Flat RFID read/write head for tight spaces

PRESS RELEASE 20/26

TURCK's TN-Q30-IOL IO-Link read/write head detects small objects and tools with in-metal tags at an installation depth of just 8 mm

Mülheim, November 12, 2026 – TURCK introduces the TN-Q30-IOL2-0.15-RS4.41T, a compact RF read/write head with an IO-Link interface for applications with limited installation space. The housing measures just 32 × 20 × 8 mm. This allows the read/write head to fit even where readers in M12 or M18 housings are too long. Users can use it to identify small objects on small workpiece carriers as well as tools with in-metal tags directly inside the machine. The TN-Q30-IOL complements TURCK's IO-Link RFID devices in the TN-M18, TN-M30, and TN-Q40 series.

Functionally, the new head corresponds to the existing RF read/write heads with IO-Link; all devices use a common IODD. For simple identification tasks, reading the UID or reading and writing a few bytes is sufficient. Users parameterize and configure the device via the web interface of the TURCK IO-Link master or via the TURCK Automation Suite (TAS). Additionally, the head supports SIO mode, in which a switching signal is output depending on the result of an RFID read.

In tool management, the tag stored in the tool records data such as operating hours, maximum speed, last maintenance date, and tool type—password-protected if desired. This data is also available for IIoT applications via the IO-Link master, TAS, and TAS Cloud. Typical applications include tool identification as well as semiconductor, electronics, photovoltaic, and battery production.



TURCK2026.jpg:
TN-Q30-IOL2-0.15-RS4.41T: TURCK's RF read/write head with IO-Link identifies small objects and tools at an 8 mm mounting depth

FURTHER INFORMATION
https://www.turck.com/de/en/spotlight/product-news/flat-rfid-read-write-head-for-tight-spaces

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