



UHF Transponder, rectangular, on-metal & high-temp FCC

RFID transponders

RFID

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
UHF Transponder, rectangular, on-metal & high-temp FCC	6053159

Other models and accessories → www.sick.com/RFID_transponders



Detailed technical data

Features

Type	Hardtag
Frequency band	UHF (860 MHz ... 960 MHz)
Carrier frequency	902 MHz ... 928 MHz
RFID standard	EPCglobal UHF Class 1 Generation 2, ISO/IEC 18000-6 C
Read range	
	RFU61x 70 cm ¹⁾
	RFU62x 100 cm ¹⁾
	RFU63x/RFU65x 500 cm ¹⁾
IC type	Alien Higgs 3
IC capacity	96/512 Bit
IC write cycle	≤ 100,000
IC data retention time	< 10 years
On Metal	✓ ²⁾
High Temperature	✓

¹⁾ Typical value; actual value depends on environmental conditions.

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

Mechanics/electronics

Housing	Nylon
Housing color	Gray
Enclosure rating	IP68
Weight	26 g
Dimensions (L x W x H)	36.3 mm x 51 mm x 7.5 mm
Hole	3.2 mm
Design	Rectangular
Mounting method	Screws, riveting
ATEX marking	✓

Ambient data

Ambient operating temperature	-40 °C ... +85 °C ¹⁾
Application temperature	+ 220 °C, 30 min, 1,000 ²⁾ + 250 °C, 30 min, 600 ²⁾
Storage temperature	-40 °C ... +85 °C

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

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

Classifications

ECl@ss 5.0	27280402
ECl@ss 5.1.4	27280402
ECl@ss 6.0	27280402
ECl@ss 6.2	27280402
ECl@ss 7.0	27280402
ECl@ss 8.0	27280402
ECl@ss 8.1	27280402
ECl@ss 9.0	27280402
ECl@ss 10.0	27280402
ECl@ss 11.0	27280402
ETIM 6.0	EC002998
ETIM 7.0	EC002998
UNSPSC 16.0901	52161523

Recommended services

Additional services → www.sick.com/RFID_transponders

	Type	Part no.
Commissioning		
Product area: RFID Range of services: 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 Travel expenses: The prices do not include travel costs such as hotel, flight, travel time and expenses. Duration: Additional work will be invoiced separately	Commissioning RFU/RFH	1610018
Product, system, and software training		
Range of services: 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	RFH/RFU training	1612233
Maintenance		
Product area: RFID Range of services: 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 Travel expenses: The prices do not include travel costs such as hotel, flight, travel time and expenses.	Maintenance RFU/RFH	1611424

	Type	Part no.
• Duration: Additional work will be invoiced separately		

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