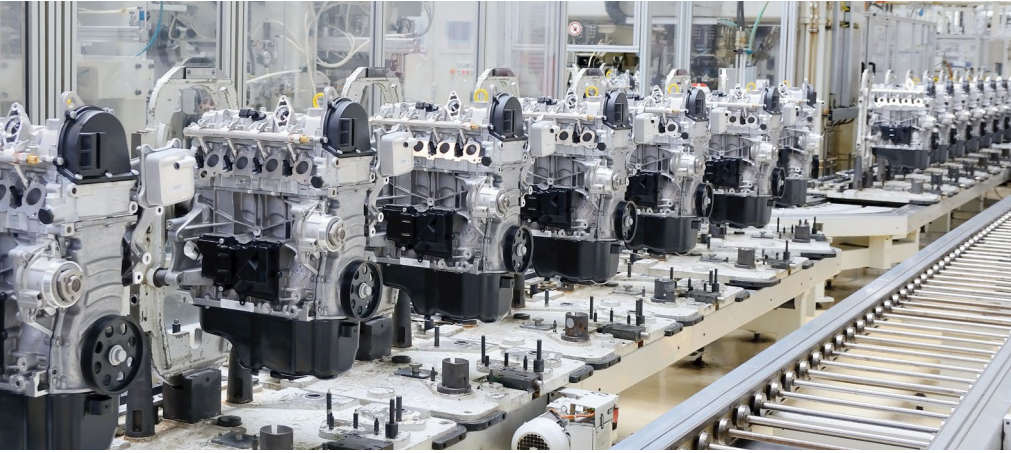# Product Announcement

Turck Introduces RFID Transceiver with IO-Link

Turck is adding an IO-Link HF reader to its RFID portfolio. The new TN-M18 and TN-M30 HF RFID readers come with an IO-Link interface on board. These IP67-rated read/write heads are designed for use in production controllers on assembly lines and can be assigned parameters easily with IO-Link. Combining IO-Link and RFID in a single device delivers a cost-effective solution for simple identification tasks. The read/write heads can be operated in IO-Link mode but also in standard I/O mode (SIO mode).

In IO-Link mode, bidirectional IO-Link communication takes place between an IO-Link master and the read/write heads. To make this possible, the devices are integrated via IO-Link master at the control level. The read data or the data to be written is transferred via the IO-Link interface along with the process data. Diagnostics and identification messages can also be requested via IO-Link.

In SIO mode, the read/write heads generate a switching signal depending on the parameterization. As soon as a tag moves into the detection range, the output of the read/write head is switched to allow a simple "object present" response to be generated. The compare mode, compares the data stored on the read/write head, can be compared to the data on the tag and generate a response based on a data "match" or "mismatch".

Setting parameters of the transceiver is possible via three methods:
- Via the controller and IO-Link master
- Via Pactware or to initiate simple read/write operations
- Via parameterization tag

Using RFID in conjunction with IO-Link, the user has the option to complete a simple, standardized and, more importantly, non-controller-specific integration. These transceivers can be used with the most common RFID tags.

Key Features

- Operates in IO-Link or Standard I/O mode (SIO)
- Easily assign parameters via IO-Link
- Process value in 32-bit IO-Link
- Used to read and write passive HF tags in single or multi-tag
- 13.56 MHz operating frequency
- IP67 rated

Benefits

- Cost-effective solution for simple identification tasks
- Ideal for production control in assembly lines and material flow control
- Uses common RFID data tags

Additional Resources

- TN-M18 Data Sheet
- TN-M30 Data Sheet