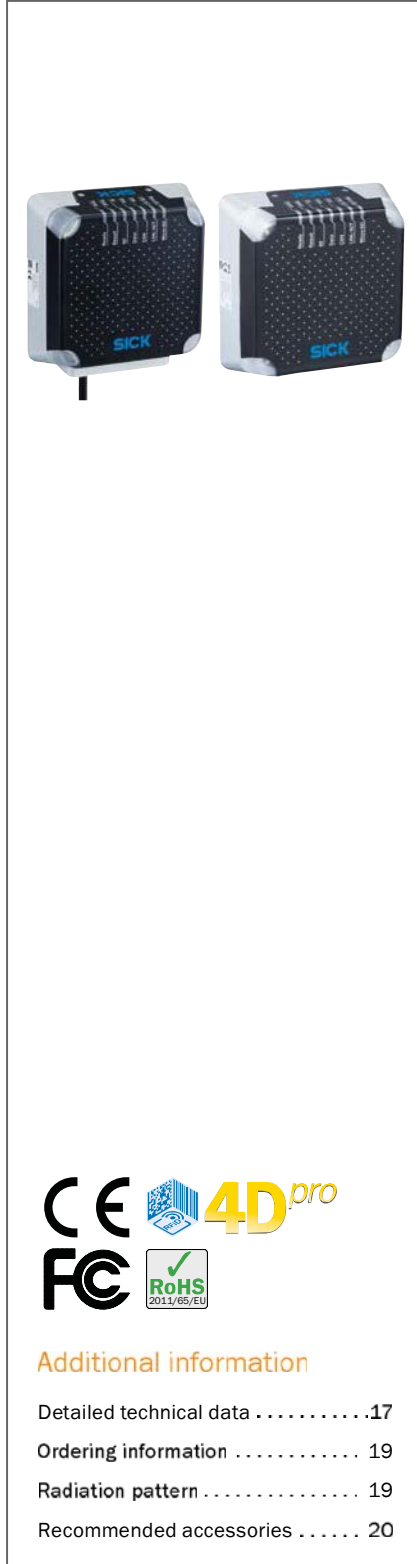


# SHORT-RANGE ULTRA HIGH FREQUENCY SCANNER



### Product description

The RFU62x is a UHF RFID read/write device suitable for scanning ranges of up to 1 m. Transponder communication is compliant with the ISO/IEC18000-6C (EPC Class 1 Gen 2) standard. The device can be configured to operate from

the SOPAS user interface or by sending ASCII commands directly. The well-defined, characteristic read/write range is particularly well-suited for automatic identification over small object distances, e.g., in conveyor technique.

### At a glance

- Compact UHF RFID read/write device with integrated antenna for scanning ranges of less than 1 m
- Standard-compatible transponder interface (ISO/IEC 18000-6C / EPC C1G2)
- Supports industry-standard data interfaces and fieldbuses, as well as PoE
- MicroSD memory card for parameter cloning
- Extensive diagnostic and service functions

### Your benefits

- Correct assignment and no overshoot thanks to the well-defined read/write range and intelligent filter functions
- Integrated process logic for remote solutions saves additional control and programming effort
- Can be easily integrated into industrial networks thanks to 4Dpro compatibility
- Firmware upgrades and industry-standard compliance ensure long-term reliability
- Minimum changeover times in case of failure thanks to cloning
- RFU62x can be mounted to metal directly – no loss of range
- Easy operation and installation with SOPAS ET user interface



### Additional information

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→ [www.mysick.com/en/RFU62x](http://www.mysick.com/en/RFU62x)

For more information, just enter the link or scan the QR code and get direct access to technical data, CAD design models, operating instructions, software, application examples and much more.



## Detailed technical data

## Features

<b>Version</b>	Mid Range
<b>Carrier frequency</b>	
Europe, South Africa	865.7 MHz ... 867.5 MHz
USA, Canada	902.75 MHz ... 927.25 MHz
Brazilian	902.75 MHz ... 927.25 MHz, 915,25 MHz ... 927,25 MHz
China	920.625 MHz ... 924.375 MHz
Japan	916.8 MHz ... 920.4 MHz
India	865.7 MHz ... 866.9 MHz
<b>Output power</b>	
Europe, South Africa, India	250 mW (ERP, 24 dBm)
USA, Canada, Brazilian, Japan	320 mW (EIRP, 25 dBm)
China	200 mW (ERP, 23 dBm)
<b>Modulation</b>	PR-ASK, DSB-ASK
<b>MTBF</b>	23 years (continuous operation at ambient temperature 50°C)
<b>Heating</b>	
Cable	No
Ethernet	Yes
PoE	No
<b>Antenna</b>	
Europe, South Africa, India	Integrated (circular polarized, axial ration typ. 2 dB, 100° field opening, front to back ratio > 7 dB)
USA, Canada, Brazilian, China, Japan	Integrated (circular polarized, axial ration typ. 3 dB, 100° field opening, front to back ratio > 7 dB)
<b>Service functions</b>	Parameter cloning with integrated microSD memory card slot or externally via CMC module in CDB620
<b>Further functions</b>	Cloning function (microSD memory card or system), diagnosis, updatable firmware, freely programmable data output format, heartbeat, triggering

## Interfaces

<b>Serial (RS-232, RS-422/485)</b>	✓ / – (depending on type)
Function	Host, AUX (only RS-232)
Data transmission rate	300 Baud ... 115.2 kBaud, AUX: 57.6 kBaud (RS-232)
<b>USB</b>	✓, USB 2.0
Function	AUX
<b>Ethernet</b>	– / ✓ (depending on type)
Function	Host, AUX, PoE (depending on type)
Data transmission rate	10/100 Mbit
Protocol	TCP/IP, EtherNet/IP, PROFINET, PROFINET Dual Port (optional via external connection module CDF600-2), EtherCAT (optional via external connection module CDF600)
<b>CAN bus</b>	✓ / – (depending on type)
Function	Host
Protocol	CSN (SICK CAN Sensor Network)
<b>PROFIBUS DP</b>	✓, optional via external connection module (CDF)
<b>DeviceNet</b>	✓, optional available externally
<b>Switching inputs</b>	
Cable	4 ("Sensor 1", "Sensor 2", 2 inputs via optional parameter storage CMC600 in CDB620/CDM420)

	Ethernet	4 ("Sensor 1", "Sensor 2", 2 inputs via optional parameter storage CMC600 in CDB620/CDM420)
	PoE	0
<b>Switching outputs</b>		
	Cable	4 ("Result 1", "Result 2", 2 outputs via optional parameter storage CMC600 in CDB620/CDM420)
	Ethernet	4 ("Result 1", "Result 2", 2 outputs via optional parameter storage CMC600 in CDB620/CDM420)
	PoE	0
<b>Optical indicators</b>		11 LEDs (function configurable via SOPAS ET, alternatively controlling with sw commands, status displays)
<b>Configuration software</b>		SOPAS ET

### Mechanics/electronics

<b>Electrical connection</b>		
	Cable	1 x 15-pin D-sub HD plug
	Ethernet	1 x M12, 17-pin male connector 1 x M12, 4-pin female connector Ethernet
	PoE	1 x M12, 18-pin female connector
<b>Operating voltage</b>		10 V DC ... 30 V DC <sup>1)</sup> (depending on type)
<b>Power consumption</b>		8 W, with activated heating for temperatures below -20° C + 8 W, standby 3 W (depending on type)
<b>Housing</b>		Die-cast aluminum Plastic (PPS)
<b>Enclosure rating</b>		IP 67
<b>Protection class</b>		III
<b>Weight</b>		780 g
<b>Dimensions</b>		137 mm x 131 mm x 56 mm

<sup>1)</sup> With heating (ethernet) 20 V DC ... 30 V DC.

### Ambient data

<b>Electromagnetic compatibility (EMC)</b>		EN 61000-6-3 (2007) + A1 (2011) / EN 61000-6-2 (2005)
<b>Vibration resistance</b>		EN 60068-2-6 (2008-02)
<b>Shock resistance</b>		EN 60068-2-27 (2009-05)
<b>Ambient operating temperature</b>		
	Cable	-25 °C ... +50 °C
	Ethernet	-40 °C ... +50 °C
	PoE	-25 °C ... +50 °C
<b>Storage temperature</b>		-40 °C ... +70 °C
<b>Permissible relative humidity</b>		90 %, non-condensing

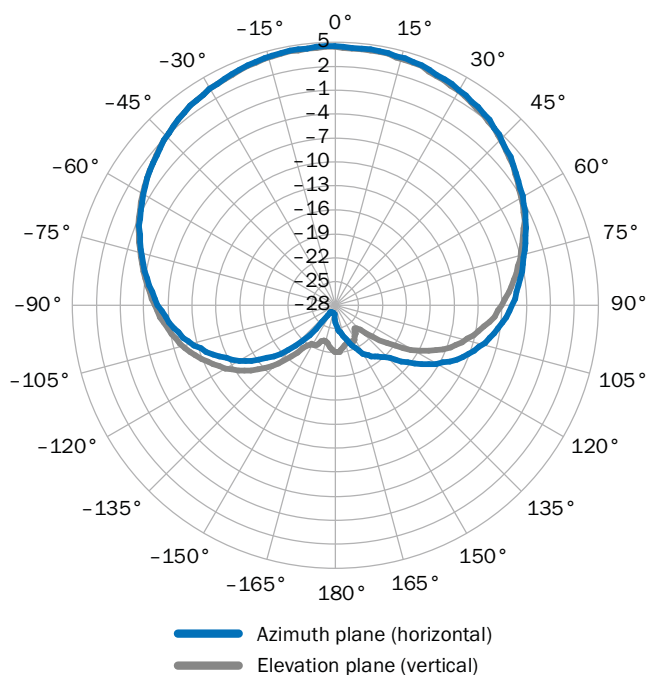
## Ordering information

- **Version:** Mid Range
- **Product category:** write/read device with integrated antenna
- **Frequency band:** UHF (860 ... 960 MHz)
- **RFID standard:** EPCglobal UHF Class 1 Generation 2, ISO/IEC 18000-6 C
- **Scanning range:** max. 1 m (Depending on transponder used and ambient conditions.)

Connection type	Radio approval	Type	Part no.
Cable	Europe, South Africa	RFU620-10400	1062600
	USA, Canada	RFU620-10401	1062603
Ethernet	Europe, South Africa	RFU620-10100	1062599
	USA, Canada	RFU620-10101	1062602
	Brazilian	RFU620-10104	1069677
	China	RFU620-10105	1068728
	Japan	RFU620-10107	1068727
PoE	Europe, South Africa	RFU620-10500	1062601
	USA, Canada	RFU620-10501	1062604
	India	RFU620-10503	1069453
	Brazilian	RFU620-10504	1070407

## Radiation pattern


Measured antenna gain in dBic at 868.5 MHz,  
RHCP (right-hand circular polarized)



Recommended accessories




Mounting systems

Mounting brackets and mounting plates





	Brief description	Part no.	RFU62x Cable	RFU62x Ethernet	RFU62x PoE
	Simple mounting bracket	2071067	●	●	●

Connection systems

Modules


	Brief description	Type	Part no.	RFU62x Cable	RFU62x Ethernet	RFU62x PoE
	Small connection module for one sensor, 4 cable glands, base for CMC600	CDB620-001	1042256	●	●	-
	Fieldbus proxy/gateway for connecting identification sensors to PROFIBUS-DP networks (PROFIBUS interface: 2 x M12, male connector/female connector, 5-pin)	CDF600-2100	1058965	●	●	-
	Fieldbus proxy/gateway for connecting one identification sensor to PROFINET-IO networks (interface 2 x M12, female connector/female connector, 4-pin)	CDF600-2200	1062460	●	●	-

Plug connectors and cables

	Signal type/application	Connection type head A	Connection type head B	Cable	Cable length	Part no.	RFU62x Cable	RFU62x Ethernet	RFU62x PoE
	Power, serial, CAN, digital I/Os	Female connector, M12, 17-pin, straight	Male connector, D-Sub-HD, 15-pin, straight	To connection module CDx (except CDB650)	2 m	2055419	-	●	-
	Gigabit Ethernet/PoE	Male connector, M12, 8-pin, straight, X-coded	Male connector, RJ45, 8-pin, straight	AWG26	2 m	6049728	-	-	●
	Ethernet	Male connector, M12, 4-pin, straight, D-coded	Male connector, RJ45, 8-pin, straight	4-wire, AWG26	2 m	6034414	-	●	-
	USB 2.0	Male connector, USB-A	Male connector, Micro-B	-	2 m	6036106	●	●	●

## Further accessories

## RFID transponder

	Brief description	Type	Part no.	RFU62x Cable	RFU62x Ethernet	RFU62x PoE
	UHF transponder, global, thermoplastic, 51.5 mm x 47.5 mm x 10 mm, Impinj Monza 4 QT	On-metal Transponder (52 mm x 48 mm x 10 mm)	6052346	●	●	●

→ For additional accessories, please see page 28