

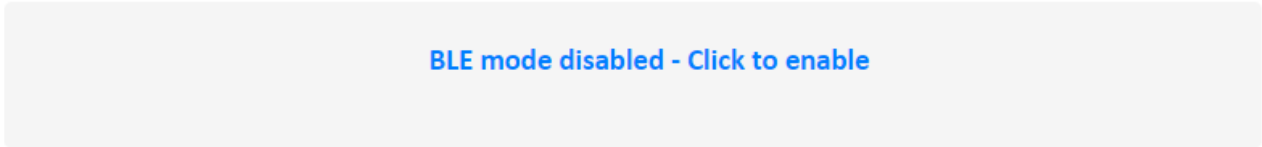
# uFR Online BLE mode v1.0

# Table of contents

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

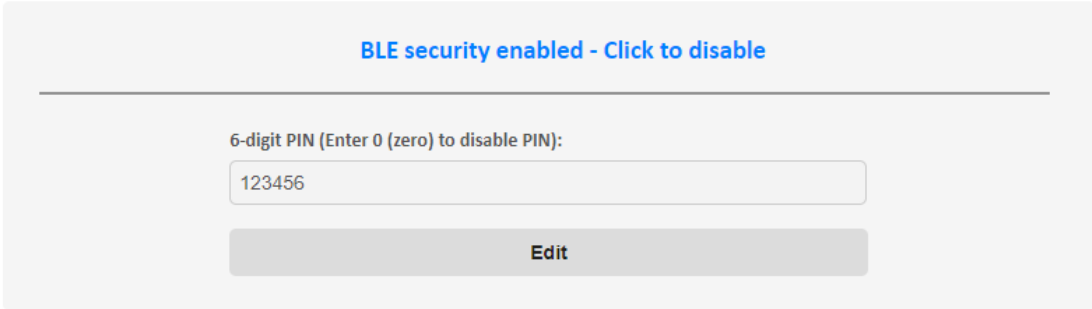
## How to enable BLE mode?

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).



BLE mode disabled - Click to enable

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



BLE security enabled - Click to disable

6-digit PIN (Enter 0 (zero) to disable PIN):

123456

Edit

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

### Notes.

\*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.

\* 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](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](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 |