RFU63x
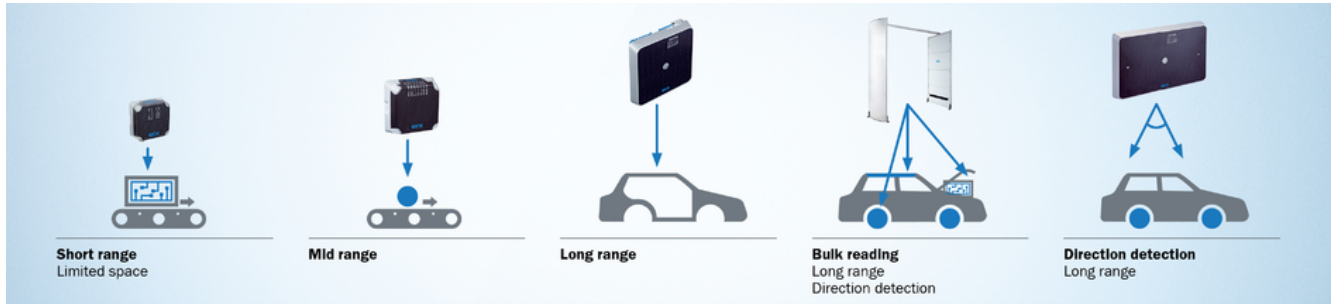
UHF transponder identification using an RFID read/write device for long sensing ranges

SICK
Sensor Intelligence.
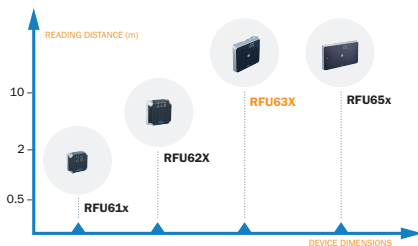
Advantages

Short range
Limited space

Mid range

Long range

Bulk reading
Long range
Direction detection

Direction detection
Long range

Complete transparency with the RFU family

Continuous and company-wide identification with a single technology is now possible for the first time. The RFU61x achieves complete transparency in production and logistics processes – from component assembly to the shipment of the end product. The foundation for this is UHF RFID technology: IIoT applications with scanning ranges of 0 to 10 m, bulk reading and resistance to interfering factors such as light, dirt and dust. A direct line of sight to the data card is also not required.

Continuous identification solution for production and logistics process

The RFU63x complements the product portfolio for large scanning ranges. A continuous UHF RFID identification solution for read/write ranges of 0 to 10 m is therefore possible for the first time.
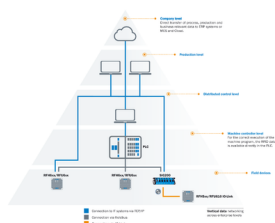
The RFU family features a uniform operating and configuring interface. The user-friendly software ensures quick and easy installation as well as fault-free operation.

SICK supports the planning and design of the read/write stations and helps to select a suitable transponder. A worldwide network of service technicians is available for commissioning at the customer site.

The UHF write/read devices from SICK are enabling full transparency along the entire value chain for the first time – and all with one technology

Your advantages at a glance

Increases system productivity
Integration of the sensors at the fieldbus level enables continuous communication up to the cloud. It also allows sensor data to be stored centrally and called up as needed, which is a good basis for increasing system productivity.

Wide range of solutions
The range of solutions from SICK includes many different devices. This enables a uniform communication infrastructure.

Quick and easy device replacement
Easy device replacement thanks to various parameter cloning options in the event of an error. No specially trained staff, additional tools or instructions are required.

RFU63x

Technical data overview

Product category	RFID read/write device with integrated antenna / RFID read/write device without integrated antenna (depends on variant)
Frequency band	UHF (860 MHz ... 960 MHz)
Version	Long Range
Reading range	≤ 10 m
Ethernet	✓, TCP/IP, OPC UA
PROFINET	✓
EtherNet/IP™	✓
EtherCAT	✓, optional over external fieldbus module
Serial	✓, RS-232, RS-422
CAN	✓
PROFIBUS DP	✓, optional over external fieldbus module
USB	✓
CANopen	✓
Weight	2.6 kg / 2.1 kg (depends on variant)

Product description

The RFU63x is an ultra-high frequency (UHF) RFID solution for industrial environments. Via integrated application management software, the RFU63x is able to solve common industrial applications without any external "middleware" and can, therefore, be used as a stand-alone solution. This is possible due to an integrated filter and data management system. With 4D*pro* compatibility, the RFU63x is easy and cost-efficient to integrate in common industrial environments. Different options for parameter cloning between systems (e.g., integrated microSD memory card feature) reduce maintenance time. The integrated feedback LED can be used to read diagnostic or process feedback.

At a glance
- Antenna and data processing integrated in the sensor
- Read range up to 10 m
- Linkage option to superior control systems or directly to the cloud
- Up to 4 external antennas
- Configuration via SOPAS ET or integrated web server
- Can be used with SICK AppSpace
- Rugged design in accordance with IP67

Your benefits
- External antenna for cost-effective extension of the detection range
- Easy configuration through SOPAS ET or the integrated web server saves time and costs for commissioning
- Maximum flexibility when programming individual software solutions with SICK AppSpace
- The rugged design enables reliable operation - even in tough industrial environments
- Very little programming work needed in the control due to intelligent process logics in the device

Fields of application
- Identification of bodyparts in the automotive industry
- Tracing of transport containers in logistics
- Identification of vehicles at tollbooths
- Identification of trains and cars in rail transport
- Electronic toll collection

Ordering information

Other models and accessories ➜ www.sick.com/RFU63x

- **Frequency band:** UHF (860 MHz … 960 MHz)
- **Reading range:** ≤ 10 m (Depending on transponder used and ambient conditions.)
- **Enclosure rating:** IP67

Radio approval	Type	Part no.
Australia	RFU630-04102	1073376
	RFU630-13102	1058775
Brazilian	RFU630-04104	1093152
	RFU630-13104	1068726
China	RFU630-04105	1073196
China, Thailand	RFU630-13105	1057943
	RFU630-13105 Kit1 China	1057945
	RFU630-13105 Kit2 China	1082193
European Union, South Africa, Saudi Arabia, Egypt, United Arab Emirates	RFU630-04100	1058117
European Union, South Africa, Saudi Arabia, United Arab Emirates, Qatar	RFU630-13100	1054396
Hong Kong	RFU630-04117	1087776
India	RFU630-04103	1104670
	RFU630-13103	1067473
Indonesia	RFU630-13119	1150062
Japan	RFU630-04106	1068569
	RFU630-13106	1067133
	RFU630-13107	1061498
Korea	RFU630-13110	1073442
Malaysia	RFU630-13114	1095224
Morocco	RFU630-13115	1083558
New Zealand	RFU630-13111	1077862
Singapore	RFU630-04109	1073377
Taiwan	RFU630-13113	1077861
USA, Canada, México	RFU630-04101	1059999
USA, Canada, México, Argentina	RFU630-13101	1054397

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**

SICK AG | Waldkirch | Germany | www.sick.com