No compromises: robust UHF evaluation system for harsh environments.

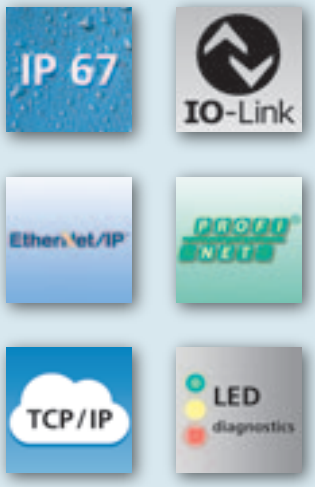
RFID UHF

Antenna, evaluation unit and switch, all in one device, reduces installation time.

Reads up to 16 tags at a distance of up to 3 meters.

Installation in metallic or wet environments is possible.

Fieldbus interface and digital inputs and outputs, minimise field wiring.



So compact, so flexible

The new RFID UHF evaluation systems convince with their compact design and the maximum flexibility they offer. Complete with antenna, evaluation unit and switch, the hardware provides everything required for a quick and easy installation. What is more, the optimised operating principle of the system allows direct installation in metallic or wet environments – without any loss of performance.

Transferring data over the network, controlling actuators directly

At maximum performance level, the antenna can detect up to 16 rapidly moving tags, at a distance of up to 3 m. The tag reading can be refined further via selective RSSI values. Using an additional fieldbus interface offers the possibility to directly connect another network point. The digital output can be used to control an actuator.

Advantages of ifm's UHF RFID solution:

Robust and expandable

Antenna, evaluation unit and interface are integrated in one compact, robust housing with protection rating IP 67. This makes the system perfectly suited for use in harsh industrial environments.

Powerful antenna

Thanks to the internal antenna with circular polarisation, the device can be installed in metallic housings without reception being affected.

Integrated web server

The evaluation systems have an integrated web server. Users log in via an HTTP address to get full access to the device set-up and, in case of cloud integration, to monitoring and diagnostic data.

Universal interface

The UHF RFID evaluation units with their interfaces for Profinet, EtherNet/IP and TCP/IP are ideal for direct connection to PCs, industrial PCs or PLCs. Using an additional fieldbus interface, it is also possible to pass through signals and minimise field wiring.

Additional digital inputs

The unit has two additional digital inputs and outputs. The inbuilt logic function can be used to provide additional control functionality directly, e.g. to immediately control a light tower when required.

Applications

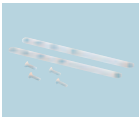
The benefits of the evaluation systems really come in to their own in track and trace and traceability applications. Thanks to the long ranges, for example, tags on vehicles with access rights can be detected and evaluated at a distance of up to 3 meters, after detection it is possible to control the barriers or gates directly from the unit. Without time consuming programming effort.

In intralogistics, the system is used for seamless product tracking. It is possible to read up to 16 tags simultaneously and the products can be clearly assigned to their designated storage stations or pallets. This ensures that the correct quantity of the correct product reaches its destination on time.

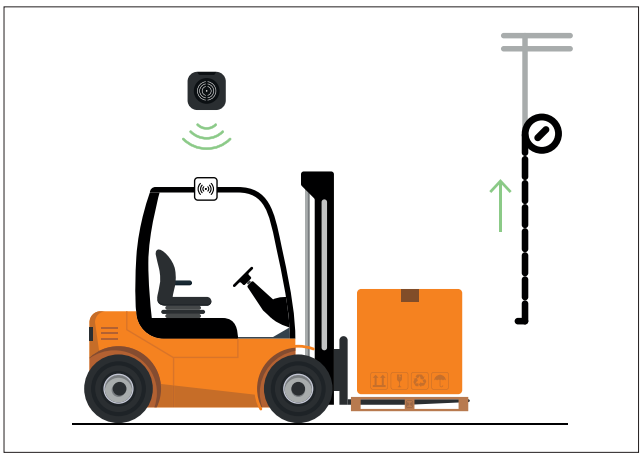
Products

Design	Description	Order no.
PROFINET interface		
	RFID UHF compact unit 865...868 MHz (ETSI)	**DTE801**
	RFID UHF compact unit 902...928 MHz (FCC)	**DTE901**
EtherNet/IP interface		
	RFID UHF compact unit 865...868 MHz (ETSI)	**DTE802**
	RFID UHF compact unit 902...928 MHz (FCC)	**DTE902**
TCP/IP interface		
	RFID UHF compact unit 865...868 MHz (ETSI)	**DTE804**
	RFID UHF compact unit 902...928 MHz (FCC)	**DTE904**

Further country approvals and interfaces for IO-Link and IoT (cloud connection) are in preparation.

Mounting accessories for DTE801, DTE802, DTE804		
	Mounting bracket, 1.4301 (stainless steel / 304)	**E80335**
	Mounting plate, 1.4301 (stainless steel / 304)	**E80336**
	Mounting rod 1.4301 (stainless steel / 304)	**E80337**

Selection RFID transponders	
ID-TAG/R30X10/04 – 865...870 MHz, 96 bit	**E80353**
ID-TAG/73.5X21.2/04 – 1000 pieces on reel	**E80386**
ID-TAG/139 x 53 x 15/04	**E80393**
ID-TAG/174 x 70 x 17.6/04	**E80394**



RFID solution for automated gate opening.