KATHREIN

Features

- Minimal dimensions
- Extremely high selectivity
- Extremely high resistance to interference (multi-reader applications)
- Suitable for use in industrial environments
- Optimized for near field applications
- High IP67 degree of protection
- Suitable for outdoor use

Quality made in Germany

RAIN RFID

General specifications

Order No.		52010084	5210085
Type		LORA-ETSI	LORA-FCC
Frequency range	[MHz]	865-868	902-928
©KRAI		-	
Polarization		-	
Antenna gain	[dBiC	-15	
EIFF *	[dB]	20	
VSWR		typ. 1.3:1	typ. 1.8:1
Impedance antennaport	[Ohm]	50	
Max. input power	[dBm]	+27 (at antenna port) (ETSI EN 302 208)	+27 (at antenna port) (FCC15.247)
Range of near field tags **	[cm]	7	
Selectivity of near field tags **	[cm]	5	
Range of far field tags **	[cm]	-	
Selectivity of far field tags **	[cm]	-	
Connection		TNC female	
Weight	[kg]	0.11	
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]	79.5 x 90 x 31	
Packing size (L x W x H)	[mm]	approx. 165 x 250 x 50	
Material			
Antenna cover		tough, weather-resistant polymer blend, colour: RAL7045	

* The Effective Isotropic Field Factor (EIFF) shows the field isolation from far field to near field standardised to an isotropic radiator. The values were determined with 3 cm spacing.
** dependant upon transmission power and tag type

Remarks

Mounting options

- Four through-holes Ø 4.2 mm for M4 screws

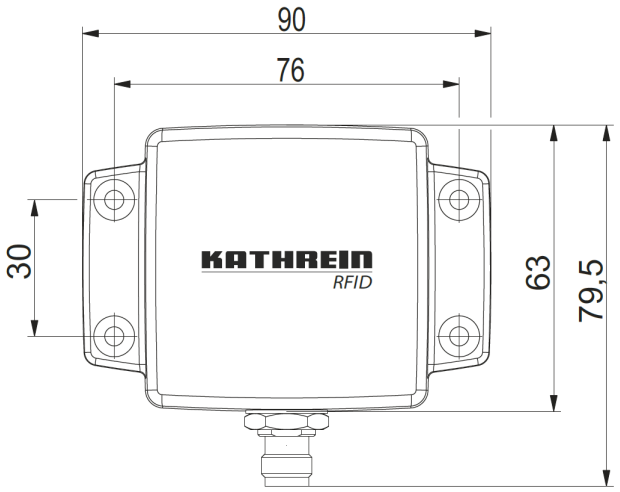
Accessories optional

- All accessories can be found at: https://http://www.kathrein-solutions.com/products/hardware/accessories

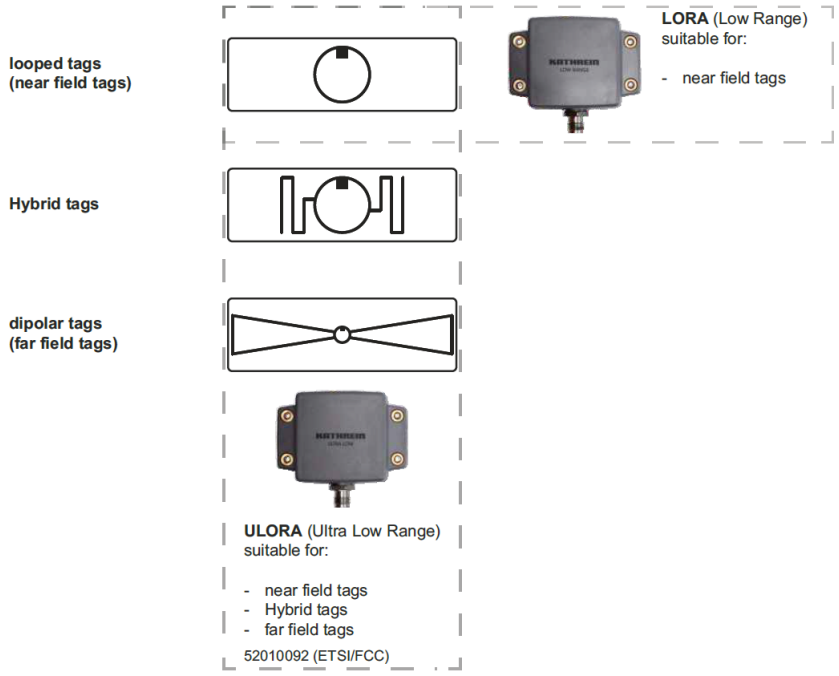
936B114A I Subject to changes
date of creation: 31.08.2012

Kathrein Solutions GmbH, Kronstaudener Weg 1, 83071 Stephanskirchen, Germany
Phone: +49 8036 90831 20 I Fax: +49 8036 90831 69
www.kathrein-solutions.com

Dimensions [mm]



Tag type



Description

The Ultra Low Range Antenna (ULORA) and Low Range Antenna (LORA) feature a high field concentration in the near field with simultaneously extremely minimised antenna gain in the far field. With these properties the antennas achieve outstanding reading and writing results with ranges up to 10 cm with a typical selectivity of 5 cm. The special design of these antennas guarantees interference-free operation in multi-reader environments.

The ULORA was especially developed to read dipolar tags (far field tags) at very limited distances. In addition this antenna can address looped tags (near field tags) up to 3 cm. The LORA version was developed in order to increase the range for near fi eld tags, with which ranges up to 7 cm can be achieved. The range of applications of the antennas according to tag type is displayed in the tag association table.

Key Application

Pharmaceutical industry (e.g. individual tag capture on liquid-filled vessels and blister packs)

Access controls

Automation industry

936B114A I Subject to changes
date of creation: 31.08.2012

Kathrein Solutions GmbH, Kronstaudener Weg 1, 83071 Stephanskirchen, Germany
Phone: +49 8036 90831 20 I Fax: +49 8036 90831 69
www.kathrein-solutions.com