

# Student Competition

The IEEE RFID-TA 2025 provides a forum for advancing RFID technology and practice, and aims at strengthening relations between industry, research institutions, and academia. It gives attendees a unique opportunity to share, discuss, and witness research results in all areas of RFID technologies and their applications. This student competition is open to any student (classical student and PhD student). Teams can be composed of multiple students.

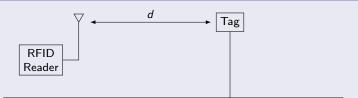
### Objective

The objective of the student comptetition is to design a UHF tag which can be read at the highest read range.

### Constraints

- $\bullet$  Maximum tag's dimension: 20  $\times$  20  $\times$  20 cm
- Tag have to be compliant with EPC Gen2
- No battery allowed

## Configuration



- Fixed reader at 868 MHz with linear polarization antenna (vertical)
- Tag orientation is chosen by the team before the measurement
- Tag is translated along a single direction (increasing d) at a height of 1 m
- Tag is inventoried at 100 times per second by the reader
- Any given distance is validated if the tag is read at least 10 times per second
- Measurement stop when the tag is not detected anymore and maximum distance is recorded
- Tags are evaluated one at a time

### Important dates

- Deadline: 30th of September, 2025
- Conference: 27 30 October, 2025

### Application

- Before 30th of September, each team has to write a 1 page abstract (IEEE template) describing the proposed tag.
- During the conference, each proposed tag will be measured in real environment.

#### Ranking

Ranking of the registred teams are function of:

- 50%: Scientific approach (abstract)
- 50%: Maximum read range (experiment)

#### Awards

Best teams will received awards during the conference.

### Additional Information

### Visit the conference website at: https://2025.ieee-rfid-ta.org/