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 ruggedzied environment.

With its best in class 33 dBm UHF RF unit, connectivity Interface PoE+, Wi-Fi and the powerful scalable 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, authentification and encoding.

ARU 3560 Reader Unit

Features

Type		ETSI Version ARU 3560	FCC Version ARU 3560
Order No.		**52010293**	**52010301**
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	
Wi-Fi			
Supported standards		a, b, g, n	
2.5 GHz Band	[GHz]	2.412 - 2.484	
Max. TX power (dependent on country)	[dBm]	max. 17.3	
5 GHz Band	[GHz]	4.910 - 5.825	
Max. TX power (dependent on country)	[dBm]	max. 18	
Max. channel bandwith	[MHz]	max. 40	
Bluetooth			
Frequency range	[GHz]	2.402 - 2.480	
Max. TX power	[dBm]	11.7	

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General Specifications

Type		ETSI Version ARU 3560	FCC Version ARU 3560
Order No.		**52010293**	**52010301**
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]	7.0	
Gain, circular	[dBiC]	6.5	
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

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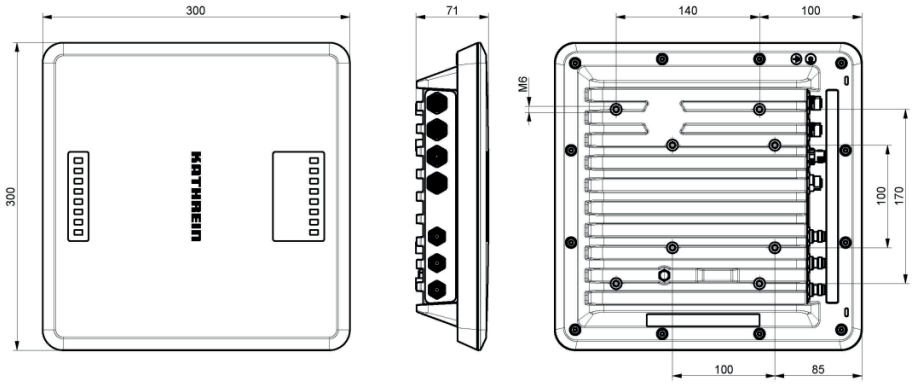
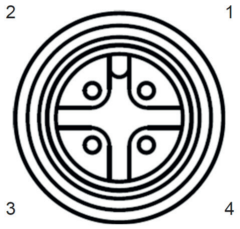
Dimensions [mm]



Power Supply

M12, A-coded, 4 pin, male

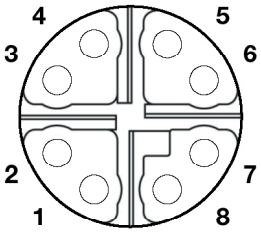


Pinout power supply

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

Ethernet

M12, X-coded, 8 pin, female



Pinout communication PoE+

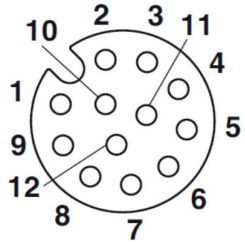
Pin	Allocation
1	TX+ / PoE+1
2	TX- / PoE+1
3	RX+ / PoE+2
4	RX- / PoE+2
5	PoE+1
6	PoE+1
7	PoE+2
8	PoE+2

Pinout communication LAN

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

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