

The Kathrein RRU 4000 reader family is the next generation of RAIN RFID reader and the leading IoT device for all professional AutoID solutions.

With its best in class 30 dBm UHF RF unit and connectivity interface PoE+ and the basic level processing unit. The way how identification works will be changed.

Based on the latest RFID standards like EPC Gen2v2 / ISO 18000-63 Kathrein RRU 4000 Series supporting all market leading transponder chip features for security, authentication and encoding.



## RRU 4400 Reader Unit

### > Features

Type	ETSI Version RRU 4400		FCC Version RRU 4400
Order No.	52010287		52010295
<b>Ethernet</b>			
Number of Ethernet ports			1
Datarate	[Mbit/s]	10/100	
Connetor			M12, X-coded, 8-pole
<b>©KRAI</b>			
TX Frequency	[kHz]	22	
Supply voltage (output)	[V]	5	
Max. current per port	[mA]	100	
<b>LED visualisation</b>			
Freely programmable			Basic LED

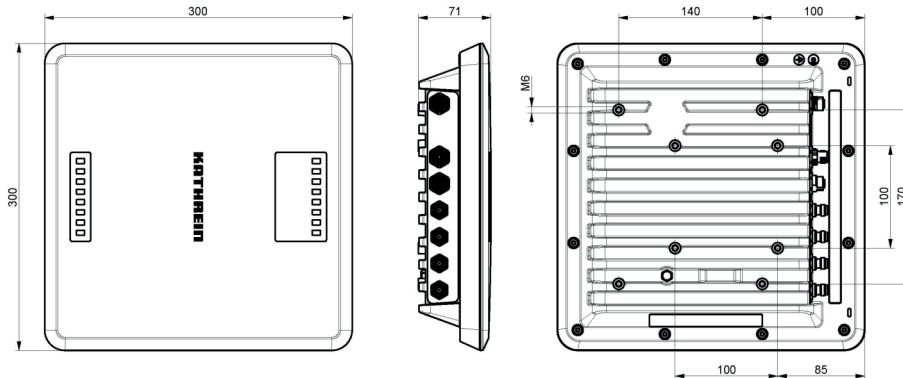
**> General Specifications**

Type		ETSI Version RRU 4400	FCC Version RRU 4400
Order No.		52010287	52010295
<b>RFID</b>			
Frequency range	[MHz]	865 - 868	902 - 928
Impedance antenna port	[Ohm]	50	
Max. TX power conducted	[dBm]	30	30
Max. TX power radiated	[ERP (ETSI)/ EIRP (FCC)]	30	36
RX sensitivity	[dBm]	typ. -80	
Number of antenna ports	[R-TNC]	4	
<b>Voltage</b>			
In situ	[VDC]	+10 to +30	
Connector		M12, A-coded, 4-pole	
Remote-fed	[VDC]	PoE+ according to 802.3at (10-57) (internal supply of GPIO-VCC-Pin not possible with PoE+)	
Connector		M12, X-coded, 8-pole, port 1 only	
<b>Power consumption</b>			
In situ	[W]	11	
Remote-fed	[W]	12	
<b>GPIO</b>			
Max. input voltage	[V]	30	
Max. output voltage	[V]	30	
Max. current per output port	[mA]	500	
Max. current over all outputs	[mA]	1500	
Connector		M12, A-coded, 12-pole	
<b>RFID controller</b>			
Processor		ARMv7-A based processor with 600 MHz	
Flash memory eMMC	[Gbyte]	4	
RAM DDR2	[Mbyte]	128	
Operating system		Linux	
Weight	[kg]	4.00	
Degree of protection		IP67	
Operating temperature range	[°C]	-20 to +55	
Storage temperature range	[°C]	-40 to +85	
Dimensions (L x W x H)	[mm]	300 x 300 x 71	
Standards		EN302208-2 V2.1.1, EN301489-3, EN50364, EN62368-1, EN60529, EPC Gen2 V2, UCODE DNA	FCC Part15, UL, IC, EPC Gen2 V2, UCODE DNA

**Key Application**

- Logistics
- Industry Automation
- Vehicle Identification
- Smart City Applications

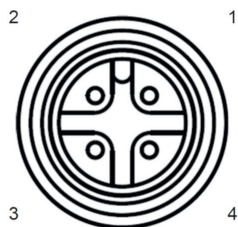
**Dimensions [mm]**



**Power Supply**

M12, A-coded, 4 pin, male

Pinout power supply

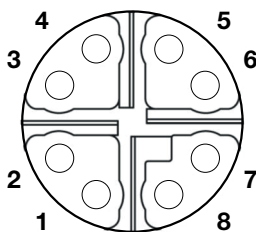


Pin	Allocation
1	+24 V DC
2	GND
3	GND
4	+24 V DC

**Ethernet**

M12, X-coded, 8 pin, female

Pinout communication PoE+

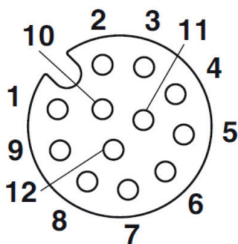


Pin	Allocation
1	TX+ / PoE+1
2	TX- / PoE+1
3	RX+ / PoE+2
4	RX- / PoE+2
5	PoE+1
6	PoE+1
7	PoE+2
8	PoE+2

**GPIO**

M12, A-coded, 12 pin, female

Pinout general purpose input output:



Pin	Allocation
1	OUT_CMN
2	OUTPUT_0
3	INPUT_2
4	INPUT_CMN
5	INPUT_0
6	GND
7	UB
8	OUTPUT_3
9	OUTPUT_2
10	OUTPUT_1
11	INPUT_1
12	INPUT_3