

The Kathrein ARU 3000 antenna reader family is the next generation RAIN RFID Reader with an integrated 65° Wide range antenna and the first choice for professional IoT Solutions like Industrial Automation and vehicle identification in ruggedized environment.

With its best in class 33 dBm UHF RF unit and connectivity interface PoE+ and the basic level processing unit. The way how identification works will be changed.

Base on the latest RFID standards like EPC Gen2v2 / ISO 18000-63 Kathrein ARU 3000 Series supporting all market leading Transponder Chip Features for security, authentication and encoding.



ARU 3500 Reader Unit

➤ Features

Type	ETSI Version ARU 3500	FCC Version ARU 3500
Order No.	52010292	52010300
Embedded PC		
Processor	ARMv7-A based processor, 2 cores @ 800 MHz	
Flash memory (eMMC)	[Gbyte]	8
RAM DDR3	[Gbyte]	1
Operating system	Linux	
Ethernet		
Number of Ethernet ports	2	
Data rate	[Mbit/s]	10/100
Connector	M12, X-coded, 8-pole	
LED visualisation		
Freely programmable	high-end LED	

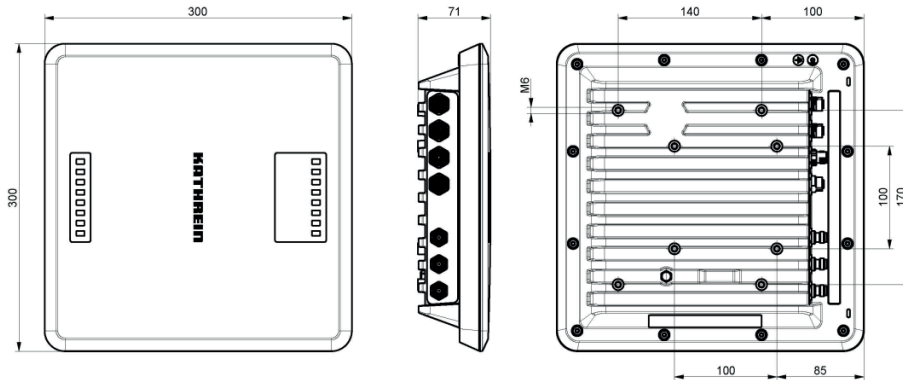
> **General specifications**

Type		ETSI Version ARU 3500	FCC Version ARU 3500
Order No.		52010292	52010300
RFID			
Frequency range	[MHz]	865 - 868	902 - 928
Impedance antenna port	[Ohm]	50	
Max.TX power conducted	[dBm]	33	30 (33 dBm with extended cable length)
Max. TX power radiated	[ERP (ETSI)/ EIRP (FCC)]	33	36
RX sensitivity	[dBm]	typ. -80	
Number of antenna ports	[R-TNC]	3	
Antenna			
Half-power beam width	[°]	65	
Gain, linear	[dBi]	-	
Gain, circular	[dBiC]	8.5	
Voltage			
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	
Power consumption			
In situ	[W]		
Remote-fed	[W]	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, 12-pole	
RFID controller			
Processor		ARMv7-A based processor with 600 MHz	
Flash memory eMMC	[Gbyte]	4	
RAM DDR2	[Mbyte]	128	
Operating system		Linux	
Weight	[kg]	4.26	
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 Gen2v2, UCODE DNA

Key Application

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

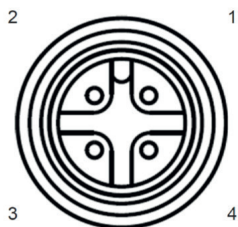
➤ **Dimensions [mm]**



➤ **Power Supply**

M12, A-coded, 4 pin, male

Pinout power supply



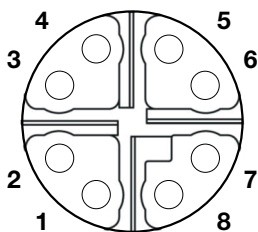
Pin	Allocation
1	+24 V DC
2	GND
3	GND
4	+24 V DC

➤ **Ethernet**

M12, X-coded, 8 pin, female

Pinout communication PoE+

Pinout communication LAN



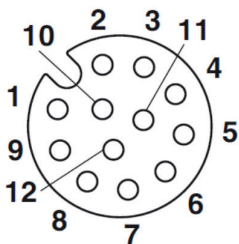
Pin	Allocation
1	TX+ / PoE+1
2	TX- / PoE+1
3	RX+ / PoE+2
4	RX- / PoE+2
5	PoE+1
6	PoE+1
7	PoE+2
8	PoE+2

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

➤ **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