**Systematic transparency – for production and logistics**

The UHF system with integrated Ethernet/IP

- Ethernet/IP interface for data transmission to the controller
- UHF write/read unit with 4 antenna terminals and digital I/Os
- Ultra low, low, mid range and wide range antennas for every application
- Ethernet TCP/IP interface for parameter setting
- Industrially compatible protection rating IP 65 / IP67

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**The new RFID evaluation unit**

As further component of the UHF system platform the RFID readers DTE 810 for Europe and DTE 910 for the USA are equipped with an Ethernet/IP interface. With this standard fieldbus the RFID units can be easily integrated into automated environments.

**The UHF antenna concept**

The ultra low and low range antennas are ideal for sensing in the near field. In order to achieve high selectivity, small designs are used as they allow short reading ranges. The mid range antenna is chosen for applications in the near / far field with reading ranges of up to 2 m. The wide range antennas with a 70° angle of aperture have been developed for applications in the far field where reading ranges of up to 10 m are required.

Identification of parcels in a packaging line.
Applications
Owing to its application-specific antennas, the new UHF system platform from ifm electronic is widely used in automation technology, e.g. in the fields of production, logistics and conveyor technology. Goods, packaging or pallets but also individual products can be identified without contact.

The UHF RFID has been optimised for applications in
- production control
- asset management
- material flow control
- track & trace

The standardised Ethernet/IP interface with M12 connection enables quick and easy integration into the higher level automation or process control.

Current is supplied directly via an M12 connection. The connected sensors or actuators to be triggered are supplied via two additional M12 sockets.

A robust housing with protection rating IP 65 and a wide temperature range ensure the use of the readers in harsh industrial environments.

The products

<table>
<thead>
<tr>
<th>Description</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>RFID UHF reader, dimensions 270 x 234 x 68 mm</td>
<td>DTE810</td>
</tr>
<tr>
<td>RFID UHF reader, Ethernet/IP, 4 DI / 4 DO, EU/ETSI</td>
<td>DTE910</td>
</tr>
<tr>
<td>RFID UHF reader, Ethernet/IP, 4 DI / 4 DO, US/FCC</td>
<td>DTE800</td>
</tr>
<tr>
<td>RFID UHF reader, Ethernet TCP/IP, 2 DI / 2 DO, EU/ETSI</td>
<td>DTE900</td>
</tr>
</tbody>
</table>

| RFID UHF antennas, dimensions 90 x 60 x 18 mm | |
| RFID UHF ultra low range antenna EU/ETSI/US/FCC | ANT805 |
| RFID UHF low range antenna EU/ETSI | ANT810 |
| RFID UHF low range antenna US/FCC | ANT910 |

| RFID UHF antennas, dimensions 150 x 122 x 35 mm | |
| RFID UHF mid range antenna 100°/100° EU/ETSI | ANT820 |

| RFID UHF antennas, dimensions 270 x 270 x 45 mm | |
| RFID UHF wide range antenna 70°/70° EU/ETSI | ANT830 |
| RFID UHF wide range antenna 70°/70° US/FCC | ANT930 |

Common technical data RFID UHF reader

- Operating voltage [V]: 24 DC ± 10 %
- Current consumption [mA]: < 700
- Current rating outputs [mA]: 500 (per switching output)
- Ambient temperature [°C]: -25...55
- Protection rating, protection class: IP 65
- Material: metal housing with plastic cover
- Switching inputs: 2 or 4
- Switching outputs: 2 or 4
- Frequency range EU/ETSI [MHz]: 865...870
- Frequency range US/FCC [MHz]: 902...928
- Air interface: ISO 18000-6C
- Range [m]: 10, depending on the tag
- Antenna concept: external
- Antenna terminal, external: 4 x TNC reverse 50 Ω

For further technical data please go to: www.ifm.com