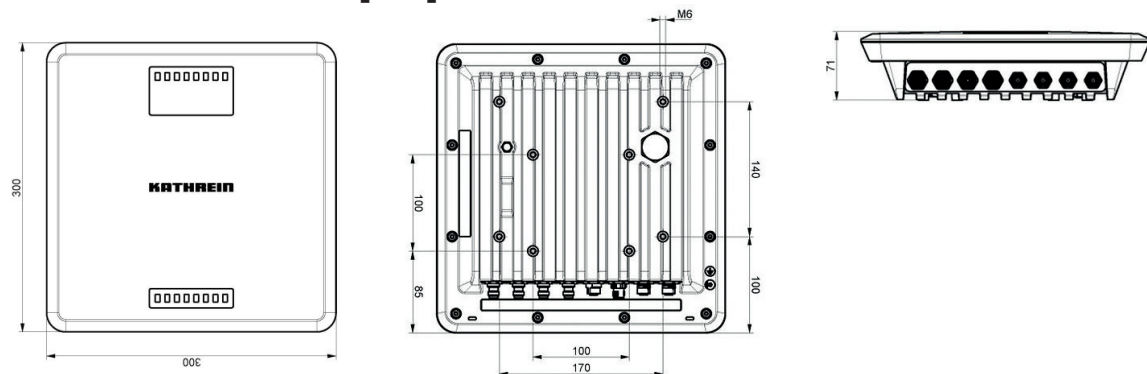


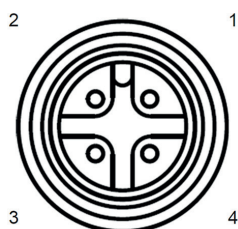
RRU 4570 Dimensions [mm]:



Power supply:

M12 A-coded, 4 pin, male

Fig.1 table: Pinout power supply

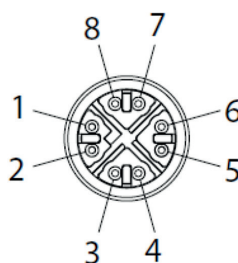


PIN#	Singal	Value
1	Supply voltage	+
2	Supply voltage	+
3	Supply voltage	GND
4	Supply voltage	GND

Ethernet:

M12 X-coded, 8 pin, female

Fig. 2 table: Pinout communication POE/LAN:



PIN#	Singal	Value
1	TD+	Transmit Data +/-POE
2	RD+	Reveive Data +/-POE
3	TD-	Transmit Data -/POE
4	RD-	Reveive Data -/POE
5		POE
6		POE
7		POE
8		POE

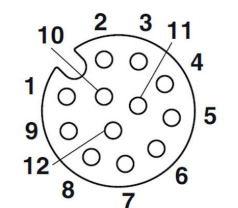
Fig. 3 table: Pinout communication LAN:

PIN#	Singal	Value
1	TD+	Transmit Data +/-POE
2	RD+	Reveive Data +/-POE
3	TD-	Transmit Data -/POE
4	RD-	Reveive Data -/POE
5		
6		
7		
8		

GPIO:

M12 A-coded, 12 pin, female

Fig. 4 table: Pinout general purpose input output:



PIN#	Singal GPIO
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

Kathrein RRU 4000 next generation reader family is the industry leading IoT device for all AutoID solutions.

With its high performance UHF unit, optional connectivity modules, scalable processing unit, the way how identification works will be changed.



RRU 4000 Reader Overview

Features:

	RRU 4400	RRU 4500	RRU 4560	RRU 4570
Version ETSI Order no.	52010287	52010288	52010289	52010290
Version FCC Order no.	52010295	52010296	52010297	52010298
Basic computing module			✓	
Dual core embedded PC				✓
Ethernet				
Number of interfaces 1	✓			
Number of interfaces 2			✓	
GPIO			✓	
© KRAI			✓	
LED visualization			✓	
WLAN			✓	
Bluetooth			✓	
2G/3G				✓

Remarks

Scope of Delivery

- Data sheet (.pdf)

Accessories optional

- RRU/ARU DC power cable 10m or 3m (Order no. 52010358 or 52010359)
- RRU/ARU Ethernet cable 10m or 3m (Order no. 52010360 or 52010361)
- RRU/ARU GPIO cable 10m or 3m (Order no. 52010362 or 52010363)
- RRU/ARU AC/DC adapter 90W or 30W or 100W (Order no. 52010364 or 52010365 or 52010366)
- Vandalism protectiv cover (Order no. 52010367)
- Wall/Poll mount kit (Order no. 52010368)
- PoE+ Ethernet Switch 4Port (Order no. 52010369)
- PoE+ Injector 30W, 100Mbit (Order no. 52010370)

> **General Specifications:**

RFID UHF Reader Overview		ETSI Version		FCC Version	
		RRU 44xx	RRU 45xx	RRU 44xx	RRU 45xx
RFID					
Frequency range	[MHz]	865-868		902-928	
Impedance antennaport	[Ohm]	50			
max.TX power conducted	[dBm]	30	33	30	30 (+33 dBm with extended cable length)
max. TX power radiated	[ERP (ETSI)/ EIRP (FCC)]	30	33	36	
RX sensitivity	[dBm]	typ. -80			
Number of antennaports	[R-TNC]	4			
Voltage					
In situ	[VDC]	+10 to +30			
Connector		M12 A coded connector, 4 positions			
Remote-fed	[VDC]	POE according to 802.3at (10-57) (internal supply of GPIO-VCC-Pin not possible with POE)			
Connector		M12 X coded connector, 8 positions, port 1 only			
Power consumption					
In situ	[W]	11	25.4	11	25.4
Remote-fed	[W]	12	25.4	12	25.4
GPIO					
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 connector 12 positions			
RFID controller					
Processor		ARMv7-A based processor with 600MHz			
Flash memory eMMC	[Gbyte]	4			
RAM DDR2	[Mbyte]	128			
Operating system		Linux			
Weight	[kg]	4.00		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		FCC Part15, UL, IC	

> **Optionale Specification:**

RFID UHF Reader Overview		ETSI Version				FCC Version			
		RRU 4400	RRU 4500	RRU 4560	RRU 4570	RRU 4400	RRU 4500	RRU 4560	RRU 4570
Order no.		52010287	52010288	52020289	52010290	52010295	52010296	52010297	52010298
Embedded PC									
Processor	ARMv7-A based processor, 2 cores @ 800MHz								
Flash memory (eMMC)	8 [Gbyte]			✓				✓	
RAM DDR3	1 [Gbyte]								
Operating system	Linux								
Ethernet									
Number of interfaces		1		2		1		2	
Datarate	10/100 [Mbit/s]			✓				✓	
Connetor		M12 X coded connector 8 positions							
© KRAI									
TX Frequency	22 [kHz]								
Supply voltage (output)	5 [V]			✓				✓	
Max. current per port	100 [mA]								
LED visualization									
Basic LED		✓				✓			
Hig end LED				✓				✓	
WLAN									
Supported standards	a, b, g, n								
2.5GHz Band	2.412 - 2.484 [GHz]								
Max. TX power (dependend on country)	max 17.3 [dBm]			✓				✓	
5GHz Band	4.910 - 5.825 [GHz]								
Max. TX power (dependend on country)	max. 18 [dBm]								
Max. channel bandwidth	max. 40 [MHz]								
Bluetooth									
Frequency range	2.402 - 2.480 [GHz]			✓				✓	
Max. TX power	11.7 [dBm]								
3G									
Frequency range GSM/ GPRS/ EDGE	850/ 900/ 1800/ 1900 [MHz]								
Frequency range UMTS/ HSPA	800/ 850/ 900/ 1900/ 2100 [MHz]				✓				✓
Max.TX power (dependend of class an modulation)	33 [dBm]								