a stepwise mode. The expertise of euromicron supports the customers of the company in increasing their flexibility and efficiency as well as in the development of new business models which set the cornerstone for the corporate success of tomorrow. The technology corporation, which has been registered at the stock market since 1998 and has its headquarters in Frankfurt am Main, employs approximately 1,800 employees at 30 company sites. The euromicron group includes 17 subsidiaries in total, among them the brands Elabo, LWL-Sachsenkabel, MICROSENS, and telent.