



The Kathrein-RFID Reader RRU4-ELC-U6 is a unit with an Ethernet communication interface and © KRAI Interface for use in the frequency range from 902 to 928 MHz for the EPC Gen2 standard (ISO 18000-6C). With the Linux running on the embedded PC based on the Q7 standard, a high computing power is available.

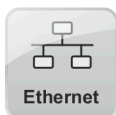


The user can set up and run his own complex applications. Thus, the device is ideal for applications with time-critical filters in high to very high tag populations.

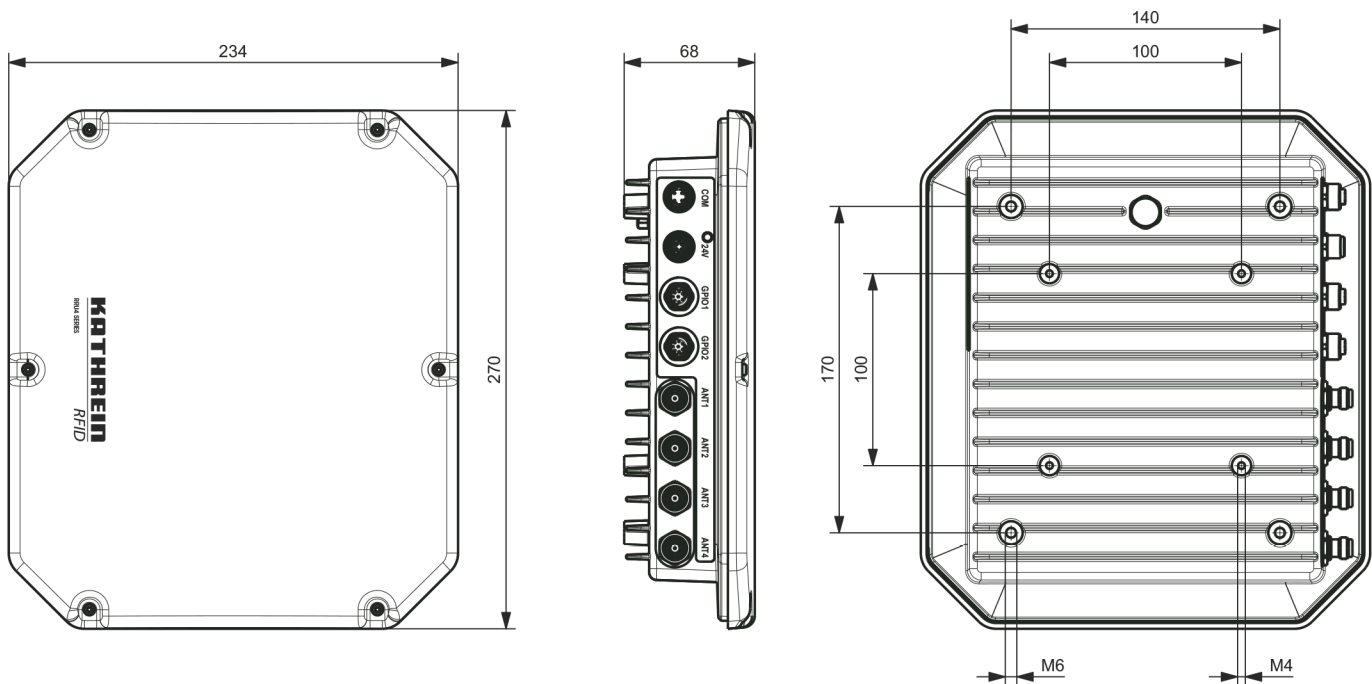
<b>Order-No.</b>		<b>52010181</b>
Frequency range	MHz	902-928
Output power at antenna port (max.)	dBm	+30 (+33 with extended cable length)
Emitted output power (max.)	dBm	+36 EIRP
Protocols		EPC Class1 Gen2/ISO 18000-6C
Nominal impedance (antenna ports)	Ω	50
RX input sensitivity	dBm	typ. -80
Antenna interface		4 port TX/RX interface with TNC-rev. (female) connectors
Communication interface		Ethernet 10/100 MBit/s
Operating system reader		Kathrein firmware @ ARM 9 processor
Embedded PC module		
Processor		ARMv7-A compatible processor 1GHz
Flash memory		eMMC 4GB
RAM		512MB 200MHz DDR SDRAM
Linux kernel		> version 2.6
Digital interfaces (GPIO)		4 digital inputs; 4 digital outputs
Current load digital interfaces (DO)	mA	500 each; max. 1500
Supply voltage	V DC	+10 to +30
Current consumption (at 24 V DC)	mA	typ. 800 (without GPIO); max. 2500 (incl. GPIO)
Connector (male) power supply		1x M12, 4-pole, A-coded
Connector (female) Ethernet		1x M12, 4-pole, D-coded
Connector (female) GPIO		2x M12, 8-pole, A-coded
Operating temperature range	°C	-20 to +55
Storage temperature range	°C	-40 to +85
Housing materials		die-cast aluminium, steel, plastic
Dimensions (L x W x H)	mm	234 x 270 x 68
Weight	kg	2.8
Degree of protection		IP 65 (at covering of not used connectors)
Conform to		FCC part 15, UL pending, IC-FCB

#### Technical Features:

- System compliant to EPC Class 1 Gen2/ISO 18000-6C standards
- Combined TX/RX antenna ports (4 external)
- Dense Reader Mode (DRM)
- output power adjustable from 6 dBm up to 33 dBm in 0.25 dB steps
- calibrated output power from 17 dBm up to 33 dBm (50 mW - 2 W)

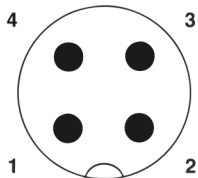


#### Dimensions in [mm]:



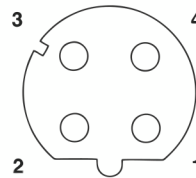
#### Electrical interfaces:

##### Power supply:



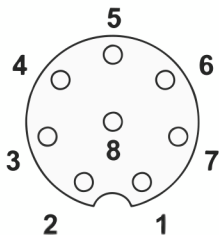
Pin	Allocation
1	+24 V DC
2	n.c.
3	GND
4	n.c.

##### Ethernet:



Pin	Allocation
1	TD+
2	RD+
3	TD-
4	RD-

##### Digital inputs and outputs (GPIO):



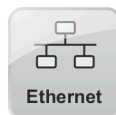
Pin	GPIO 1	GPIO 2
1	OUT_CMN	OUT_CMN
2	INPUT 3	INPUT 0
3	INP_CMN	INP_CMN
4	GND	GND
5	Vcc	Vcc
6	OUTPUT 3	OUTPUT 1
7	OUTPUT 2	OUTPUT 0
8	INPUT 2	INPUT 1

#### Scope of delivery:

- CD-ROM with manual and data sheet (.pdf)
- Grounding set M6

#### Accessories (optional):

- Cable adaptor set (Order-No. 52010126); includes:  
1x power supply cable, 1x Ethernet port cable, 2 x GPIO cable
- wall/mast bracket (Order-No. 52010128), mounting kit for outdoor use
- wall/bracket (Order-No. 52010261), mounting kit for indoor use only
- protective cover set (Order-No. 52010127)



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