

Kathrein offers the most comprehensive passive UHF RFID antenna portfolio. For applications in the read range up to 20m, the WiRa 40 is characterized by a high antenna gain, for optimum reading of transponders, even at great distances. Thanks to its 40° aperture angle in both directions a selective detection at a long read range and at the same time highspeed is possible. Due to the linear polarization of the antenna the optimal reception is possible even for weak transponders. This makes the WiRa 40 the ideal antenna for detection of vehicles at a great distance.



> Features

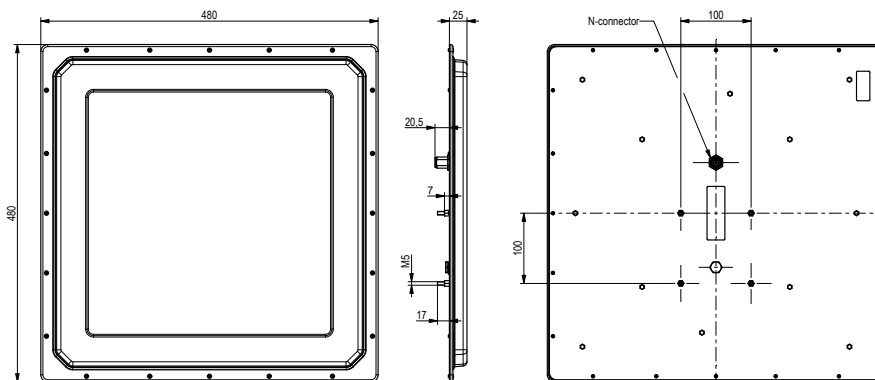
- Compact design for ruggedized environmental applications
- Read range: up to 20 m
(depending on tag properties, environment and requirements)
- Ideal solution for toll collect applications
- Suitable for bulk and single tag applications
- High degree of protection, IP67 suitable for outdoor use



> Key Applications

- Road Charging
- Enforcement
- Smart City Applications

> Dimensions [mm]



> Note

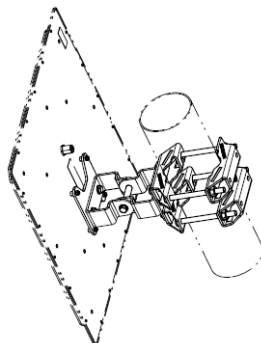
- ▶ Please ensure that the underlying surface is clean, load-bearing and free of conductors.
- ▶ Install the antenna on the pole bracket using four M5 threaded bolts at intervals of 100 x 100 mm.

> General Specifications

Type		WIRA-40-linear-ETSI	WIRA-40-linear-FCC
Order No.		52010251	52010252
RFID			
Frequency range	[MHz]	865–868	902–928
Impedance, antenna port	[Ohm]	50	
Polarisation		linear	
Antenna gain	[dBi]	typ. 12.5	typ. 13
Half-power beam width	[°]	40/40	
Front-to-back ratio	[dB]	> 25	
Max. input power	[dBm]		+30 (FCC 15.247)
Max. radiated power	[dBm]	+33 (ETSI EN 302 208)	+36 EIRP (FCC 15.247)
Max. read range	[m]	20	
VSWR		typ. 1.3 : 1	
Mechanical properties			
Connection		N female	
Weight	[kg]	2.7	
Degree of protection		IP67	
Operating temperature range	[°C]	–40 to +70	
Storage temperature range	[°C]	–40 to +85	
Dimensions (L x W x H)	[mm]	480 x 480 x 25 (45.5)	
Package size (L x W x H)	[mm]	approx. 520 x 510 x 70	
Material			
Antenna cover		hermoplastic radome, UV resistant	
Chassis		aluminium	

> Accessoires

Pole bracket MK-WPGM-100-100-Outdoor 52010262.



For more information about accessories, go to <https://www.kathrein-solutions.com/products/rfid/rfid-accessories>