ANDROID APP TO MANAGE WATERSENS DEVICE (AONCHIP)

1.Introduction

Watersens Tool is an Android application to manage the water controller Watersens. This application allows to the end user to monitor and to program different parameters for the Watersens device.

2.Requirements to use Watersens Tool

- Android phone with Android OS equal or higher than version 6.0
- Android phone with NFC port

3.How to install

- At the moment the Watersens Tool is not available in the Android Play Store and only can be get from Aonchip sources.
- To install the app it is necessary to allow installs from Unknown sources:
    - Navigate to Setting -> Security
    - Check the option "Unknown sources"
    - Tap OK on the prompt message
    - Select "Trust"

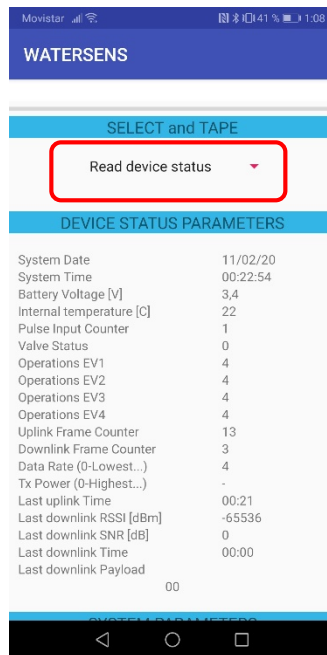**4.How to operate with App Tool and the Watersens**

The normal procedure is:

1. Select the command to send to Watersens
2. Match the NFC antenna area of the phone with the NFC antenna area of the Watersens
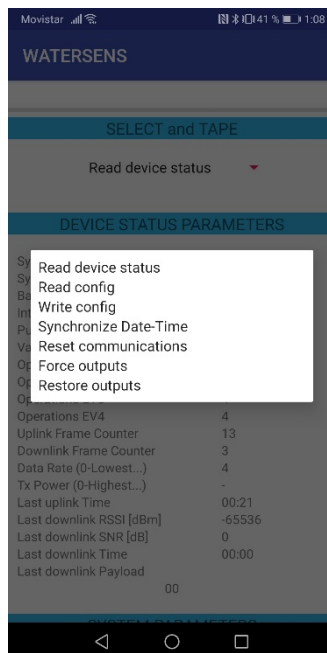3. Wait up to finish the operation

(*) Please note that the NFC communication is very selective and it is necessary to match as well as possible the NFC antenna areas from the phone and Watersens.

5.Commands

Through the dropdown menu select the command desired

The list is similar than the shown in the picture below

5.1. Read device status – command to read several parameters linked with the device status like output status, date and time, RSSI and SNR values of the last downlink received, number of operations, …

5.2. Read config – command to read parameters linked with:

- Communications (keys, Join activation mode, ADR, ports,…)
- Irrigation. Schedules, enabling status, …

5.3. Write config – command to change configuration parameters. **Take into account, always is necessary to perform a Read config, modify the parameters get from the device and finally write the new configuration into Watersens**. If the read config operation has not been performed before write, Watersens could be configured in a wrong way.

> **Note**: Key parameters are in hexadecimal codification and bytes are separated by ascii character ":". This notation must be kept after modifying any key parameter

5.4. Reset communications – command to force a join request in OTA mode. In ABP mode has not effect

5.5. Force and Restore outputs – command to manage the outputs of the device in local way (command useful for commissioning or for maintenance actions)

6. Commissioning of the Watersens

After receiving the Watersens it is necessary to modify some parameters to allow the communication with the Lorwan network.

1. Read the configuration (Read config).
2. Modify the configuration (Write config). Configure the parameter "Time slot uplink (x15 min.) " to 0 (parameter in "network parameters zone"). The value 0 will force to Watersens to perform uplinks in 3 minutes interval time.
3. Force the rejoin with the command "Reset communications"
4. After verifying the communication is ok, adjust the uplink interval time according to your needs.