

# RFID

## Sensor Data Sheet

RFID 01072015

### SPECIFICATIONS

- > **Tag Frequency:** 125kHz
- > **Read Range:** 10cm (typical)
- > **Consumption:** ~70mA
- > **Output:** Filtered PWM from CRC of tag ID

### FEATURES

- > Analog output
- > Detection of tag in range
- > Ergonomic design
- > Easy-to-use

### APPLICATIONS

- > Reaction time experiments
- > Object recognition
- > Event annotation

### GENERAL DESCRIPTION

This is the perfect accessory for synchronous recording of biosignal data and ID-mappable events. Usage examples include token detection and reaction time analysis in object manipulation tasks, and also differentiated event annotation. This accessory was designed to plug directly to the analog inputs of our biosignalsplux hub, and produces an analog output computed as a function of the tag ID (Fig. 2 shows an example output for 6 different tags). Its built-in tag in range detection guarantees that an output is produced only while a tag is within reading range, enabling also the timing of the event (e.g. how much time was an object in proximity of the reader in manipulation tasks). RFID tags have a unique ID with a higher number of bits than those acquirable by our hub, reason for which this accessory requires a calibration step in order to determine which analog output corresponds to a given tag.

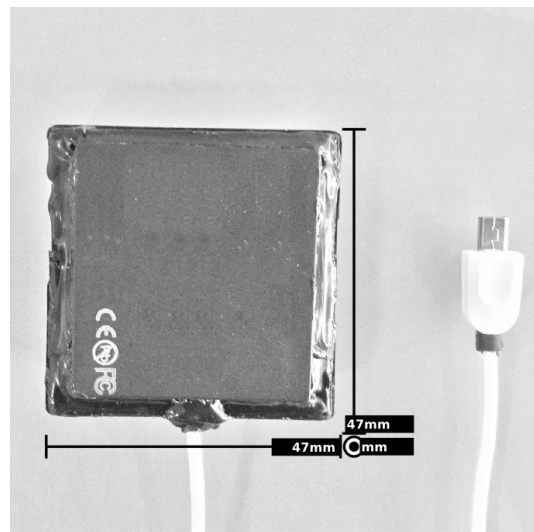


Fig. 1. Plug & play compact form factor.

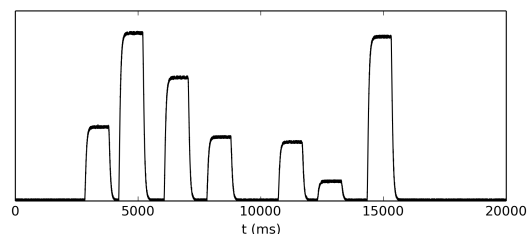


Fig. 2. Typical raw RFID data (acquired with biosignals).

**biosignalsplux**  
wearable body sensing platForm

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### ORDERING GUIDE

| Reference | Package Description  |
|-----------|--|
| RFID1     | RFID sensor in a standard configuration  |
| RFID1-A-S | RFID sensor built with custom cable length A and custom sleeve color S; for standard physical characteristics in A or S use 0. |