Kathrein offers the most comprehensive UHF RFID antenna portfolio. For applications in the read range up to 20m, the WRA 3070 antenna is available for such application, especially if a focused beam is needed.
The WRA 3070 antenna are characterised by a high antenna gain and at the same time very low axial ratio for circular polarization, for optimum reading of transponders in all orientations, even at great distances.
For applications in which the reading range must be selectively detected despite a long range, the antennas are focused in the horizontal direction to an aperture angle of 30°. This makes the WRA 3070 the ideal antenna for gate applications and lane-selective detection for vehicles.
For easier installation, the antenna already has two brackets integrated to mount the antenna directly to gantries or poles with hose clamps.



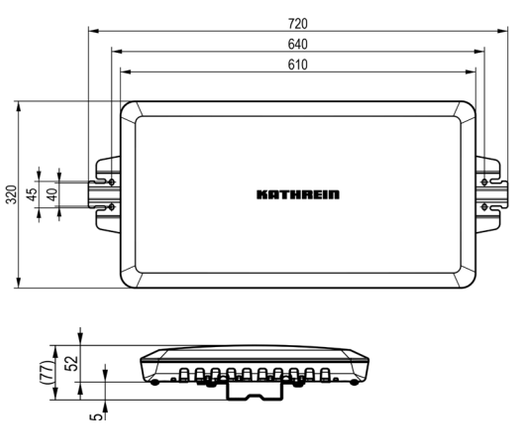
Features

- Ideal for far-field applications up to 20m
- Very homogenous reading field
- Optimal axial ratio
- Selective 30° beam focused in horizontal plane mounted as shown in the picture
- New compact design for ruggedized environmental applications or shop floor use cases
- Mounting brackets for pole or gantry mount included
- Prepared for 3D mount kit (100 x 100 mm)
- High IP67 degree of protection
- Suitable for outdoor use
- Available for Europe, US and RoW

Key Applications

- Manufacturing and Automotive
- Logistics
- Intelligent Transportation Systems
- Service and maintenance

Dimensions [mm]



Note

Risk of material damage!

- ▶ Please ensure that the underlying surface is clean, load-bearing and free of conductors.
- ▶ To mount the antenna, please use the four M6 screws to fix mounting kit.

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936B330/E/0722 | Subject to changes.

General Specifications

Type		ETSI Version WiRa 30° 70° PRO Antenna	FCC Version WiRa 30° 70° PRO Antenna
Model No.		**52010583**	**52010584**
RFID			
Frequency range	[MHz]	865–868	902–928
Impedance antenna port	[Ohm]	50	
Polarisation, circular		RHCP*	
Antenna gain	[dBiC]	typ. 11.5	typ.11.5
Axial ratio [dB]	[dB]	typ. 1	typ. 1
Far field half-power beam width	[°]	30 horizontal 65 vertical	
Front-to-back ratio	[dB]	>20	
Max. input power (at antenna port)	[dBm]	-	+30 (FCC 15.247)
Max. radiated power	[dBm]	+33 ERP (ETSI EN 302 208)	+36 EIRP (FCC 15.247)
Max read range	[m]	20	
VSWR		typ. 1.2:1	
Mechanic properties			
Connection		TNC female**	
Weight	[kg]	4.5	
Degree of protection	[W]	IP67	
Operating temperature range	[°C]	-40 to +70	
Storage temperature range	[°C]	-40 to +85	
Dimensions (L x W x H)	[mm]	610 x 320 x 77	
Packing size (L x W x H)	[mm]	642 x 380 x 150	
Antenna cover		weather-resistant polymer blend, colour: RAL7035	
Chassis		aluminium, powder coated	

*) right-handed circular polarisation

**) For vertical pole mounting with the included mounting brackets, we recommend using the right-angle TNC-TNC adapter 52010598.

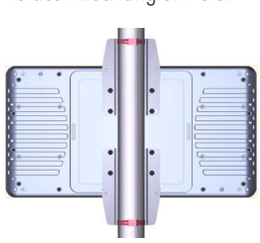
Mounting options

Horizontal mounting on gantry:



- Pipe and hose clamp not included in delivery.

Vertical Mounting on Pole:



- Pipe and hose clamp not included in delivery.
- For vertical pole mouting with the included pole mounting brackets, we recommend using the right-angle TNC-TNC adapter 52010598.

Screw holes for 3D mount kit:



- Install the antenna on the 3D mounting kit 52010351, using four M6 threaded bolts at intervals of 100 x 100 mm.

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