# TURCK

## Types and Features

| Ident-No. | Type code | Description | Power supply connection | Dimensions |
|---|---|---|---|---|
| 6814122 | TBEN-L5-4RFID-8DXP-OPC-UA | Compact RFID and I/O module with integrated OPC UA server | 5-pin, 7/8" | 60.4 x 230.4 x 39 mm |

### Application examples
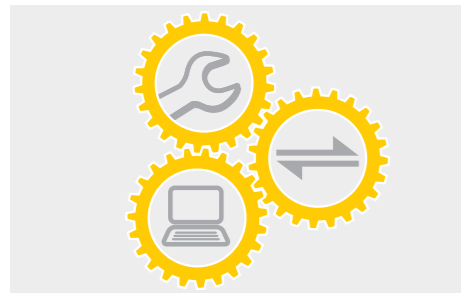


**Greater availability for machines and plants**

- Predictive maintenance: A total failure of the machine can be prevented by monitoring limit values via OPC UA
- Condition monitoring: Plant availability, degree of utilization and other operating data are used to analyze and optimize production processes and supply chains

**Improved quality assurance up to the end user**

- Automated quality assurance processes are simplified, faulty shipments prevented and quality assurance ensured right up to the end user

**Optimized safety/security**

- Rapid, secure and simple access to the relevant data is possible in the event of malfunctions and machine failures
- Access rights and security certificates enable the secure access with authentication from any location worldwide



Link to product data sheet

Over 30 subsidiaries and 60 representations worldwide!

TURCK

Your Global Automation Partner

## TBEN-L-RFID
## Compact RFID Module with OPC UA Server

# TBEN-L-RFID – Compact RFID Module with OPC UA Server

Turck's IP67 RFID interface with an integrated OPC UA server simplifies the integration of RFID systems in MES, PLC, ERP and cloud systems, thanks to the platform-independent OPC UA communication standard.

Authentication and integrated security protocols protect communication between the systems from unauthorized access and manipulation. The TBEN-L5-4RFID-8DXP-OPC-UA module is compliant with the compan-

ion specification for Auto-ID devices. This standard enables the customer to replace devices between the Auto-ID systems of different manufacturers.
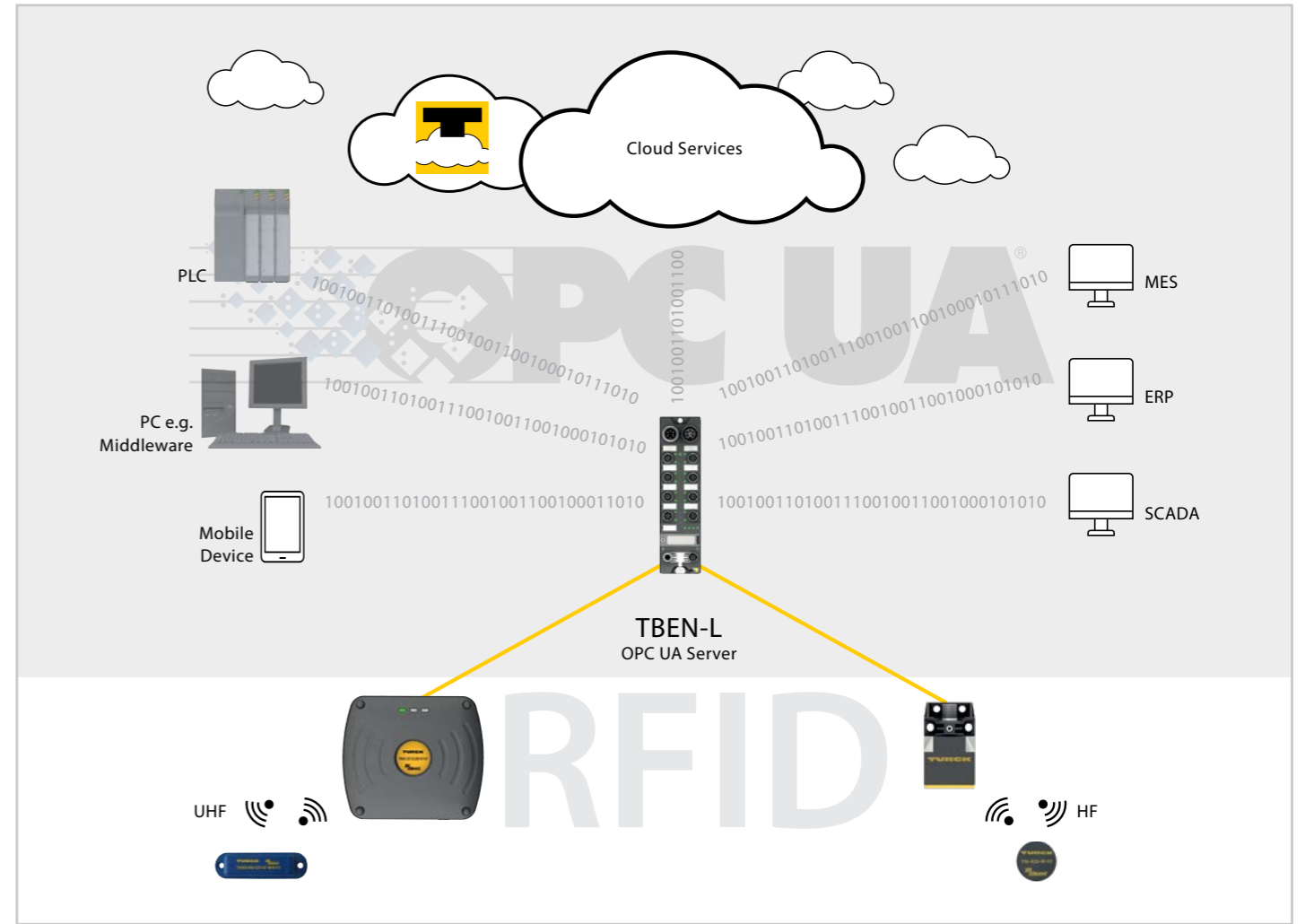
The standard specification for the use of RFID and barcode readers eliminates the need for manufacturer-specific programming and simplifies integration in the higher-level systems, thus often eliminating the need for a system integrator.

Like the other TBEN-L RFID modules, the OPC UA RFID module boasts a high degree of protection (IP65/67/69K), four RFID interfaces for connecting HF and/or UHF read/write heads, and eight universal channels that can be used as inputs or outputs without any configuration. This simplifies the connection of sensors such as for a trigger signal, or actuators, such as for indicator lights acknowledging processes.
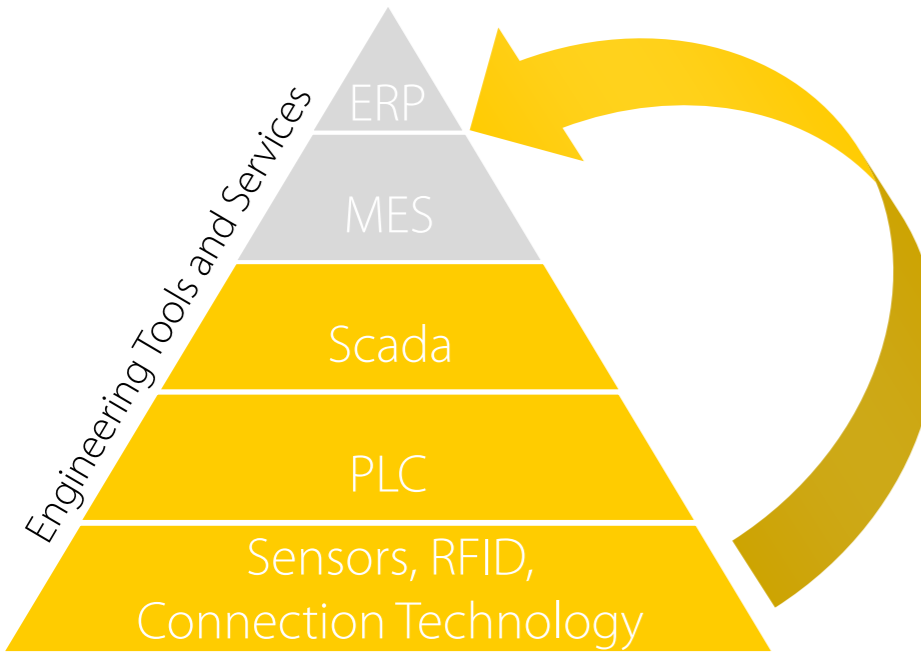
## Customer benefits

- Direct provision of information to higher-level systems
- Platform-independent access to the OPC UA server with different clients
- Secure communication confirmed by the BSI, the German Federal Office for Information Security
- Support for the Auto-ID companion specification for simple and standard integration of RFID and barcode systems
- Mixed operation of HF and UHF read/write heads as well as connection of sensors and actuators via DXPs
- Direct decision making in the higher-level systems (Internet of things)
- Service-oriented architecture with read event notifications

**Engineering Tools and Services**

- ERP
- MES
- Scada
- PLC
- Sensors, RFID, Connection Technology



Cloud Services

PLC

PC e.g. Middleware

Mobile Device

MES

ERP

SCADA

**TBEN-L**
OPC UA Server

UHF

HF

RFID

The TBEN-L5-4RFID-8DXP-OPC-UA with an integrated OPC UA server supports the connection of HF and UHF read/write heads as well as sensors and actuators. The standard access and data exchange via OPC UA from different systems is provided via the information model defined in the Auto-ID companion specification. Turck has been one of the principal participants in the development of the multi-vendor standard for RFID and barcode systems.
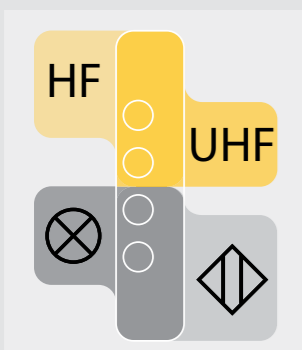
**Mixed operation of HF and UHF**
HF read/write heads and one UHF read/write head can be run simultaneously on a TBEN-L module. Additional sensors and lamps can be connected via the universal digital inputs and outputs.

HF
UHF
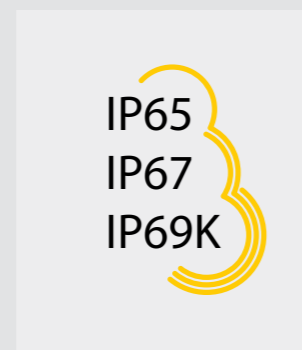
**Degree of protection IP65/IP67/IP69K**
Thanks to its high degree of protection to IP65/IP67/IP69K, the fiber-glass housing, the fully encapsulated module electronics, as well as shock and vibration testing, the module is ideal for use in harsh industrial environments.

IP65
IP67
IP69K

**OPC UA**
OPC UA is a global, flexible and secure communication standard, which stands for "Open Platform Communication Unified Architecture". It enables use on any platform, irrespective of the operating system or the programming language used.

OPC UA
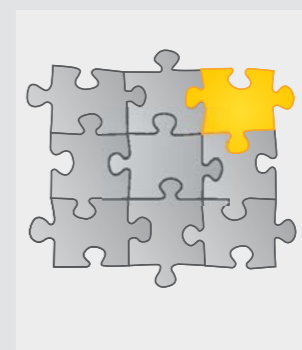
**Standard for Auto-ID devices**
Turck has made a significant contribution to the Auto-ID companion specification as a multi-vendor standard for RFID and barcode systems, and is offering here a simplified and standard integration of the Turck OPC UA solution in different system landscapes.