

# RFID READER - Instructions

These brief instructions explain how the wireless RFID reader is used to read an NFC compliant RFID tag content.

## Features

- Supports reading NFC compliant Mifare ISO14443A Classic (1K byte) and UltraLight (512 bits) tags
- Fast reader-tag communication speed (106 Kbit/s)
- Operating distance to a tag circa 4 cm
- 802.15.4 radio communication distance to Nokia 770 up to 8-10 meters
- 6LoWPAN protocol for short range, power efficient wireless transmission

## To read an RFID tag

1. Press the power button (on the right side) once to turn the power on. The led lights up for a second and then turns off. The reader is now successfully initialized.
2. Press the read button (on the left side) once to start the reading procedure. The led lights up and stays on. The reader is now ready to read an RFID tag.
3. Touch a tag with the reader, or place it near to the tag (< 4 cm). The tag is now being read. This takes usually 1-2 seconds, but can sometimes take a little longer. The tag is successfully read when the led goes off. The tag's content is send to the N770 device.
4. To read a tag again, proceed from step 2. There's no need to turn power on/off between multiple readings.
5. When the reader is not used, turn off the power to save battery's operating time.

In case of an error situation, the cause may be one of the following:

- There is another tag too close to the tag you're trying to read. The reader senses multiple tags and refuses to read a tag until only one tag is inside the reading distance.
- Battery is running on low power (led starts to dim). This can prevent the data to be sent to the N770 device, since the radio communication requires a lot of power.
- The RFID tag has corrupted data content and therefore can't be read.