

### Datasheet Echo-5P UHF Antenna

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#### metraTec® Echo-5P UHF Antenna

The Echo-5P is one of the most compact circularly polarized UHF RFID antennas for the European UHF RFID frequency range at 868 MHz available today. With a gain of approx. 5 dBic and an angular width of 100° the antenna may be operated with up to 500 mW ERP allowing reading distances of up to 3 m.

The size is only  $90 \times 105 \times 30$  mm not counting the Reverse-TNC connector at the bottom. The housing is made from Nylon6 with 30% glass fibre which has excellent mechanical properties and is resistant to many chemicals.

The antenna can be mounted directly to a wall using the two mounting holes at the side. Alternatively, mounting holes in the back at  $50 \times 50$ mm allow the use of VESA mounting kits.

# **Applications**

- Reading UHF tags directly at a conveyor
- Applications with limited available space
- Mounting between the forks of forklifts

# 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-5P UHF antenna e.g. works in combination with the hyperMux-4 UHF multiplexer which enables you to connect up to four Echo-5P antennas to a single antenna port. On the reader side you can connect our PulsarMX UHF Mid-Range Reader which will give you a read range of up to 3m.



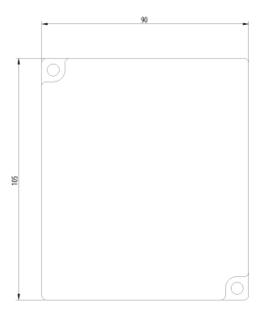




# **Technical Specification**

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	approx. 5 dBi circ.
Nominal Impedance	50 Ohm
Axial Ratio	< 3 dB
Max. RF Power (acc. to ETSI)	500 mW ERP (*)
Dimensions	90 x 105 x 30 mm
Connector	Reverse TNC, female
Housing	Plastic, IP54 resp. IP65 on demand

<sup>(\*)</sup> 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

- Very small form factor
- Robust housing
- Great size/performance ratio

#### About metraTec

metraTec develops, manufactures and sells RF hardware for the product segments "Identification", "Localization", "Communication" and "Wireless Power". It serves a variety of industries, both with standard products as well as custom solutions. Our customers are system integrators, OEM customers as well as research institutes world wide.

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