

UHF RFID Wide Range Antenna
Polarization
Half-Power Beam Width

865-870

C

30°

KATHREIN

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- Features:**
- Compact construction
 - Low axial ratio for optimum performance
 - Reading range *): up to 10 m
 - Different half-power beam widths in azimuth and elevation plane
 - Optimised for portal applications
 - Suitable for use in industrial environments
 - High IP 65 protection class
 - Suitable for outdoor use
- *) depending upon tag properties, environment and requirements



Type No.	00519
Frequency range	865-870 MHz
Polarization	circular
Antenna gain	11.3 dBic @ 866 MHz
Axial ratio	typ. 1 dB
VSWR	< 1.2:1
Impedance	50 Ω
Front-to-back ratio	> 18 dB
Max. radiated power (ETSI EN 302 208)	2 W ERP
Far field half-power beam width	30°/69°
Connection	TNC socket
Protection class	IP 65
Weight	~4.8 kg
Dimensions (W x H x D)	580 x 270 x 90 mm
Packing dimensions	ca. 650 x 350 x 150 mm

Material:

Antenna cover: Tough, weather-resistant polymer blend
Colour: RAL7045

Chassis: Aluminium

Seals: Thermoplastic elastomer

Installation: Four M5 drill holes 100 x 100 mm

Temperature range:

Storage temperature: -40° C - +85° C

Ambient temperature: -20° C - +55° C



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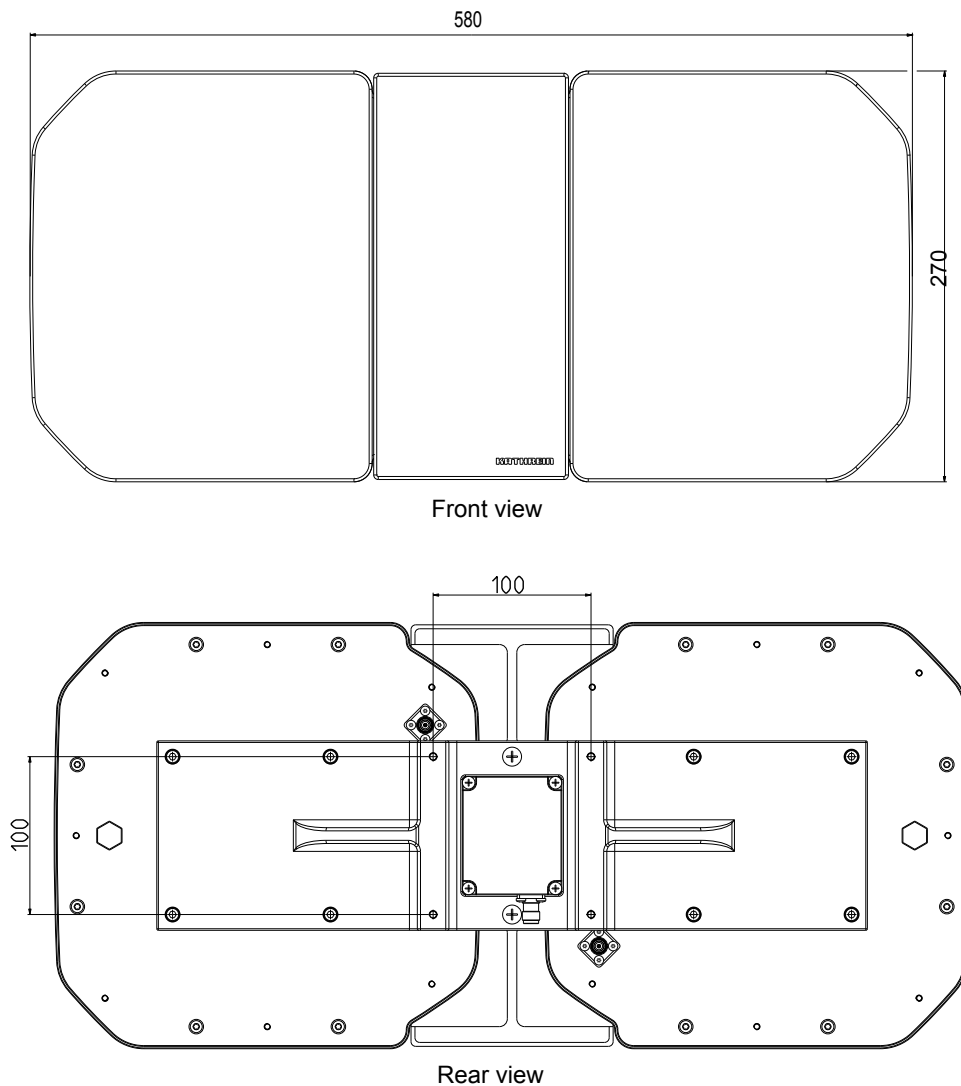
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Mechanical view and dimensions (in mm):



Description:

For classic far field applications with large reading distances, the Wide Range Antennas (WIRA) are the optimal choice: they are characterised by a very low axial ratio for circular Polarization, whereby the dependence of reading results upon the position or alignment of tags is significantly reduced. For this reason they are also the ideal solution for portal applications in addition to many other application possibilities. The version with 30° half-power beam width makes available a narrow antenna pattern on one level (according to horizontal or vertical alignment). In this way, a focused reading range can be realised.

Example Applications

- Gate applications for goods registration
- Logistics
- Vehicle detection to a distance of up to 10 metres
- Bulk and single tag applications