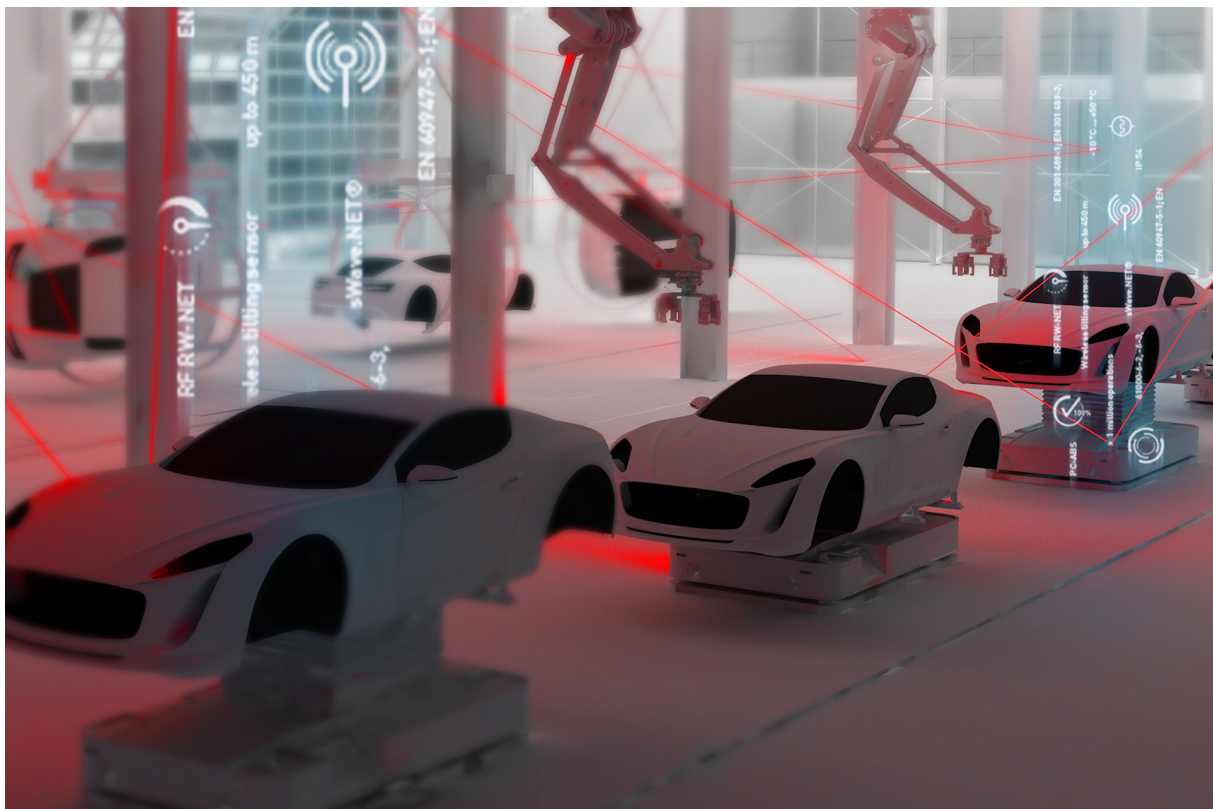


White paper on wireless networks for AGV fleets

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Manufacturers and users of automated guided vehicle (AGV) systems all face the challenge of deciding which wireless system to select in order to, for example, facilitate communication with pickup points or activate individual AGV with a wake-up signal from low-energy deep-sleep mode to operating mode.

A white paper published by steute provides decision criteria for this special field of wireless technology. It also presents the steute sWave.NET® wireless network, already used by multiple AGV manufacturers and an established part of the AGV specifications of system integrators and renowned AGV users, especially in the automotive industry.



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The advantages of the sWave.NET[®] wireless system include not only low-energy operation, but also a complete network infrastructure – from sensors in the factory, to a robust wireless protocol developed especially for industrial applications, to interfaces connecting to the superordinate IT systems of the user. Typical applications include the "wake-up" of AGV from a deep-sleep mode, as well as communication between AGV and mobile pickup points or stationary conveyors.

To download the white paper, please [click here](#).

steute has a new wireless receiver for its sWave.NET[®] wireless network, developed especially with AGV applications in mind.

The sWave.NET[®] system ensures that battery management is energy-efficient: during breaks and downtimes of up to 3 weeks, the entire AGV system, or alternatively individual vehicles, can be put into a "deep-sleep mode" in which they require no power. This means that the vehicles do not have to drive to a docking station before starting their downtime, but can simply remain parked wherever they happen to be. A buffer battery supplies the wireless receiver, which then receives the "wake-up" signal and passes it on to the AGV control system electrically.

For this task steute previously used a wireless receiver from its standard range with 24V voltage supply. The new generation can be coupled directly to the 48V voltage supply typical for AGV, does not require a voltage transformer and thus requires less power. In addition, the switching process is no longer performed by a relay, but by optocoupler outputs with galvanic isolation. This allows the wireless receiver, which "rides" on the AGV, to save even more energy.

This new steute development heralds an expansion to its sWave.NET[®] range for AGV applications, an important target market for such a robust and flexible wireless network. Renowned AGV manufacturers are already using the remote "wake-up" function in their vehicle fleets, while system integrators and multiple car manufacturers have included sWave.NET[®] in their AGV factory specifications.