

# HF transponder, disk

RFID transponder

RFID

**SICK**  
Sensor Intelligence.



### Ordering information

Type	Part no.
HF transponder, disk	6033781

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

### Detailed technical data

#### Features

<b>Type</b>	Hardtag										
<b>Frequency band</b>	HF (13.56 MHz)										
<b>Carrier frequency</b>	13.56 MHz										
<b>RFID standard</b>	ISO/IEC 15693, ISO/IEC 18000-3 "Mode 1"										
<b>Read range</b>	<table border="0"> <tr> <td>RFH505</td> <td>3 cm <sup>1)</sup></td> </tr> <tr> <td>RFH510</td> <td>5 cm <sup>1)</sup></td> </tr> <tr> <td>RFH515</td> <td>7 cm <sup>1)</sup></td> </tr> <tr> <td>RFH620</td> <td>12 cm <sup>1)</sup></td> </tr> <tr> <td>RFH630</td> <td>20 cm <sup>1)</sup></td> </tr> </table>	RFH505	3 cm <sup>1)</sup>	RFH510	5 cm <sup>1)</sup>	RFH515	7 cm <sup>1)</sup>	RFH620	12 cm <sup>1)</sup>	RFH630	20 cm <sup>1)</sup>
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<b>Special features</b>	High Temperature										
<b>IC type</b>	NXP ICODE SLIX2										
<b>Memory capacity (UII / user memory)</b>	2528 Bit (79 x 4 Byte)										
<b>IC write cycle</b>	≤ 100,000										
<b>IC data retention time</b>	< 5 years										

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

#### Mechanics/electronics

<b>Housing</b>	PA 6
<b>Housing color</b>	Black
<b>Enclosure rating</b>	IP68
<b>Weight</b>	+ 3 g
<b>Diameter</b>	50 mm
<b>Thickness</b>	2.5 mm
<b>Hole</b>	5.2 mm
<b>Design</b>	Round
<b>Mounting method</b>	Screws, Rivets

## Ambient data

<b>Vibration resistance</b>	IEC 68-2-6
<b>Shock resistance</b>	IEC 68-2-29
<b>Ambient operating temperature</b>	-25 °C ... +85 °C <sup>1)</sup>
<b>Application temperature</b>	+ 140 °C, 100 h, 1 <sup>2)</sup>
<b>Storage temperature</b>	-40 °C ... +90 °C

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

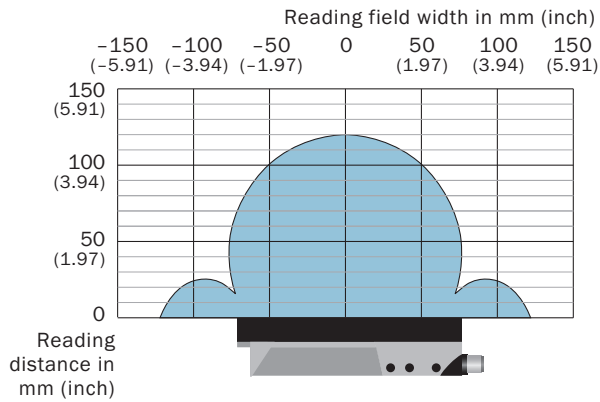
<sup>2)</sup> Max. temperature the RFID transponder can withstand [maximum temperature; duration; cycles]. For optimal performance, the transponders should completely cool off before a new temperature cycle is started.

## Classifications

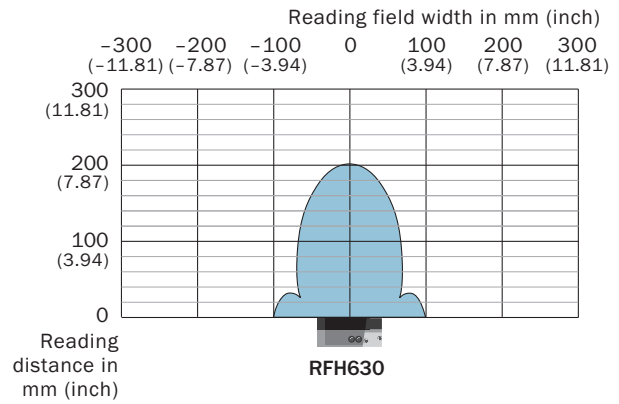
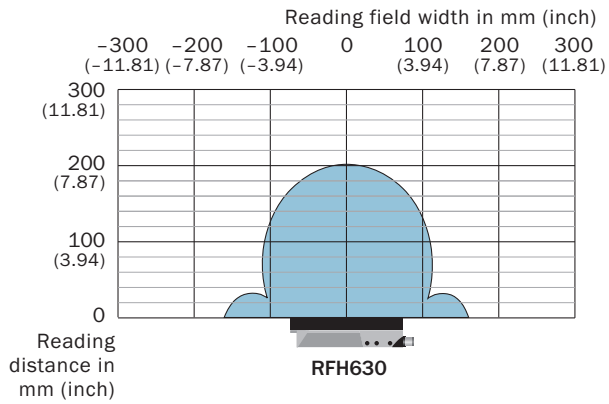
<b>ECLASS 5.0</b>	27280402
<b>ECLASS 5.1.4</b>	27280402
<b>ECLASS 6.0</b>	27280402
<b>ECLASS 6.2</b>	27280402
<b>ECLASS 7.0</b>	27280402
<b>ECLASS 8.0</b>	27280402
<b>ECLASS 8.1</b>	27280402
<b>ECLASS 9.0</b>	27280402
<b>ECLASS 10.0</b>	27280402
<b>ECLASS 11.0</b>	27280402
<b>ECLASS 12.0</b>	27280402
<b>ETIM 6.0</b>	EC002998
<b>ETIM 7.0</b>	EC002998
<b>ETIM 8.0</b>	EC002998
<b>UNSPSC 16.0901</b>	52161523

## Reading field diagram

Reading field diagram RFH62x



### Reading field diagram RFH63x



 Disc 50

### Assembly note





## Recommended services

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

	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>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>Duration:</b> Additional work will be invoiced separately</li> <li>• <b>Travel expenses:</b> The prices do not include travel costs such as hotel, flight, travel time and expenses.</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)