



RFU62x

RFID





Ordering information

Туре	part no.
RFU620-10514	1077863

Other models and accessories → www.sick.com/RFU62x



Detailed technical data

Features

Version Mid Range Product category RFID read/write device with integrated antenna Radio approval Malaysia (MCMC SRSP-530 RFID) Frequency band UHF (860 MHz 960 MHz) Carrier frequency 919.25 MHz 922.75 MHz Output power 0.2 W (ERP, 23 dBm) RFID standard EPCglobal UHF Class 1 Generation 2, ISO/IEC 18000-6 C, RAIN Modulation PR-ASK Connection type PoE Aperture angle 100° Heating No Reading range ≤ 2 m ¹) Antenna Integrated Polarization Adjustable Polarization Circular Axial ration Tront-to-back ration 2 b dB Further functions Diagnosis, updatable firmware, freely programmable data output format, Heartbeat, triggering, SICK AppSpace functionalities can be enabled with the SD card accessory SDK6U-P00100 (for firmware ≥ 2.0.0)		
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Carrier frequency Output power O.2 W (ERP, 23 dBm) RFID standard PR-ASK Connection type Aperture angle Heating Reading range Antenna Transmitting power Polarization Axial ratio Front-to-back ratio Further functions P19.25 MHz 922.75 MHz O.2 W (ERP, 23 dBm) PR-ASK PR-ASK PR-ASK POE Aperture angle PoE Antenna Integrated Adjustable Circular Transmitting power Polarization Axial ratio Front-to-back ratio Diagnosis, updatable firmware, freely programmable data output format, Heartbeat, triggering, SICK AppSpace functionalities can be enabled with the SD card accessory SDK6U-P00100 (for	Radio approval	Malaysia (MCMC SRSP-530 RFID)
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Aperture angle Heating No Reading range ≤ 2 m ¹) Integrated Antenna Transmitting power Polarization Axial ratio Typ. 3 dB Front-to-back ratio Further functions Polarization Diagnosis, updatable firmware, freely programmable data output format, Heartbeat, triggering, SICK AppSpace functionalities can be enabled with the SD card accessory SDK6U-P00100 (for	Modulation	PR-ASK
Heating No Reading range ≤ 2 m ¹) Antenna Integrated Polarization Circular Axial ratio Typ. 3 dB Front-to-back ratio SICK AppSpace functionalities can be enabled with the SD card accessory SDK6U-P00100 (for	Connection type	PoE
Reading range ≤ 2 m ¹) Antenna Integrated Transmitting power Adjustable Polarization Circular Axial ratio Typ. 3 dB Front-to-back ratio > 5 dB Further functions Diagnosis, updatable firmware, freely programmable data output format, Heartbeat, triggering, SICK AppSpace functionalities can be enabled with the SD card accessory SDK6U-P00100 (for	Aperture angle	100°
Antenna Integrated Transmitting power Adjustable Polarization Circular Axial ratio Typ. 3 dB Front-to-back ratio > 5 dB Further functions Diagnosis, updatable firmware, freely programmable data output format, Heartbeat, triggering, SICK AppSpace functionalities can be enabled with the SD card accessory SDK6U-P00100 (for	Heating	No
Transmitting power Adjustable Circular Axial ratio Typ. 3 dB Front-to-back ratio Typ. 3 dB Further functions Diagnosis, updatable firmware, freely programmable data output format, Heartbeat, triggering, SICK AppSpace functionalities can be enabled with the SD card accessory SDK6U-P00100 (for	Reading range	\leq 2 m $^{1)}$
Polarization Circular Axial ratio Typ. 3 dB Front-to-back ratio > 5 dB Further functions Diagnosis, updatable firmware, freely programmable data output format, Heartbeat, triggering, SICK AppSpace functionalities can be enabled with the SD card accessory SDK6U-P00100 (for	Antenna	Integrated
Axial ratio Typ. 3 dB Front-to-back ratio > 5 dB Further functions Diagnosis, updatable firmware, freely programmable data output format, Heartbeat, triggering, SICK AppSpace functionalities can be enabled with the SD card accessory SDK6U-P00100 (for	Transmitting power	Adjustable
Front-to-back ratio > 5 dB Further functions Diagnosis, updatable firmware, freely programmable data output format, Heartbeat, triggering, SICK AppSpace functionalities can be enabled with the SD card accessory SDK6U-P00100 (for	Polarization	Circular
Further functions Diagnosis, updatable firmware, freely programmable data output format, Heartbeat, triggering, SICK AppSpace functionalities can be enabled with the SD card accessory SDK6U-P00100 (for	Axial ratio	Typ. 3 dB
SICK AppSpace functionalities can be enabled with the SD card accessory SDK6U-P00100 (for	Front-to-back ratio	> 5 dB
	Further functions	SICK AppSpace functionalities can be enabled with the SD card accessory SDK6U-P00100 (for

 $^{^{1\!\!1}}$ Depending on transponder used and ambient conditions.

Mechanics/electronics

Connection type	1, 1 x M12, 8-pin female connector, X-coded, USB, 5-pin micro-B socket
Supply voltage	48 V DC 57 V DC ¹⁾
Power consumption	Typ. 8 W, standby 3 W
Housing material	Aluminum die cast Plastic (PPS)
Enclosure rating	IP67
Protection class	III
Weight	780 g
Dimensions (L x W x H)	137 mm x 131 mm x 56 mm
MTBF	> 100 years

¹⁾ According to PoE technology.

Interfaces

Ethernet	✓, TCP/IP, PoE, OPC UA
Remark	Companion Spec V1.0 from firmware 2.20
Function	Data interface (read result output), Service interface, PoE
Data transmission rate	10/100 MBit/s
PROFINET	✓
Function	PROFINET Single Port, Data interface (read result output)
Data transmission rate	10/100 MBit/s
EtherNet∕ IP™	✓
Function	Data interface (read result output)
Data transmission rate	10/100 MBit/s
USB	✓
Remark	USB 2.0
Function	Service interface
Digital inputs	0
Digital outputs	0
•	7 LEDs, multi-color (device status) 4 RGB LED (Process feedback)
Operator interfaces	Web server
Configuration software	SOPAS ET ¹⁾
Programming interface	Application-specific programming using the SICK AppStudio development environment
Memory card	microSD memory card (parameter cloning, data storage)

¹⁾ Another alternative is to generate your own configuration tools based on the SICK command language CoLa (e.g. in your own software or on PLC function blocks).

Ambient data

Electromagnetic compatibility (EMC)	EN 301489-3
Vibration resistance	EN 60068-2-64:2008-02
Shock resistance	EN 60068-2-27:2009-05
Ambient operating temperature	-25 °C +50 °C
Storage temperature	-40 °C +70 °C

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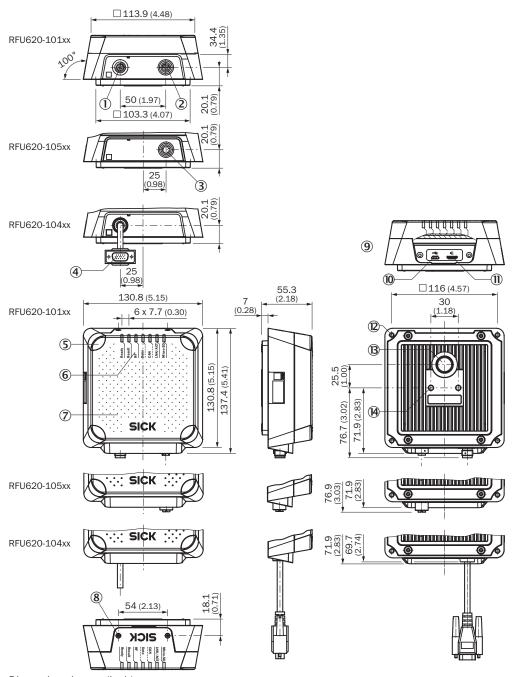
RFID

Permissible relative humidity	90 %, Non-condensing
Certificates	
China RoHS	✓
Profinet certificate	✓
Radio Approval certificate	✓
4Dpro	✓
RAIN RFID	✓
Classifications	
ECLASS 5.0	27280401
ECLASS 5.1.4	27280401
ECLASS 6.0	27280401
ECLASS 6.2	27280401
ECLASS 7.0	27280401
ECLASS 8.0	27280401
ECLASS 8.1	27280401
ECLASS 9.0	27280401
ECLASS 10.0	27280401
ECLASS 11.0	27280401
ECLASS 12.0	27280401
ETIM 5.0	EC002998
ETIM 6.0	EC002998
ETIM 7.0	EC002998
ETIM 8.0	EC002998

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UNSPSC 16.0901

dimensional drawing RFU62x



Dimensions in mm (inch)

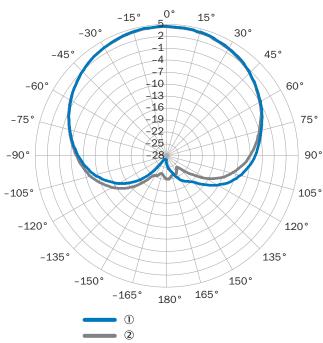
- ① "Power/AUX/CAN/I/O" connection, 17-pin M12 male connector, A-coded
- ② "Ethernet" connection, 4-pin M12 female connector, D-coded
- ③ "Ethernet" connection, 8-pin M12 female connector, X-coded
- ④ "Power/HOST/AUX/CAN/I/O" connection, 15-pin D-Sub HD male connector, cable 0,9 m
- ⑤ 4 x LED, multi-colored (process feedback)
- 6 7 x LED for status display
- ⑦ cover with integrated antenna
- (8) screw (Torx T8), captive (2 x), for side cover
- 9 side cover opened
- 1 USB socket, type Micro-B
- 1 Slot for microSD memory card
- 2 blind hole thread M5, 9 mm deep (4 x), for alternatively mounting

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- ③ pressure compensation valve (venitlation element)
- 4 M6 blind tapped holes, 7 mm deep (2 x), for mounting

Radiation pattern



measured antenna gain in dBic at 868.5 MHz, RHCP (right-hand circularly polarized)

- 1 Horizontal plane (azimuth)
- 2 vertical plane (elevation)

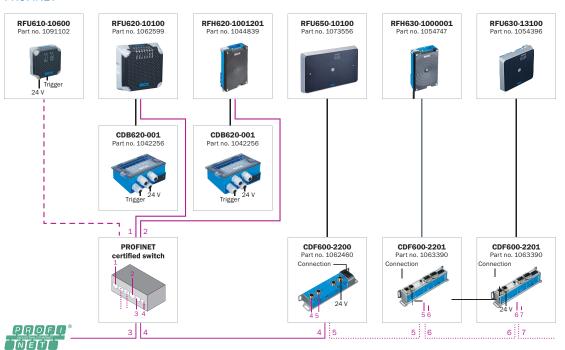
Connection diagram EtherCAT[®]



Connecting cable (already present on device)
 EtherCAT® cable, 2 m (Part no. 2106159)

Connection diagram PROFINET IO/RT

PROFINET



- Connecting cable (already present on device)

- Connection cable, 2 m (Part no. 2106182)

 PROFINET cable, 2 m (Part no. 2106288)

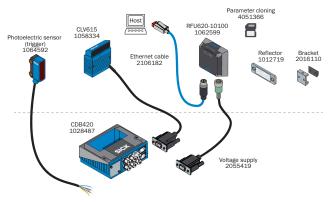
 PROFINET cable, 2 m (Part no. 2106258)

 PROFINET cable, ready to assemble AIDA plug connectors

System construction

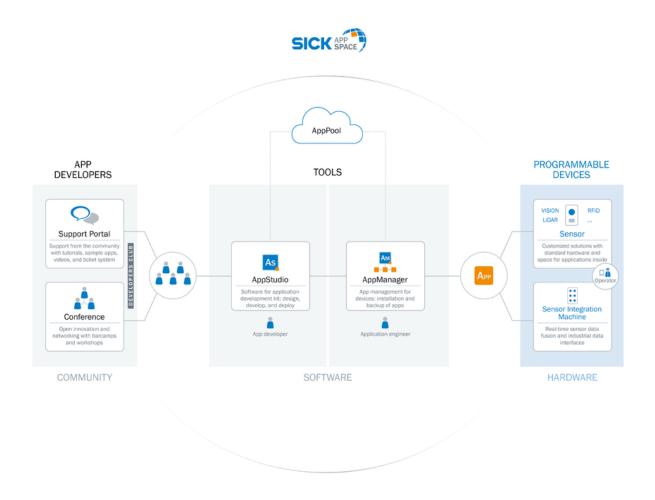


RFU62x



data combination of barcode and RFID

Overview SICK AppSpace



Recommended accessories

Other models and accessories → www.sick.com/RFU62x

	Brief description	Туре	part no.
connectors and cables			
100	 Connection type head A: Male connector, Micro-B, 4-pin, straight Connection type head B: Male connector, USB-A, 4-pin, straight Signal type: USB 2.0 Cable: 2 m, 4-wire Description: USB 2.0, unshielded 	USB cable	6036106
Storage media			
	Description: microSD memory card with 1 GB for industrial use	microSD memory card	4051366

	Brief description	Туре	part no.	
Mounting syst	Mounting systems			
0	Description: Simple mounting bracket	Mounting bracket	2071067	
RFID transponders				
	 Carrier frequency: 865 MHz 928 MHz Memory capacity (EPC / user memory): 496/128 Bit (EPC / User Memory) Dimensions (L x W x H): 18 mm x 122 mm x 2 mm 	UHF Transponder, Rectangular, global	6088050	

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

