metraTec® Echo-6P UHF Antenna

The Echo-6P is a compact circular UHF RFID antenna for the European frequency range at 868 MHz. With an antenna gain of 6.5 dBic and an opening angle of approx. 84° you can operate this antenna with up to 33 dBm ERP. This will give you a read range of up to 6 m with normal UHF transponders.

The dimensions of the compact housing are 160 x 165 x 30 mm (plus the R-TNC antenna connector at the bottom). The antenna can be supplied in an IP65 housing (dust and water proof).

In the back the housing is closed by a solid aluminum plane which shields the antenna against unwanted influences from the surrounding environment. The plane has riveted threads which can be used to mount the antenna with any VESA compatible mount.

Applications

• Reading UHF tags directly at a conveyor belt
• Identification of pallets with RFID tags
• Mounting on 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-6P UHF antenna e.g. works in combination with our PulsarMX UHF Mid-Range Reader which will give you a read range of up to 5 m.

Technical Specification

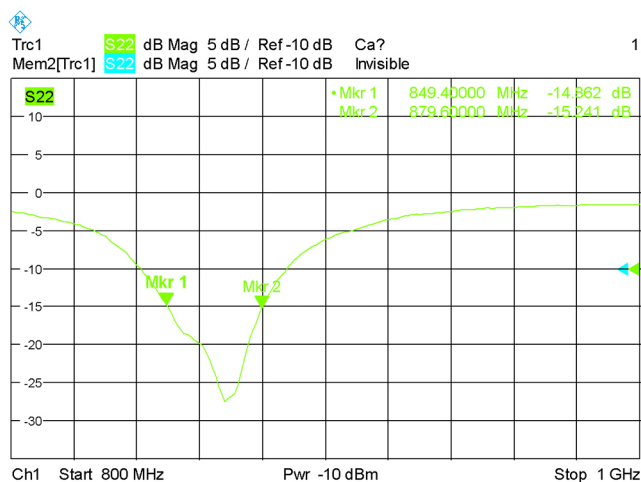| Operating Principle	Circular Polarized UHF Patch Antenna
Resonance Frequency	868 MHz (UHF RFID, Europe)
Bandwidth (-15 dB)	850 - 880 MHz
Polarization	RHCP (Right hand circular polarized)
3 dB Angular Width	approx. 84°
Antenna Gain	approx. 6.5 dBi circ.
Nominal Impedance	50 Ohm
Axial Ratio	< 2 dB
Max. RF Power (acc. to ETSI)	33 dBm ERP (*)
Dimensions	160 x 165 x 30 mm (without connector)
Connector	R-TNC
Housing	Plastic, IP54 resp. IP65 on demand

(*) 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

- Compactform factor
- VESA mountable housing
- Great size/performance ratio

About metraTec

metraTec develops, manufactures and sells 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.

Contact

metraTec GmbH

Niels-Bohr-Str. 5

39106 Magdeburg, Germany

Tel.: +49 (0)391 251906-00

Fax: +49 (0)391 251906-01

Email: sales@metratec.com

Web: www.metratec.com

Trc1 S22 dB Mag 5 dB / Ref -10 dB Ca? 1
Mem2[Trc1] S22 dB Mag 5 dB / Ref -10 dB Invisible

S22
Mkr 1 849.40000 MHz -14.862 dB
Mkr 2 879.60000 MHz -15.241 dB

Ch1 Start 800 MHz Pwr -10 dBm Stop 1 GHz

Date: 10.APR.2012 13:24:28

Measurement Return Loss Echo-6P

metraTec
RFID Solutions