

TURCK

**Industrial
Automation**

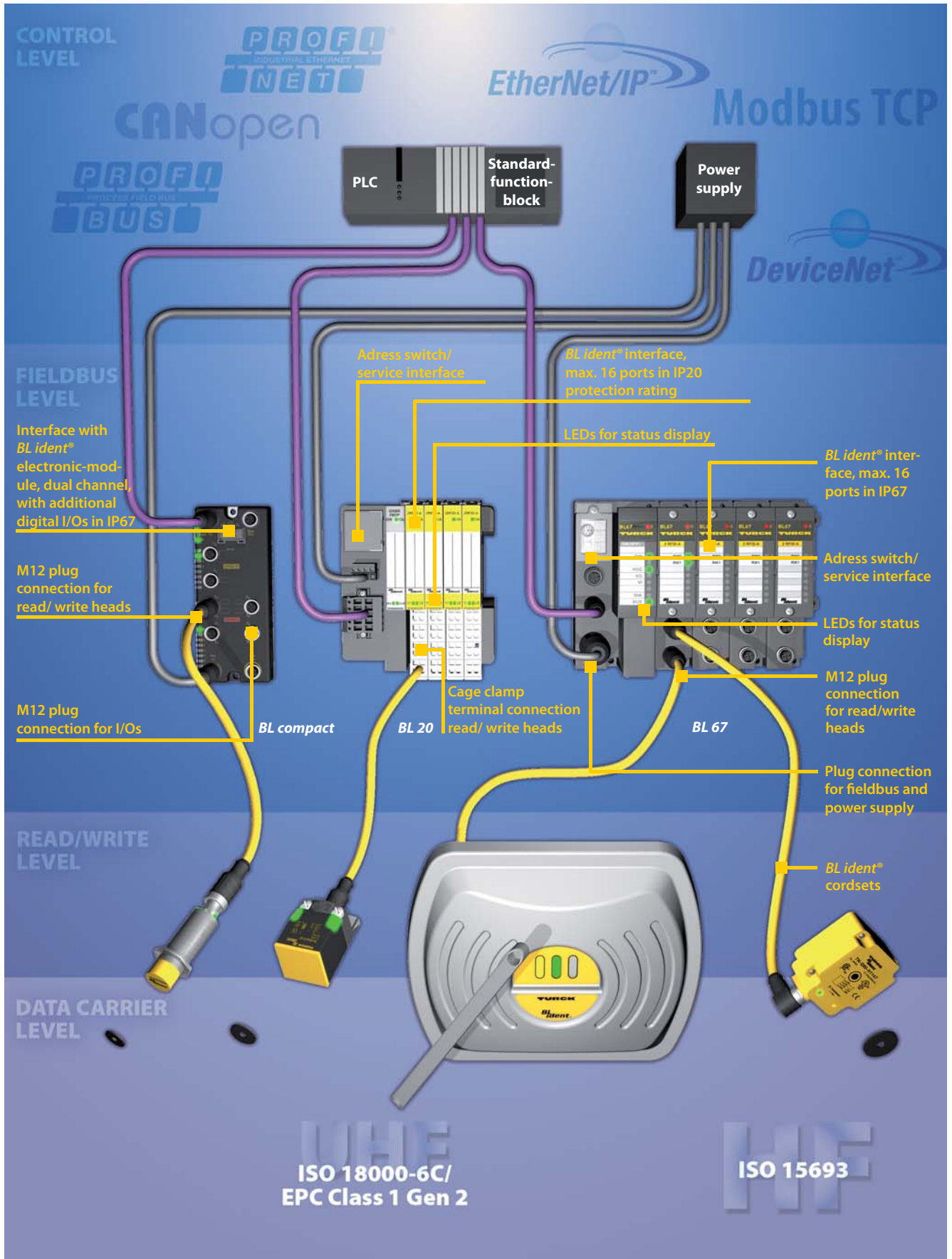
**MODULAR
RFID SYSTEM
UHF**

***BL
ident***®



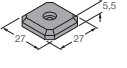
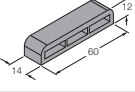
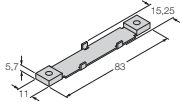
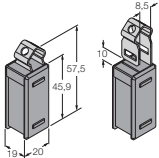
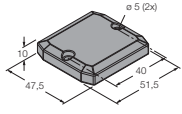

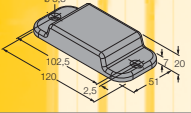
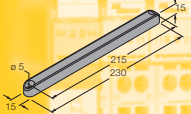
Sense it! Connect it! Bus it! Solve it!

BL ident® – modular UHF RFID system – interference-proof/long-range transmission

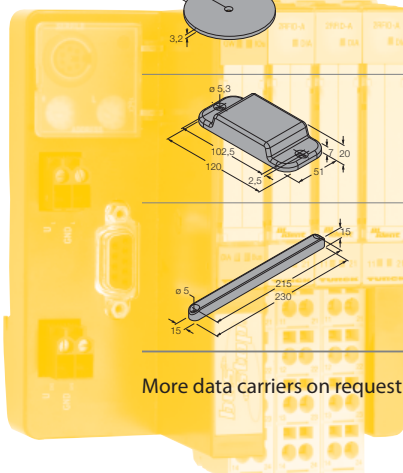


BL ident® modular RFID system data carriers and read/write heads for UHF operation

Rugged UHF RFID data carrier

Dimension drawing	Type code	Description	Memory [byte] (EEPROM)		Frequency band [MHz]
			EPC	User	
	TW865-868-Q27-M-B112	Only for direct mounting on metal	12	64	865-868
	TW865-868-Q14L60-M-B110	For direct mounting on metal	30	64	865-868
	TH-Q14L60	Metal clip with magnetic clamp, for mounting aid TW865-868-Q14L60-M-B110	-	-	-
	TW865-928-Q20L58-B110	Hanger with metal eyelets, customer-specific print applicable	30	64	865-928
	TW865-868-Q47L51-M-B110	Only for direct mounting on metal	30	64	865-868
	TW865-868-R50-B110	Ø 50 mm with center bore	30	64	865-868
	TW865-868-Q50L120-M-B110	For direct mounting on metal and outdoor applications	30	64	865-868
	TW865-868-Q15L230-M-B110	For direct mounting on metal	30	64	865-868

More data carriers on request



Large operating distances in industrial environments

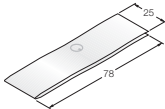


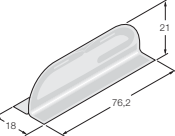
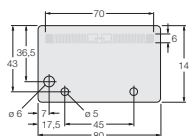


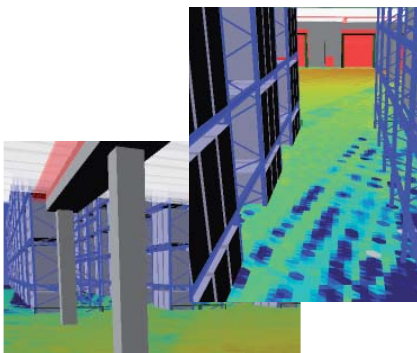
Read/write distances of several meters are achieved, even on-the-fly. The data carriers are almost infinitely rewriteable (EEPROM: 10^4 bzw. 10^5).

Simply connect UHF RFID via interface to fieldbuses such as PROFIBUS-DP, EtherNet/IP™, Modbus TCP, DeviceNet™, PROFINET IO and CANopen.

UHF

UHF RFID smart labels

Dimension drawing	Type code	Description	Memory [byte] (EEPROM)		Frequency band [MHz]
			EPC	User	
	TW865-868-L78-25-T-B28	Textile label, double layer customer-specific print applicable	12	0	865-868
	TW860-960-L73-14-C-B110	Fitting into Ø 13 mm bores , e.g. wood	30	64	860-960
	TW860-960-L97-15-F-B28	Transparent foil, self-adhesive	12	0	860-960
	TW865-928-L76-18-21-F-M-B110	Self-adhesive, for direct mounting on metal	30	64	865-928
	TW860-960-L80-50-C-HT-B110	High-temperature lable up to 200 °C, 10 x 30 minutes	30	64	860-960



Easy integration of UHF

With Ray-Tracer, a special UHF RFID simulation software, different system combinations can be tested in customer environments before installation. The test results are reliable and reduce the costs for planning and analysis of UHF RFID systems significantly.

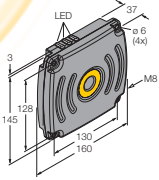
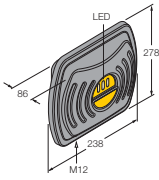
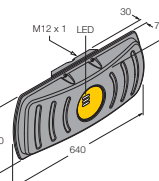
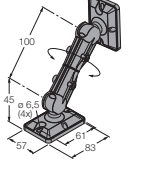
The simulation and analysis of customer's UHF RFID systems with Ray-Tracer is available on request and implemented by TURCK RFID specialists.

Fast and safe bulk reading



Thanks to high UHF data transmission rates, even bulk reading at high speed is possible. You can integrate the S-type electronic modules and interfaces (S = simple I/O communication) directly in your system, independent of the control system. The control system and the periphery are relieved because function modules are not required. Moreover, gateways with peripheral pre-processing contribute as well to the relieve of control and field level.

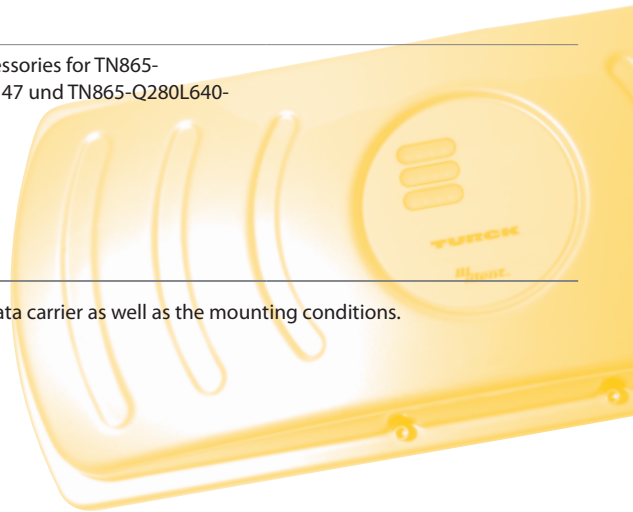
UHF RFID read/write heads

Dimension drawing	Type code	Description	Frequency band [MHz]
	TN865-Q150L170-V1147	Read distances approx. 1.5 m * connection cables: ZKP4-2-WAS4/S77/S366 ZKP4-5-WAS4/S77/S366 ZKP4-10-WAS4/S77/S366	
	TN865-Q240L280-H1147	Read distances approx. 4 m * connection cable for <i>BL ident</i> ® see flyer D101686	865-868 MHz other frequency bands available
	TN865-Q280L640-H1147	Read distances approx. 5 m * connection cable for <i>BL ident</i> ® see flyer D101686	
	RH-Q240L280/Q280L640	Mounting accessories for TN865- Q240L280-H1147 und TN865-Q280L640- H1147	

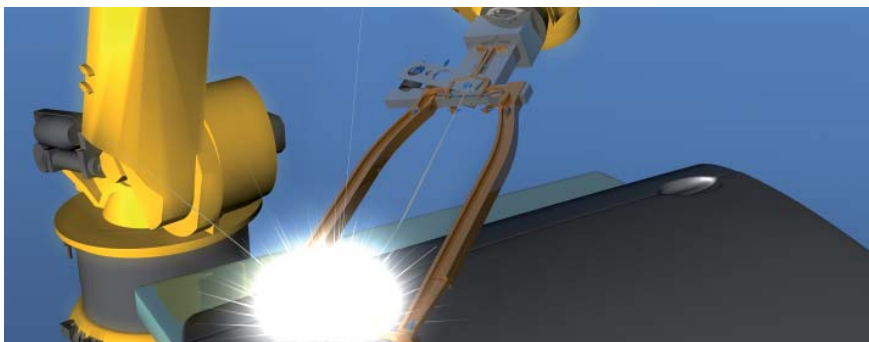
* Attainable distances always depend on the combination of read/write head and data carrier as well as the mounting conditions. Actual distances may deviate from the indicated measures.

Note

For more information on connection technology for fieldbus standards, please refer to the *BL ident*® overview in D101686.



Mixed operation of UHF and HF, reliable, interference-free and safe



HF and UHF read/write heads can be connected to the same interface. Mixed operation of HF and UHF is also possible. Cable lengths of up to 50 m enable flexible mounting between interface and read/write head. Active read/write heads incorporate the antenna and electronics in the housing. They guarantee safe transmission of data, even when exposed to electromagnetic fields, in contrast to passive antennas with external electronics and transmission via high frequency cables.

BL ident® – modular UHF RFID system – interference-proof/long-range transmission

Industrial Automation

BL ident® – Use the strengths of UHF technology in your applications!

Whether applied in production control systems, in logistics or automation processes, The long range UHF technology BL ident® by TURCK makes it possible. Compared to HF, longer operating distances are achieved, even in harsh industrial environments and with data exchange on-the-fly.

The approved UHF modules can be combined flexibly and plugged to the BL ident® system without complicated configuration.

The new UHF read/write heads enable long-distance bulk reading, fast and safe, on-the-fly and even at high speed. The data carriers are almost infinitely rewritable (EEPROM: 10^4 or 10^5 times).



- **Long range** – new areas of industrial application with UHF read/write heads, operating distance of up to 3 meters even at high speed.
- **Flexibel** – mixed operation of UHF and HF on one BL ident® electronic module
- **Application optimized** – modular system for up to 16 different read/write heads per interface
- **Universal** – durable, also made for special applications, direct mounting on metal, in autoclaves, high-temperature resistant up to +210 °C
- **Integrable** – interfaces for PROFIBUS-DP, DeviceNet™, Ethernet Modbus-TCP, PROFINET IO, EtherNet/IP, programmable gateway
- **Rugged** – interference-free operation, IP67 rated, active read/write heads
- **Interoperable** – international standards ISO 18000-6C/Gen 2 (UHF)

For more information on RFID, please see flyer D101687 and D101803!



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