

Remote and flexible – point-to-point or in a network: Wireless solutions for the shop floor

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The steute business unit Wireless will be exhibiting at the HMI Hannover Fair 2023 in the perfect location – the "Industrial Wireless Arena + 5G Networks & Applications" in Hall 14.

In this Arena, steute will be presenting solutions developed on the basis of the industrial sWave wireless protocol. The experts at steute have one central message, as conveyed by Andreas Schenk, Product Manager Wireless: "The industrial environment poses particular challenges for wireless systems. There is radiation and interference from other radio signals. And, depending on the application, the demands regarding transmission reliability and/or speed can be very high. The question is therefore not just: Wireless or not wireless? Much more complex is deciding: Which wireless system?"



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With sWave, users have a wireless system at their disposal which has been developed especially for industrial conditions – and which has been used successfully in countless applications for years. There are two very different options: wireless point-to-point communication between one (or more) switch(es) or sensor(s) with the corresponding receiver unit, or a wireless network in which hundreds or even several thousand sensors and actors can be integrated.

Both of these basic types of wireless system are true problem solvers. Point-to-point connection is ideal, for example, for the transmission of signals from rotating or moving machine elements. A wireless network, on the other hand, can be used to realise e.g. an automated materials requisition system, enabling users to control the supply of materials to production and assembly, as well as to integrate mobile components such as eKanban racks, dollies or AGV.

With this wireless network, a "digital twin" of the physical material flow is generated, facilitating e.g. uninterrupted planning of production and assembly, as well as an improved supply of replenishments. Freely moving "sites", such as AGV, dollies and eKanban racks, can also be integrated in this system. It is a flexible network open to changing requirements.

The sWave system thus demonstrates precisely what the specialist Arena at the Hannover Fair wishes to convey as its main message: radio-based communication is an enabler for realising Industry 4.0 and IIoT concepts in production, assembly and warehouse management. The steute business unit Wireless offers both the infrastructure with preconfigured software applications, and the corresponding wireless sensors and actors – including some new steute products which can be seen in Hannover.

steute at the HMI: Hall 14, Booth H06 (55)