

# Identification Solutions for the Pharmaceutical Industry

Tailor-made products for pharmaceutical applications

- Comprehensive portfolio of application-optimized RFID tags and read/write heads for the pharmaceutical industry
- Solutions for use in hazardous areas
- Resistant to cleaning processes

Benefits of Track & Trace in the pharmaceutical production

- Improved plant safety through the automatic and tamper-proof monitoring of the correct device assignment and the correct use of equipment such as with tube connections or cryo-vessels.
- Higher personal protection by avoiding media contact with tube connections
- Increased product quality through reliable identification and documentation of precursors and intermediates
- Serialization through complete traceability of medicines from production to transportation
- Safe use of field devices by ensuring the correct device operation and monitoring of maintenance intervals



BL ident® - Modular RFID complete system

BL ident® the modular RFID complete system is based on the Turck I/O systems BL67 and BL20 for field and panel mounting or the compact fieldbus modules TBEN and BL compact for field installation. With BL ident® you can use the HF and UHF technology parallelly. Each BL ident® system can be flexibly composed from tags (data carriers), read/write heads, connectivity and interfaces to a custom-made identification solution that can be easily integrated into your system configuration via gateways for all common fieldbus protocols. Thanks to the application of worldwide standards, the system is future-proof and interoperable.



Intrinsically safe inductive identification system

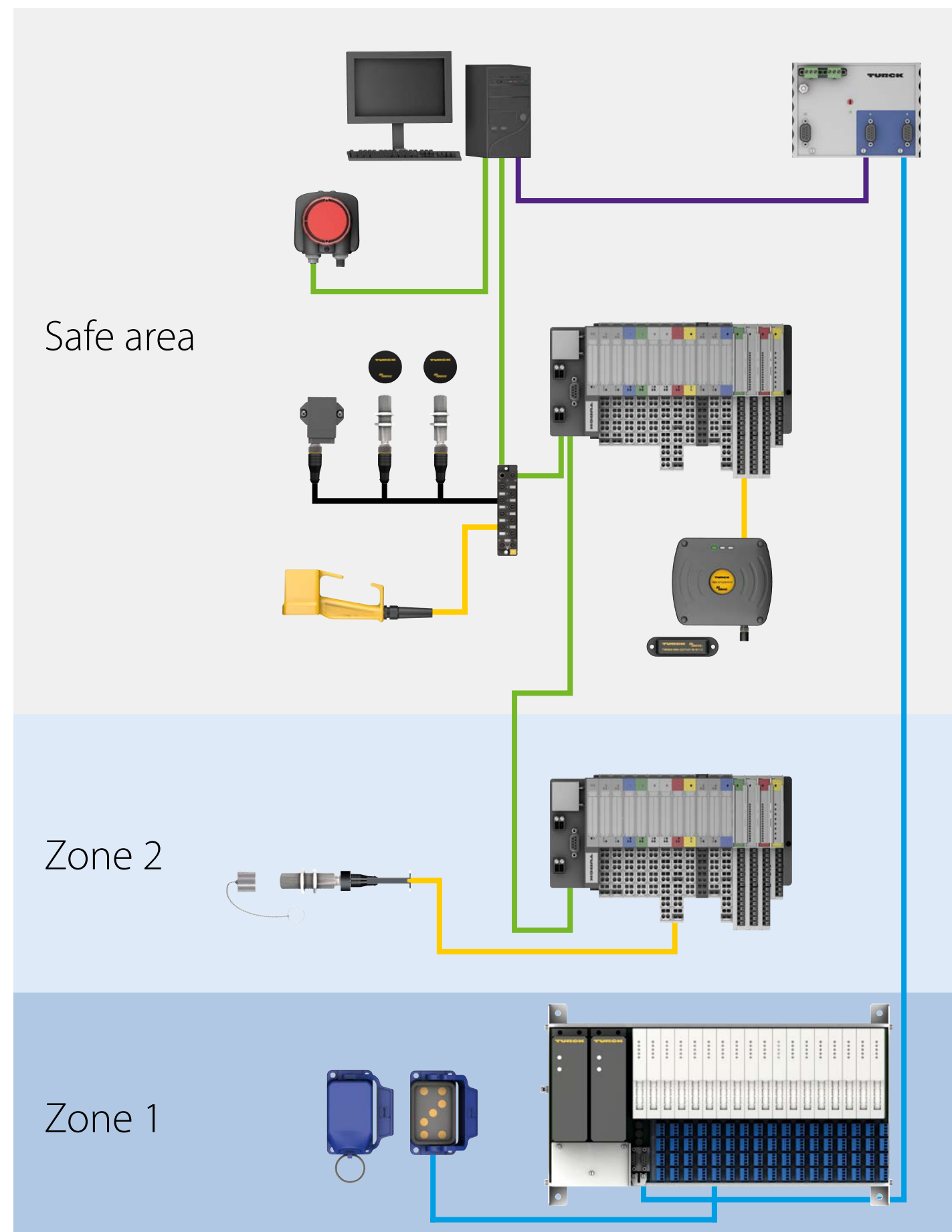
TIT, the inductive identification system from Turck, combines several inductive sensors in a housing. They are actuated by metal targets in corresponding caps, which are arranged such that each cap can be uniquely identified. Thus, this system combines the advantages of inductive sensors such as intrinsic safety, robustness and tightness with the ease of use that you expect from RFID solutions. The evaluation is carried out through the usual inputs for intrinsically safe binary signals such as for instance by the I/O system excom.



Camera-based identification system iVu

The iVu barcode reader IVU2PRBW08 is used for reading and verifying of barcodes and 2D matrix codes. It consists of internal lighting, lens and touch screen display, which is integrated either in the device or can be operated as a remote display RD35. The configuration is done via the menu-assisted display without having to connect a PC. The data exchange with the higher-level controller takes place via RS232 or Industrial Ethernet: PROFINET, EtherNet/IP™, Modbus TCP, PCCC. By configuring the device different types of barcodes can be read.

For different identification tasks in the pharmaceutical industry, Turck offers the optimal solution.



You find these products in the application examples on the back side

Read/Write Heads	Type Code	Dimensions	Description
	TB-EM18WD-H1147-Ex	18 mm threaded barrel	HF technology, compact threaded barrel, for Ex zone 2/22
	TN-Q14-0.15-RS4.47T	52 x 30 x 14 mm	HF technology, compact
	TNSLR-Q42TWD-H1147	67.7 x 42.5 x 42.5 mm	HF technology, protection class IP69K, for very long ranges, compact design
	TNLR-Q80L400-H1147	102 x 83 x 40 mm	HF technology, protection class IP67, for very long ranges
	TN865-Q175L200-H1147	200 x 175 x 60 mm	UHF technology for extremely long ranges
	HT-IDENT-H1147	190 x 85 x 70 mm	HF technology, read/write head for manual operation
	PD-IDENT-HF-S2D-RWBTA	260 x 190 x 100 mm	HF technology, handheld for location-independent reading and writing of RFID tags with WLAN and Bluetooth interface

Tags	Type Code	Dimensions	Description
	Tube tag on request		HF tag for tubes
	TW860-960-L73-17-F-B40	73 x 17 x 1.1 mm	UHF standard tag in a plastic label
	TW860-960-L73-17-P-B40	73 x 17 x 1.1 mm	UHF standard tag in a paper label
	TW-ISPTFE-..., on request	Ø 22 mm x 20 mm	Screw cap with integrated tag and attachment chain for Ex zone 2/22
	TW-L86-54-C-B128	86 x 54 x 0.8 mm	HF tag in credit card format
	TW-R30-M-B128	Ø 29.9 mm x 10 mm	HF standard tag for flush installation in metal
	TW-R30-B128 and DS-R30 (spacer)	Ø 30 mm	HF standard tag for medium ranges
	TW-R50-B128 and DS-R50 (spacer)	Ø 50 mm	HF standard tag for long ranges
	Sensor tag, on request		HF tag which, in addition to its identification function, also collects, logs and transmits sensor values.

Other Devices	Type Code	Dimensions	Description
	IVU2PRBW08 (sensor) RD35 (remote display)	81.2 x 77.5 x 51.5 mm (sensor) 97 x 83 x 23 mm (display)	Barcode reader with remote display
	TIT-Q75- ..., on request		Intrinsically safe inductive identification system Ex-zone 1/21 and 2/22

Your Global Automation Partner

# Identification Solutions for the Pharmaceutical Industry



28 subsidiaries and over 60 representations worldwide!

# Solutions for Reliable Identification of



Tube connections for precursors

- Increased plant safety and personal protection with large tube connections
- HF-RFID tag, freely rotatable, integrated in process connection



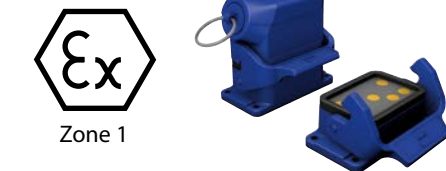
Tube connections in the sterile area

- Increased plant safety and personal protection with small and medium tube diameters
- Specific plant HF-RFID tag integrated in threaded cap



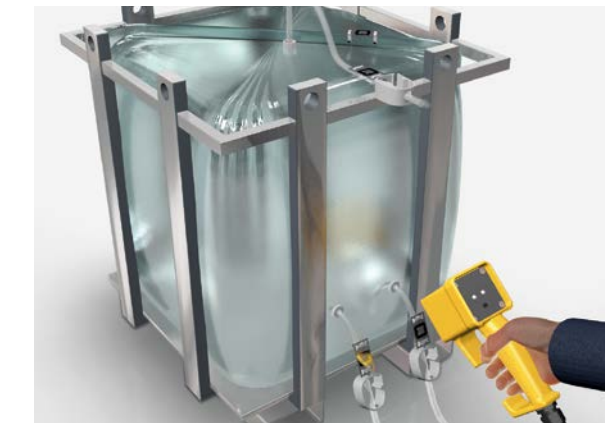
Tube connections in Ex zone 1

- Increased plant safety and personal protection in the explosion hazardous area
- Intrinsically safe inductive identification through coded cap



Accessories for single-use applications

- Increase of quality and process reliability
- Attachment of the HF-RFID tag to packaging and connection materials



Accessories for big bags and bioreactors

- Increase of quality and process reliability
- Automatic assignment of tube connections during production in single-use systems



Data Matrix on medication boxes

- Transparent production and traceability
- Reading and visualizing Data Matrix codes on medication boxes
- Standardized interface to the database



Tags on medication boxes

- Transparent production and traceability
- Simultaneous identification of many boxes within a sealed carton by UHF-RFID



Cryovessels

- Avoidance of assignment errors through non-interchangeable identification with RFID
- Secure identification even of inaccurately positioned vessels with large HF read/write heads



Mobile vessels controlled with handhelds

- Controlling the identity and the time stamp of vessels to be sterilized with RFID technology
- High flexibility through manual positioning of the HF handheld



Mobile vessels

- Assurance of product quality through automatic monitoring of the identity of system components through HF-RFID technology
- High flexibility when using different components



Pallets on conveyor belts

- Product tracking through RFID
- Reliable identification even over great distances through long-range UHF technology



Pallets on forklifts

- Seamless product tracking with manual transport
- Integration of the UHF tag according to EPAL and World Standard
- Long-range UHF technology



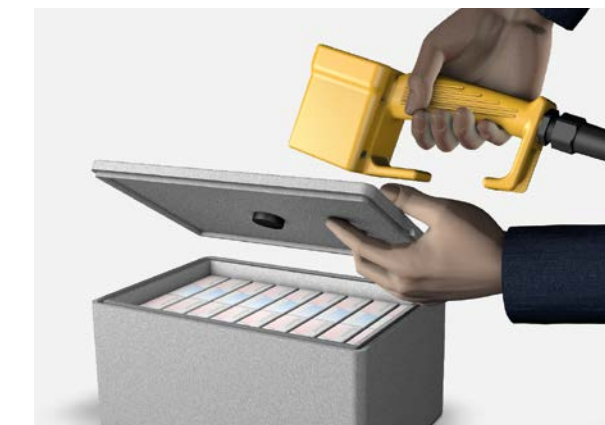
Machine operators

- Individual Permission/Access Control
- More secure than PIN method, that could be spied out and used by unauthorized persons



Field devices

- Efficient management and documentation of equipment maintenance
- Various mounting options of the HF tag on field devices



Temperatures of transport boxes

- Monitoring of cooling temperatures during transport
- Identification of the transport unit and correct assignment of the detected temperature profile in the HF-RFID tag

