



# UHF Transponder, rectangular, on-metal, global

RFID transponders

RFID

**SICK**  
Sensor Intelligence.



## Ordering information

| Type   | Part no. |
|--|----------|
| UHF Transponder, rectangular, on-metal, global | 6052346  |

Other models and accessories → [www.sick.com/RFID\\_transponders](http://www.sick.com/RFID_transponders)



## Detailed technical data

### Features

|                               |   |
|-------------------------------|---|
| <b>Type</b>                   | Hardtag   |
| <b>Frequency band</b>         | UHF (860 MHz ... 960 MHz)                             |
| <b>Carrier frequency</b>      | 865 MHz ... 928 MHz                                   |
| <b>RFID standard</b>          | EPCglobal UHF Class 1 Generation 2, ISO/IEC 18000-6 C |
| <b>Read range</b>             |   |
|                               | RFU61x 30 cm <sup>1)</sup>                            |
|                               | RFU62x 70 cm <sup>1)</sup>                            |
|                               | RFU63x/RFU65x 350 cm <sup>1)</sup>                    |
| <b>IC type</b>                | Impinj Monza 4QT                                      |
| <b>IC capacity</b>            | 128/512 Bit   |
| <b>IC write cycle</b>         | ≤ 100,000   |
| <b>IC data retention time</b> | < 50 years  |
| <b>On Metal</b>               | ✓ <sup>2)</sup>                                       |
| <b>High Temperature</b>       | ✓   |

<sup>1)</sup> Typical value; actual value depends on environmental conditions.

<sup>2)</sup> For optimal performance the transponder must be mounted directly onto metal. The metal surface must be of at least the same size as the transponder.

### Mechanics/electronics

|                               |                           |
|-------------------------------|---------------------------|
| <b>Housing</b>                | Thermoplastic             |
| <b>Housing color</b>          | Gray                      |
| <b>Enclosure rating</b>       | IP68                      |
| <b>Weight</b>                 | + 22 g                    |
| <b>Dimensions (L x W x H)</b> | 47.5 mm x 51.5 mm x 10 mm |
| <b>Hole</b>                   | 5 mm                      |
| <b>Design</b>                 | Rectangular               |
| <b>Mounting method</b>        | Screws, riveting          |
| <b>ATEX marking</b>           | ✓                         |

## Ambient data

|                                      |                                   |
|--------------------------------------|-----------------------------------|
| <b>Ambient operating temperature</b> | -40 °C ... +85 °C <sup>1)</sup>   |
| <b>Application temperature</b>       | + 125 °C, 60 min, 1 <sup>2)</sup> |
| <b>Storage temperature</b>           | -40 °C ... +85 °C                 |

<sup>1)</sup> Max. temperature at which the RFID transponder can interact with the RFID read/write device.

<sup>2)</sup> Max. temperature the RFID transponder can withstand [maximum temperature; duration; cycles].

## Classifications

|                       |          |
|-----------------------|----------|
| <b>ECl@ss 5.0</b>     | 27280402 |
| <b>ECl@ss 5.1.4</b>   | 27280402 |
| <b>ECl@ss 6.0</b>     | 27280402 |
| <b>ECl@ss 6.2</b>     | 27280402 |
| <b>ECl@ss 7.0</b>     | 27280402 |
| <b>ECl@ss 8.0</b>     | 27280402 |
| <b>ECl@ss 8.1</b>     | 27280402 |
| <b>ECl@ss 9.0</b>     | 27280402 |
| <b>ECl@ss 10.0</b>    | 27280402 |
| <b>ECl@ss 11.0</b>    | 27280402 |
| <b>ETIM 6.0</b>       | EC002998 |
| <b>ETIM 7.0</b>       | EC002998 |
| <b>UNSPSC 16.0901</b> | 52161523 |

## Assembly note



- ① Leave the mounting surface in this area near to the transponder free. Free surface should be metal.
- ② Mounting on even metal surface with full contact of the underside of the transponder on the metal.

### Recommended services

Additional services → [www.sick.com/RFID\\_transponders](http://www.sick.com/RFID_transponders)

|   | Type                  | Part no. |
|---|-----------------------|----------|
| <b>Commissioning</b>  |                       |          |
| <ul style="list-style-type: none"> <li>• <b>Product area:</b> RFID</li> <li>• <b>Range of services:</b> Inspection of connection, alignment, optimization of parameters of the RFU/RFH as well as tests, Setup of previously defined functions of reading configuration, data processing and network, interfaces and inputs and outputs</li> <li>• <b>Travel expenses:</b> The prices do not include travel costs such as hotel, flight, travel time and expenses.</li> <li>• <b>Duration:</b> Additional work will be invoiced separately</li> </ul> | Commissioning RFU/RFH | 1610018  |
| <b>Product, system, and software training</b>   |                       |          |
| <ul style="list-style-type: none"> <li>• <b>Range of services:</b> The training contents are geared toward the RFID read/write devices, Training format and location can be worked out in collaboration with SICK, SICK offers training courses for numerous target groups ranging from basic to expert levels</li> </ul>   | RFH/RFU training      | 1612233  |
| <b>Maintenance</b>  |                       |          |
| <ul style="list-style-type: none"> <li>• <b>Product area:</b> RFID</li> <li>• <b>Range of services:</b> Inspection, analysis and restoring of defined functions, Checking and adjustment of reading configuration, data processing, network, interfaces and inputs and outputs as well as operating data</li> <li>• <b>Travel expenses:</b> The prices do not include travel costs such as hotel, flight, travel time and expenses.</li> <li>• <b>Duration:</b> Additional work will be invoiced separately</li> </ul>                                | Maintenance RFU/RFH   | 1611424  |

## SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

## WORLDWIDE PRESENCE:

Contacts and other locations –[www.sick.com](http://www.sick.com)