

### metraTec® Echo-5 UHF Antenna

The metraTec Echo-5 is a patch antenna for the European UHF RFID frequency range around 868 MHz. Its main purpose is the integration of the antenna as an OEM component into other devices. Therefore, one design goal was to reach compact antenna dimensions combined with a good performance.

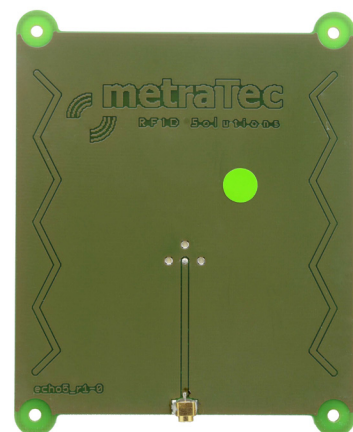
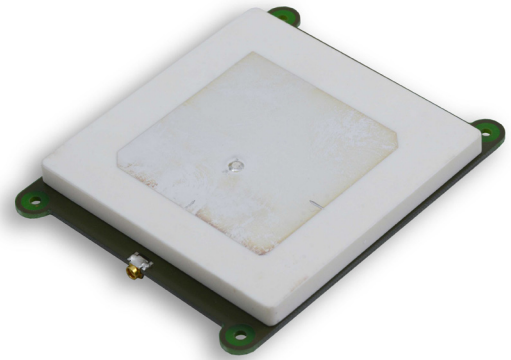
The result is an 100 x 80 x 8,5 mm sized antenna (unpacked), which can be connected to an UHF reader using the on-board MMCX connector. With a 3 dB angular width of approx. 100° the antenna may be connected to any UHF reader with up to 1 W RF output power according to current regulations (EN 302 208). Due to the 5 dBi circ. antenna gain a reading range of up to 3 m is possible with a suitable reader.

### Applications

- Integration into handhelds
- Applications with limited available space
- Integration into OEM devices

### Further RFID Components by metraTec

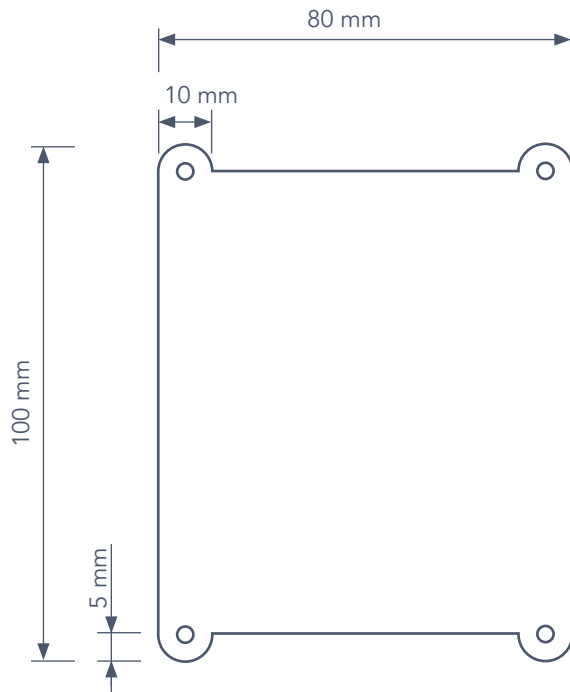
metraTec offers a comprehensive set of RFID products that enables its customers to set up RFID systems whose components work together seamlessly. The Echo-5 UHF antenna e.g. works in combination with the hyperMux-4 UHF multiplexer which enables you to connect up to four UHF antennas to a single antenna port. On the reader side you can connect any UHF reader on the market supporting the European frequencies as long as the permitted power limits are not exceeded.



## Technical Specification

Operating Principle	Circular Polarized UHF Patch Antenna
Resonance Frequency	868 MHz (UHF RFID, Europe)
Bandwidth (-10 dB)	858 - 877 MHz
Polarization	RHCP (Right hand circular polarized)
3 dB Angular Width	100°
Antenna Gain	5 dBi circ.
Nominal Impedance	50 Ohm
Axial Ratio	< 3 dB
Max. RF Power (acc. to ETSI)	1 W ERP (*)
Dimensions	100 x 80 x 8,5 mm
Connector	MMCX, female

(\*) Maximum permitted output power of the reader must be calculated according to EN 302 208, Section 8.3.2.2 "Conducted measurement".



## At a Glance

- Small form factor
- Easy device integration
- Great size/performance ratio

## About metraTec

metraTec develops, manufactures and sells RFID hardware in the product segments „finished products“, „automation“ and „embedded RFID“. It serves a variety of industries, both with standard products as well as custom solutions. Our customers are system integrators, research institutes as well as OEM customers.

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