



Test Report

for metraTec Echo6p FCC UHF RFID Antenna

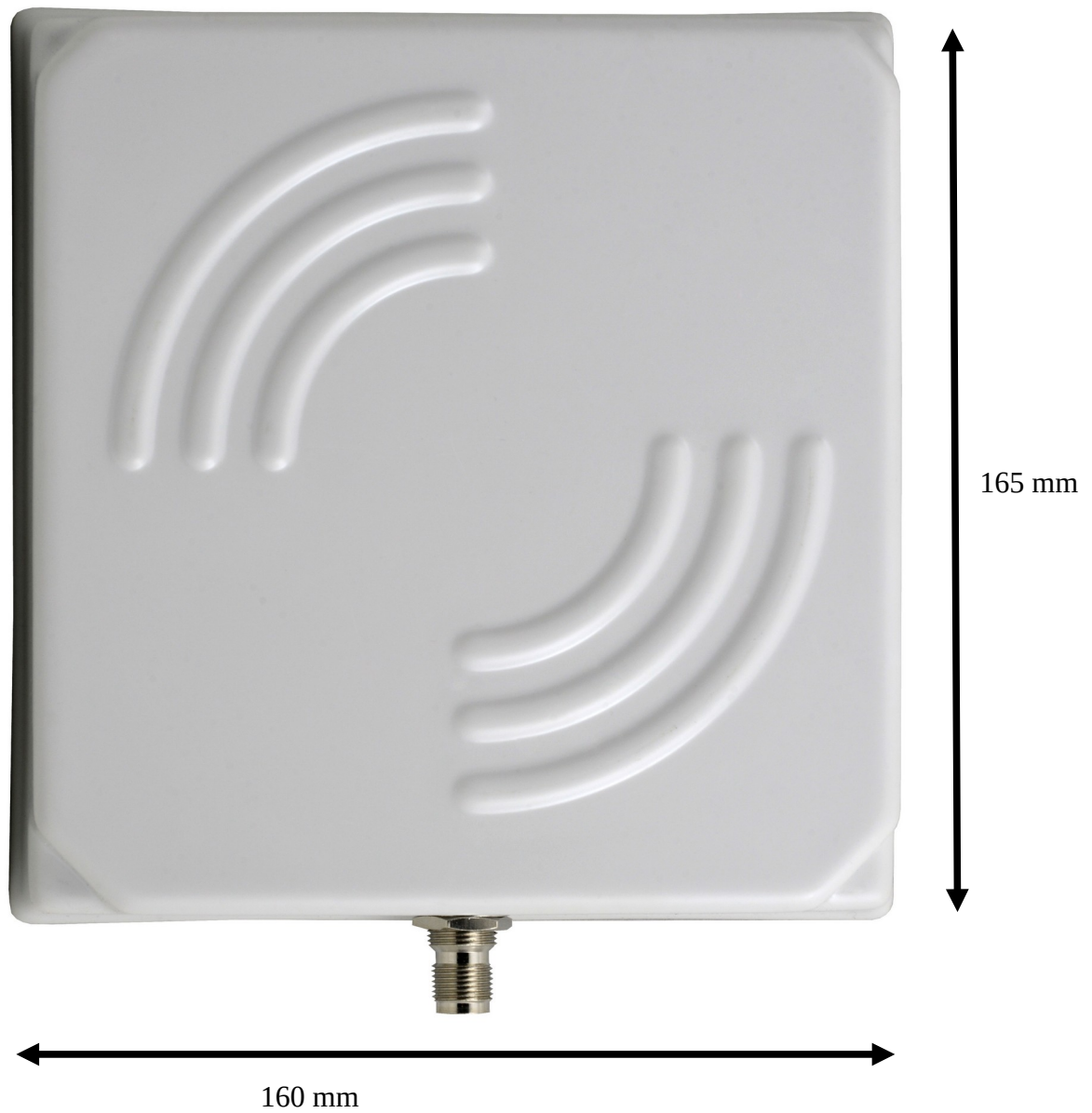
Date: March 2025

Version: 1.0

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1 Mechanical Dimensions



2 Peak Gain

The antenna peak gain was measured using a nose to nose test with two Echo6 at 3m distance and using a dipole reference antenna at the same distance.

Both measurements result in:

$G = 3.5 \text{ dBi}$

3 Radiation Pattern

The directivity pattern in azimuth was measured using a dipole reference antenna. The diagram is shown in Fig. 1. The half power beamwidth was measured to be:

HPBW=84°

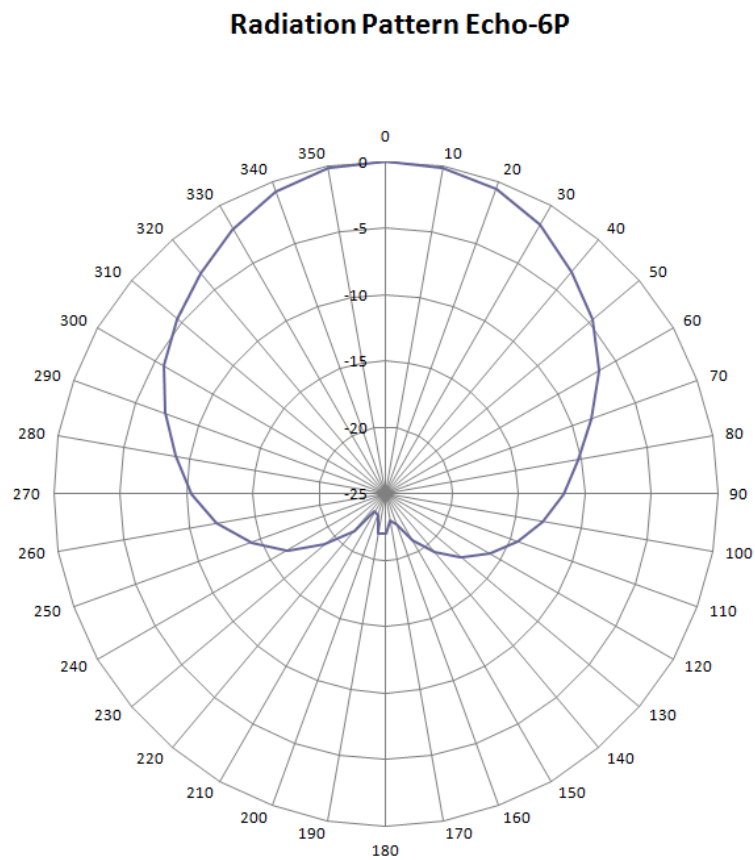
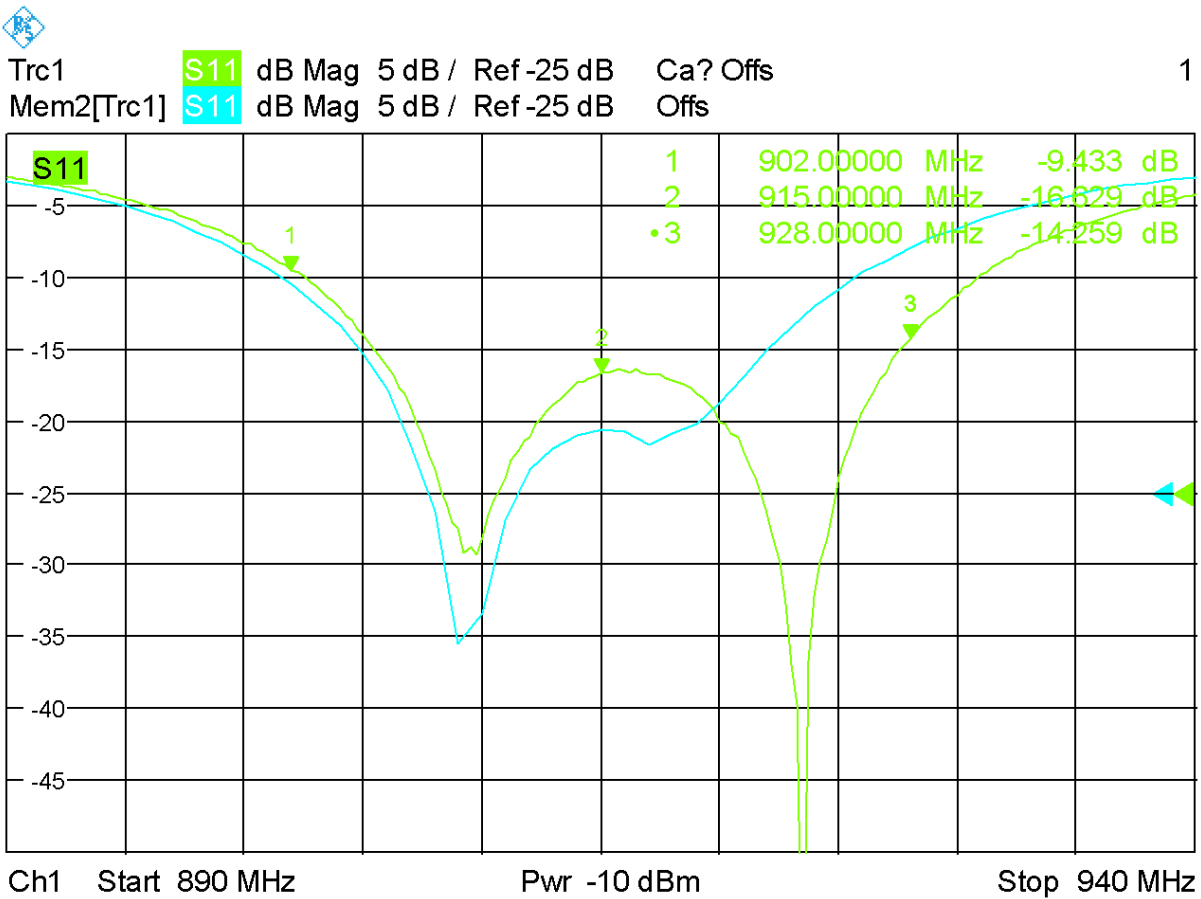


Fig. 1: Radiation Diagram of the Echo6p

4 Return Loss

The return loss measurement is shown in Fig. 2. The antenna is well matched and better then -10dB for the entire band ranging from 902 to 928 MHz.



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Fig. 2: Echo6p_FCC return loss

5 Version Control

<i>Version</i>	<i>Change</i>	<i>by</i>	<i>Date</i>
1.0	created	TM	15.3.2025
1.1	Gain stated in dBi	TM	29.4.2025

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