

**UHF RFID Mid Range Antenna**  
**Polarization**  
**Half-Power Beam Width**

**865-870**

**C**

**100°**

**KATHREIN**  
Antennen · Electronic

- Features:**
- Compact construction
  - Small dimensions
  - Typical reading range\*): 0.2 to 2 m
  - Integration possible in applications where space is limited
  - Various transponder types possible
  - Suitable for use in industrial environments
  - Use in transition range between near field and far field applications
  - Suitable for bulk and single tag applications
  - High IP 67 protection class
  - Suitable for outdoor use
- \*) depending upon tag properties, environment and requirements



<b>Type No.</b>	00520
Frequency range	865-870 MHz
Polarisation	circular
Antenna gain	4 dBic @ 866 MHz
Axial ratio	type 2 dB
VSWR	< 1,3:1
Impedance	50 Ω
Front-to-back ratio	> 10 dB (depending upon installation situation)
Max. radiated power (ETSI EN 302 208)	0.5 W ERP
Far field half power beam width	100° half power beam width
Connection	TNC socket
Protection class	IP 67
Weight	320 g
Dimensions (W x H x D)	156 x 126 x 36 mm
Packing dimensions	approx. 230 x 160 x 81 mm

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

**Installation:** Four through-holes Ø 4.2 mm for M4 screws

**Temperature range:** Storage temperature: -40° C - +85° C  
Ambient temperature: -20° C - +55° C



**UHF RFID Mid Range Antenna**

865-870

**Polarization**

C

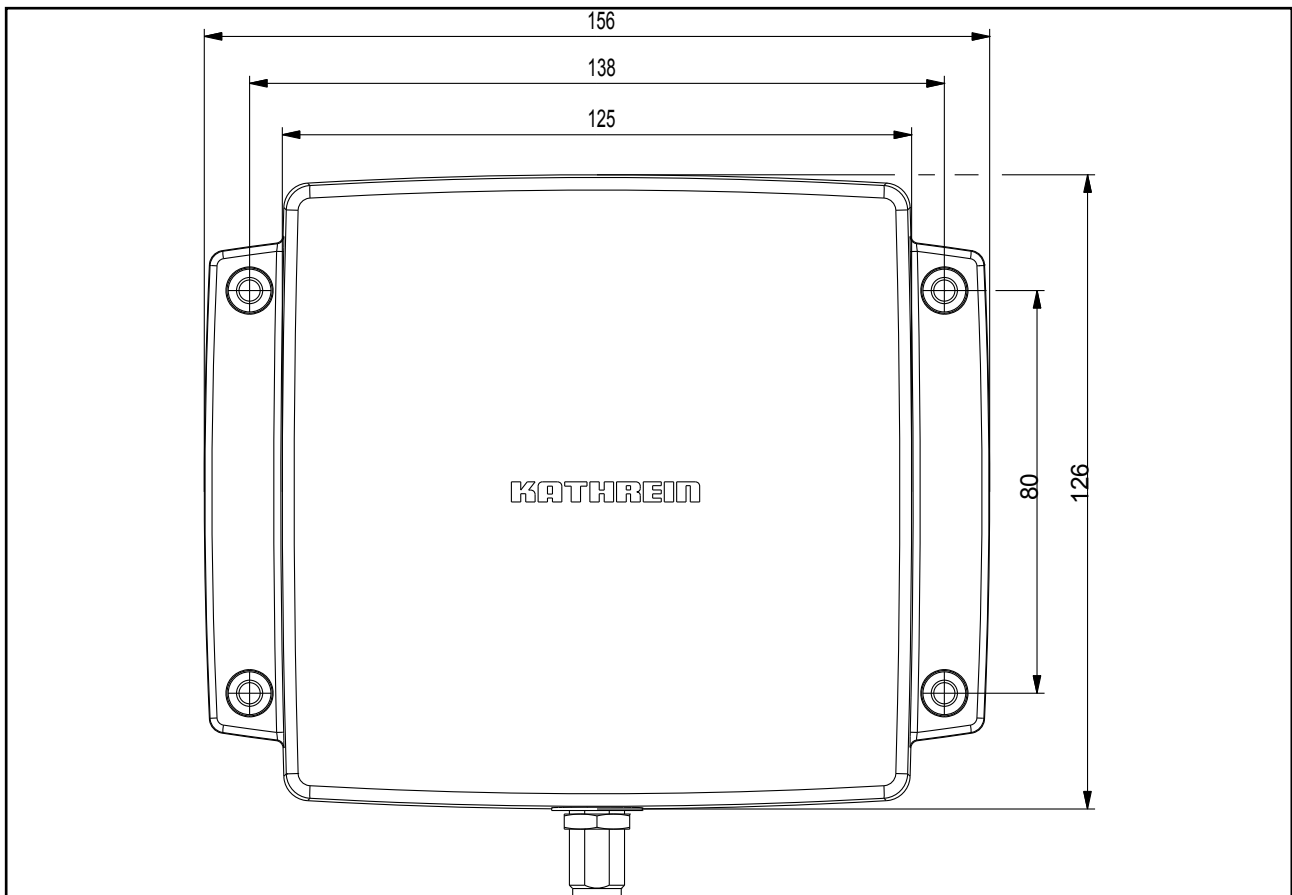
**Half-Power Beam Width**

100°

**KATHREIN**

Antennen · Electronic

**Mechanical view and dimensions (in mm):**



Front view

**Description:**

The mid-range antenna (MIRA) was developed for applications in ranges between the near and far field. An especially compact construction for integration in installation space-critical applications was focused upon. Reading distances of up to 5 m are still possible though with dimensions of 13 x 15 cm. In this case a very wide reading distance is achieved. In most cases the MIRA is implemented for reading distances to 2 m, for which it features sufficient selectivity for the specific application. As such, this antenna design is especially suitable for applications in the so-called transition area with various tag types.

**Example Applications**

- Logistics applications: installing to corridor conveyor vehicles
- Materials handling applications
- Gate applications for goods registration
- Bulk and single tag applications
- Access systems (e.g. ski lifts, control systems for tickets)