

ARU4 RFID UHF Reader System ARU4-ETG-E6

KATHREIN
RFID



The Kathrein-RFID (Radio Frequency Identification) Reader ARU4 is a unit with an Ethernet communication interface and an integrated antenna to read out active and passive RFID tags in the frequency range from 865 to 868 MHz in Europe. The device can read and write tags conforming to the EPC Gen2 standard (ISO 18000-6C) from delivery status. The unit contains an integrated antenna, simplifying cabling and providing an economical application solution. Powering is carried out over a 4-pin A-coded M12 male connector.

Type No.		52010100
Frequency range	MHz	865-868
Output power (max.)	dBm	+ 33
Emitted power (max.)	dBm	+ 33 ERP
Protocols		EPC Class1 GEN2/ISO 18000-6C
Nominal impedance (antenna ports)	Ω	50
RX input sensitivity	dBm	Typ. -80
Antenna interface		3-port TX/RX interface with TNC reverse plug
Communication interface		Ethernet TCP/IP
Digital interfaces (GPIO)		4 digital inputs/4 digital outputs
Current load digital interfaces	mA	500 each M max. 1500
Operating system		Kathrein Firmware @ ARM 9 Proc.
Far field half power beam width	$^{\circ}$	69
Polarization		circular
Antenna gain	dBic	8.5
Axial ratio	dB	Typ. 1
Power supply	V DC	+ 24 \pm 10%
Power consumption	mA	typ. 700 (without GPIO); max. 2,500 (incl. GPIO)
Temperature range	$^{\circ}$ C	-20 to +55
Storage temperature range	$^{\circ}$ C	-40 to +85
Dimensions	mm	approx. 270 x 270 x 88
Weight	kg	4.3
Protection class		IP 65
Conform to		EN 60529, EN 301489-1, EN 302208-1, EN 302208-2, EN 60950-1:2006, EN 50 364

Housing material:

- Die-cast aluminium, steel and plastic

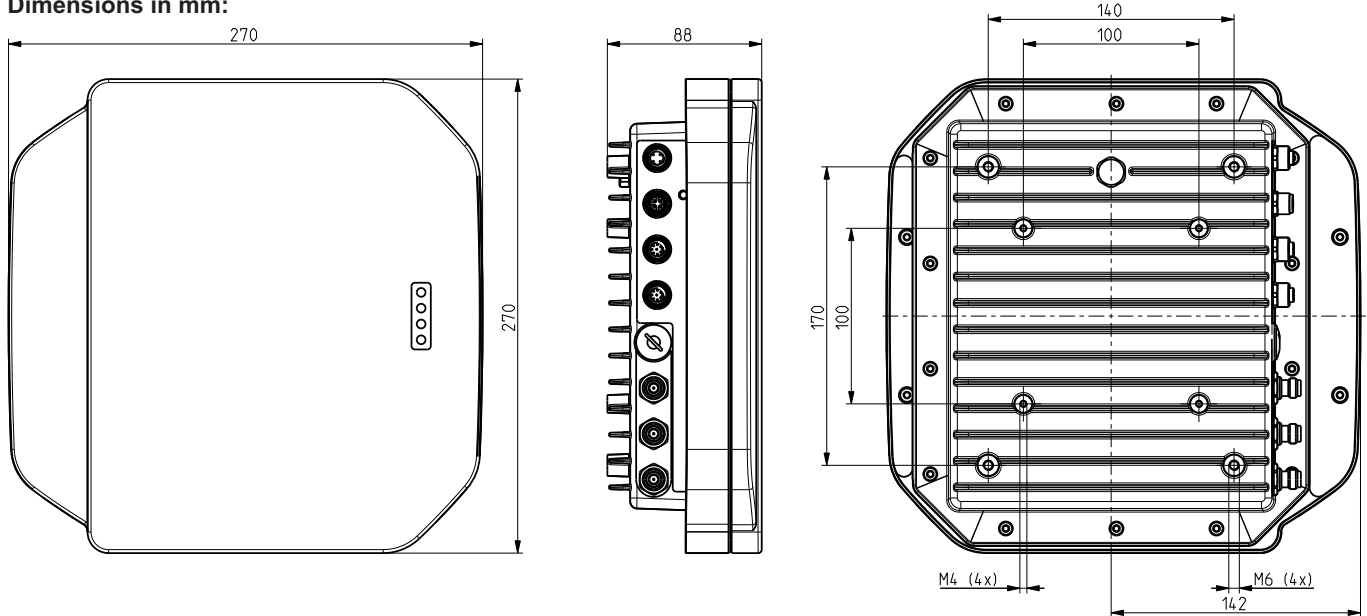
Technical Features:

- System compliant to EPC Class 1 Gen2/ISO 18000-6C standards
- Integrated 70° Wide Range Antenna
- Combined TX/RX antenna ports (1 internal, 3 external)
- Dense Reader Mode (DRM)
- Output power range adjustable from 20 dBm up to 33 dBm (100 mW up to 2 W)

Delivery scope:

- CD-ROM with manual and data sheet (pdf)

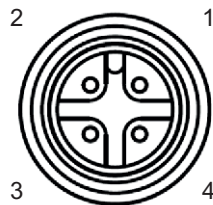
Dimensions in mm:



Electrical interfaces

Power supply:

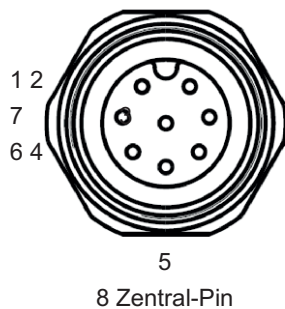
Power supply is to be configured as a four-pin terminal with an A-coded M 12 connection thread.



PIN	Allocation
1	+24 V DC
2	
3	GND
4	

Digital inputs and outputs:

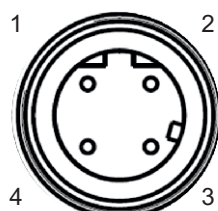
The digital inputs and outputs are to be allocated over two eight-pin sockets with an M 12 connection thread. Control and evaluation are carried out through the internal software.



PIN	GPIO 1	GPIO 2
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

Ethernet:

The data interface is to be carried out over a 4-pin D-coded M 12 socket. Only shielded cables are permissible.



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