		Annex No.10 Page 1 of 3
Antenna Description		



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Antenna for UHF RFID reader HH 800; ST 800; HH 500; ST 500; PR 500; PR 100 and ST 100

1. **Antenna type**: circular patch antenna 5x5 inch outline dimension with two quadrature inputs.

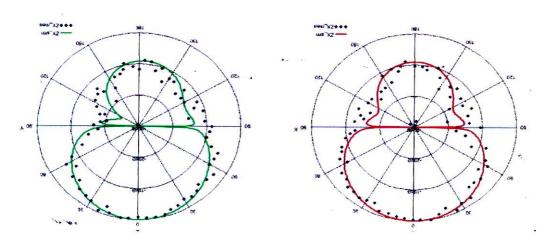
2. Electrical characteristics:

Impedance: 50 Ohm matched for a frequency range of 900 to 930 MHz; or

alternatively for 850 to 880 MHz

VSWR: less than 1:1,5 Gain: 5 dBi Directivity: at 7,5 dBi

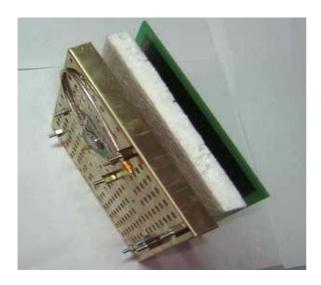
3. Radiation pattern:



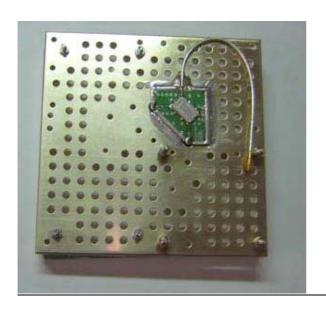
4. **Schematic**: see PDF file enclosed

5. **Mechanical construction:** see pictures below

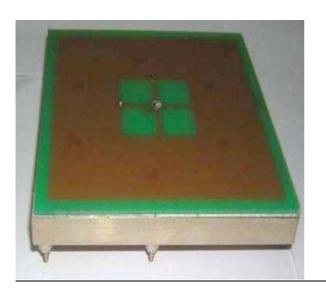
The main elements are a steel brass frame which is the carrier for the antenna and ground; a Styrofoam distance holder between the brass frame and the FR4 PCB antenna. The coupling device is directly soldered onto the brass frame and the antenna is connected with 2 steel PIN's through the brass frame and distance holder to the PCB antenna.



Antenna explosion view



Antenna back view



Top view,