Harmonised communication

Delphin Technology AG has extended its Expert Logger range with the new type 400 which is equipped with an OPC UA interface. The independently functioning data logger system is therefore ideally equipped for the universal exchange of measurement data at field level and also for the requirements of Industry 4.0.

Particularly in the field of test stand automation, measurement and automation systems, sensors and actuators from different manufacturers require linking to one another and to have integrated protocols. Not only test-sample measurement data and control commands often need transmitting but also configuration data. The cost of integrating interfaces in a system for test stand automation is often higher than the cost of the actual equipment. As OPC UA becomes increasingly established, it is now becoming possible to use it in test stand automation and thereby achieve harmonised as well as complex communications. Delphin Technology has recognised this trend and offers a combined measurement and automation device, the Expert Logger 400 with an integrated OPC UA interface. OPC UA is all already widespread in the area of automation engineering and many products are already equipped with the interface. OPC UA has now been integrated into the combined data logger and automation Expert Logger 400 device. The independently functioning data logger system is therefore ideally equipped for the open exchange of measurement data at field level and also for the requirements of Industry 4.0. The Expert Logger device is also equipped with ProfiBus, ModBus, CAN-Bus and serial interfaces for the sensor and field levels. These interfaces will continue to be required in addition to OPC UA. However, it is believed that a major part of communications will soon shift to the new OPC UA standard.

Independently operating data logger

The Expert Logger series from Delphin offers a range of models which, with 16 to 46 analog inputs, are ideal for independent data acquisition and test stand automation. All Expert Logger devices are equipped with an internal data storage capability. Monitoring and automation tasks are performed independently within the device. Measurement data and threshold violations can be immediately transmitted to subsystems via OPC UA.

The new type 400 is equipped with 16 universally usable, differential analog inputs for measuring mV and mA signals and any type of thermocouple. 24-bit precision and a maximum rate of 1,000 measurements per second can satisfy high user requirements. The Expert Logger also has the option of measuring Pt100(0) sensors and DMS. The device has a total of 24 switchable digital inputs/outputs, can record edge and fault events at microsecond precision, and output alerts. A total of six analog outputs enable the operation of regulation and control elements. As an interface to HMI, via PCs, tablets or smartphones, the Expert Logger device is optionally equipped with a WLAN or LTE connection in addition to USB and LAN interfaces.