

Ultra High Frequency RFID Ear Tag



Need:	Read tags of animals quickly and reliably
Aim:	<ul style="list-style-type: none">• Electronic identification technology (RFID) based on Ultra high frequency radio waves• Very interesting properties for mass reading• Simultaneous multiple readings• Reading distance up to several meters• Recognition: individual and group
Description:	<p>The UHF (Ultra High Frequency) RFID (Radio Frequency IDentification) identification tag linked with a suitable antenna allows multiple and simultaneous readings of animals, at distances of several meters, unlike official tags (at low frequency). This device makes possible to read the identification numbers on lots of moving animals and adapts to individual proximity reading for the analysis of attendance at points of interest (watering trough, trough, for example).</p> <p>The UHF RFID electronic tag, positioned on the ear, is detected by the antenna connected to a fixed or portable reader that can be controlled on a smartphone. The reading distance adapts according to the adjustment of the power of the reader (few cm to 2.5m). The information is available on a server or can be read directly using a smartphone application.</p>
How to Implement:	<p>UHF RFID identification tags must be fitted on the entire herd when lambs or kids are born.</p> <p>The electronic tag must be placed on the left ear of the animal. The breeder must also be equipped with automatic readers compatible with these UHF RFID identification tag.</p>
Expected Benefits:	<ul style="list-style-type: none">• Time saving: less targeted user gesture, possibility of adjusting the reading distance by modulating the power.• Traceability: functional and comparable to low frequency, reading distance slightly greater at low frequency• Interoperability: compatibility and links with many systems (milking robots, DAC, DAL, scales)

Country:



France

Production System (dairy or/and meat sheep/goat):

All

Category of Animal (ewe, goat, replacement, lamb, kid):

All

Source of Information:

<https://techcare-project.eu/>



Prerequisites and/or limits :

- Possible loss of tags
- Impossible to read through an animal



Costs and Challenges

- Set up costs: 5 000 € -15 000 € for the antenna and the box + 1 – 20 € per tag
- Subscription required: No
- Ease of use? Scale 1 (Complicated) – 10 (Simple)



- Value for money (for this type of benchmark farm)? Yes
- Recommend this tool/technology for use on other types of farm? Yes



This tech is tested in experimental farms to know what are the new uses to needs the UHF tags can have. The management of the health and welfare can be a way.

TECHNICIAN FROM FRANCE

