Control and Parameterisation of PS-AMS using Bluetooth

If actuators need to be placed in parts of the plant that are difficult to reach, then setting and parameterisation can often only be executed with difficulties. For these applications PS Automation offers a wireless connection between notebook-pc or PDA using Bluetooth technology. Bluetooth is a widely spread and tried and tested data interface. It has been developed especially for frequency bands that have to be shared with other users. Therefore a Bluetooth connection is able to function in the presence of electromagnetic perturbing radiation or radio circuits.

Due to their modular design PS-AMS actuators can be equipped for wireless communication easily. For that feature a Bluetooth-module is added to the actuators circuit board. It can also be retrofitted to any prepared circuit board.

After insertion of the Bluetooth module has the actuator is ready immediately to communicate with any Bluetooth-enabled notebook-PC in the field. No additional software needs to be installed. The parameterisation software PSCS remains the same and offers identical functions as does a conventional connection via cable or by a field bus.

If larger numbers of actuators need to be parameterised the Bluetooth connection is advantageous as well. The technician does not need to open the housing and thereby saves assembly time. After selecting the Bluetooth connection on the notebook all energized actuators in the range of the Bluetooth transmitter respond and can be logged in. They may be consecutively parameterized in one easy work step uninterrupted by assembly work. For cases, in which maintenance needs to be predicted diagnostic data can be retrieved fast and non-intrusively to judge wear and tear of actuator or control valve. This may even be done safely while the plant is fully operational and running.

The Bluetooth-interface is equipped with a build in antenna that reaches up to a10m radius. Larger ranges may be realized. In contrast to optical interfaces Bluetooth also works when intervisibility between devices is not given. Obstacles in the way between actuator and notebook generally do not cut off the connection.

Please consult with our technical sales person regarding your specific application or possible retrofits.