

The Kathrein Reader RRU4-ELC is a unit with an Ethernet communication interface and ©KRAI Interface for use in the frequency range from 865 to 868 MHz (865 to 867 MHz for India) for the EPC Gen2v2 standard (ISO 18000-63). 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.



> **General specifications**

Order No.		52010180	52010181
Type		RRU4-ELC-E6	RRU4-ELC-U6
Frequency range	[MHz]	865-868 (865-867 for India)	902-928
©KRAI			✓
Output power at antenna port (max.)	[dBm]	33	30 (33 with extended cable length)
Emitted output power (max.)	[dBm]	33 e.r.p.	36 EIRP
Protocols		EPC Gen2v2 standard (ISO 18000-63)	
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 (without brackets)	[mm]	234 x 270 x 68	
Weight	[kg]	2.8	
Degree of protection		IP65 (at covering of not used connectors)	
Standards		EN 60529, EN301489-1, EN 302208-1, EN 302208-2, EN 60950-1:2006	FCC part 15, UL pending, IC-FCB

> **Remarks**

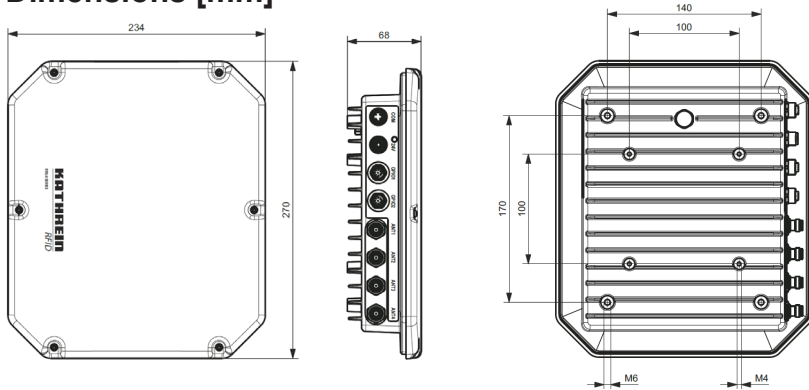
Scope of delivery

- Grounding set M6

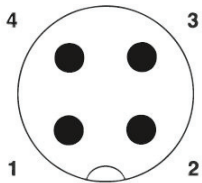
Accessories optional

- All accessories can be found at: <https://http://www.kathrein-solutions.com/products/hardware/accessories>

➤ **Dimensions [mm]**

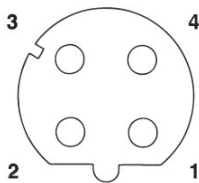


➤ **Power supply**



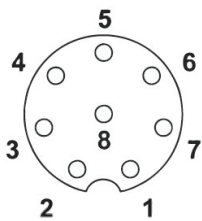
Pin	Allocation
1	+24 V DC
2	n.c.
3	GND
4	n.c.

➤ **Ethernet**



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

➤ **GPIO**



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

➤ **Features**

- System compliant to EPC Class 1 Gen2v2/ISO 18000-63 standards
- Full system support for NXP UCODE DNA chipset
- 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)