Smart Office – Building Automation Unlimited MICROSENS develops concepts for intelligent buildings

Hamm, 18. January 2017 - From the surveillance camera to air-conditioning: In modern office buildings, intelligent systems communicate with smart things – provided that they are networked with each other. The euromicron subsidiary MICROSENS offers its Smart Office building automation solution for precisely this purpose. This solution for the digital building is based on the standard IP protocol, modularly extensible, and secure.

Telephony, IT, heating control, lighting, or shading: If things and systems in the building are meant to take over common tasks, this calls for convergence. Creating gateways between different types of networks, however, is work-intensive and expensive – provided that such network couplings are feasible, in the first place. IP-based building automation creates intelligent buildings. With its "Smart Office" concept, the Hamm-based company MICROSENS has taken a path-breaking direction in the field of building automation: in-house technology goes IT.

Programming the future with MicroApps

On the basis of intelligent, decentralised switches, it is possible to address any building technology element in a network. So-called MicroApps – which are control programs running on the switches – permit the interaction with these elements. States can be captured, evaluated, and controlled. No matter whether data or illumination, audio-streaming or in-house technology – any element which has an IP address can be controlled in the IT network. This interaction gives rise to a decentralised concept with almost unlimited options: "Smart Office – unlimited". "Anything which can be programmed can also be implemented via MicroApps," explains Hannes Bauer, co-founder and technical director of MICROSENS, who is responsible for product development.

Scalable and secure

Existing units and systems can easily be integrated into an IP-based environment – a so-called Automation Gateway takes over the integration process by means of a data network or wireless communication. The connection is possible room-by-room. At the same time, the modular setup ensures the security of the system: Each room constitutes an autonomous unit. In this way, it is assured that only minor units will break down in the case of a failure and that the company will be able to continue its operations. In terms of security, the IP-based solution has gained the competitive edge, anyway. For no other network, there are such well-tested and reliable security standards.

Paradigm shift

The spirit of the Internet of Things has got out of the bottle – and we start to divine how many things an intelligent building could be able to do. If the lift is already called when checking in at the car park, if the illumination and heating are set individually, as soon as the employee reaches the workplace. If the conference room is air-conditioned as soon as the calendar indicates a meeting, if unused floors remain dark. Then,

technology will be converted into benefit. Optical fibers, motherboards, and storage chips will help to save energy and the time to do the really important things. "This is great fun," says an enthusiastic Hannes Bauer. "With our customers, we talk about the things which save their resources and make their companies more productive and secure. This is smart." 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) 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 14 subsidiaries in total, among them the brands Elabo, LWL-Sachsenkabel, MICROSENS, and telent.