



# uFR Online BLE mode v1.0





## **Table of contents**

| How to enable BLE mode?      | 3 |
|------------------------------|---|
| BLE security modes           | 4 |
| Android and IOS BLE examples | 5 |
| Revision history             | 6 |





#### How to enable BLE mode?

- 1. Open uFR Online WEB frontend settings page and login.
- 2. Open other settings.
- 3. If the reader is working in master mode, switch it to slave mode.
- 4. Navigate to BLE section (figure 1).



- 5. Click on the section to enable BLE mode.
- 6. BLE security section will be shown (figure 2).



- 7. Navigate to the next page for more details about BLE security modes.
- 8. Click save and restart.
- 9. After restart, light blue light will blink.

#### Notes.

\*Light blue blinking LEDs indicates that reader is waiting for smartphone or other BLE capable device to initiate a connection. Device is visible also as a WiFi Access point.

\*Light blue steady LEDs indicate that the reader is already connected. Connected devices are not visible on BLE scanning. Device is not visible as a WiFi Access point.





### **BLE security modes**

There are three BLE security modes. Details about all three are shown in table 1. Disabled security means that there is no open security channel and MITM protection.

| *                          | Security disabled | Security enabled and<br>PIN is setted to 0 | Security enabled and<br>PIN is 6-digit long |
|----------------------------|-------------------|--|---|
| Pairing                    | Optional          | Required                                   | Required                                    |
| Authentication             | None              | Numerical comparasion                      | Preshared 6 digit PIN                       |
| *Need for user interaction | No                | Yes  | Yes   |

#### Notes.

<sup>\*</sup>User interaction is not required when security mode is disabled. For examples how to connect BLE capable Android or IOS devices without user interaction navigate to the next page.

<sup>\*</sup> Security modes are available on firmware version 2.4.7+





### Android and IOS BLE examples

Android and IOS examples show how to connect uFR Online reader without user interaction when security mode is disabled.

Android Java example source code:

https://www.d-logic.net/code/nfc-rfid-reader-sdk/ufr\_online-examples-android-ble

IOS Swift example source code:

https://www.d-logic.net/code/nfc-rfid-reader-sdk/ufr online-examples-ios-ble





## Revision history

| Date       | Version | Comment          |
|------------|---------|------------------|
| 2021-03-08 | 1.0     | Base document    |
| 2021-10-29 | 1.1     | Doucment updated |