

MidRange 90° EDGE Antenna

ETSI 52010710 / FCC 52010711

The latest antenna family from Kathrein Solutions revolutionizes the use of UHF RFID antennas for IoT applications. The MidRange 90° antenna impresses with its excellent parameters and reduced dimensions. The antenna's thickness of only 6 mm is very advantageous. This is achieved by completely avoiding the housing. However, protection against moisture and environmental influences is provided. The MidRange 90° antenna is IP40 protected and can be used outdoors. All EDGE Line antennas are fully recyclable.



High
antenna gain



Ultra thin

MidRange
Antenna
HPBW

90°
100°



TNC (f) socket



IP54



Various mounting
options

WideRange
Antenna
HPBW

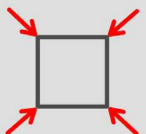
55°
80°



SMA (f) socket 90°



Symmetrical beam



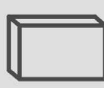
Compact
installation



Temperature
resistant



Suitable for
recycling



Pure
antenna design



3D mounting kit

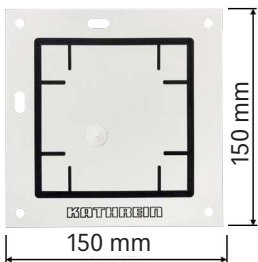
Features

- Ultra-thin RAIN RFID antenna, easy to integrate
- Outstanding best-in-class antenna gain: 6.5 dBiC
- TNC (f) connector
- Right handed circular polarized RHCP
- Symmetrical beam shape with 90°/90°
- Suitable for outdoor use according to IP40

Key Applications

- Logistics & Supply Chain
- Manufacturing & Automotive
- Healthcare

Dimensions [mm]



General Specifications WideRange Antenna 90° EDGE

Type		MidRange Antenna 90° EDGE ETSI Version	MidRange Antenna 90° EDGE FCC Version
Order number		52010710	52010711
RFID			
Frequency range	[MHz]	865–868	902–928
Impedance antenna port	[Ohm]	50	
Half-power beam width	[°]	90 / 90	
Gain, circular	[dBiC]	6.5	
Polarisation		RHCP circular	
Axial ratio	[dB]	typ. 1.5	
Front-to-back ratio	[dB]	13	
Max. input power (at antenna port)	[dBm]	–	+30 dBm
Max. radiated power acc. EN 302 208 acc. FCC 15.247	[dBm]	+33 e.r.p.	+36 EIRP
Max read range	[m]	> 10*	
Mechanic properties			
Connection		SMA 90°	
Mounting kit terminal	[mm]	50 x 58	
Weight	[kg]	0.3	
Degree of protection	[W]	IP40	
Operating temperature range	[°C]	-40 to +80	
Storage temperature range	[°C]	-40 to +85	
Dimensions (L x W x H) Antenna w/o connector Antenna with connector	[mm]	150 x 150 x 6 150 x 150 x 18	
Packing size (L x W x H)	[mm]	200 x 200 x 45	
Material		Metal Polymer Mix	

*) depends on the used transponder and the environment