# HYDROLINK MOBILE — APP MANUAL

## 1. Introduction

The Android™ app described in this manual allows to receive Wireless M-Bus data from supported B Meters devices produced by **B METERS**. The app also allows to export the data to any billing software utilizing *.txt/*.csv/*.xml file formats.

## 2. Requirements

Hardware requirements

→   Android™ phone with a 4,3" display and Class 3 Bluetooth
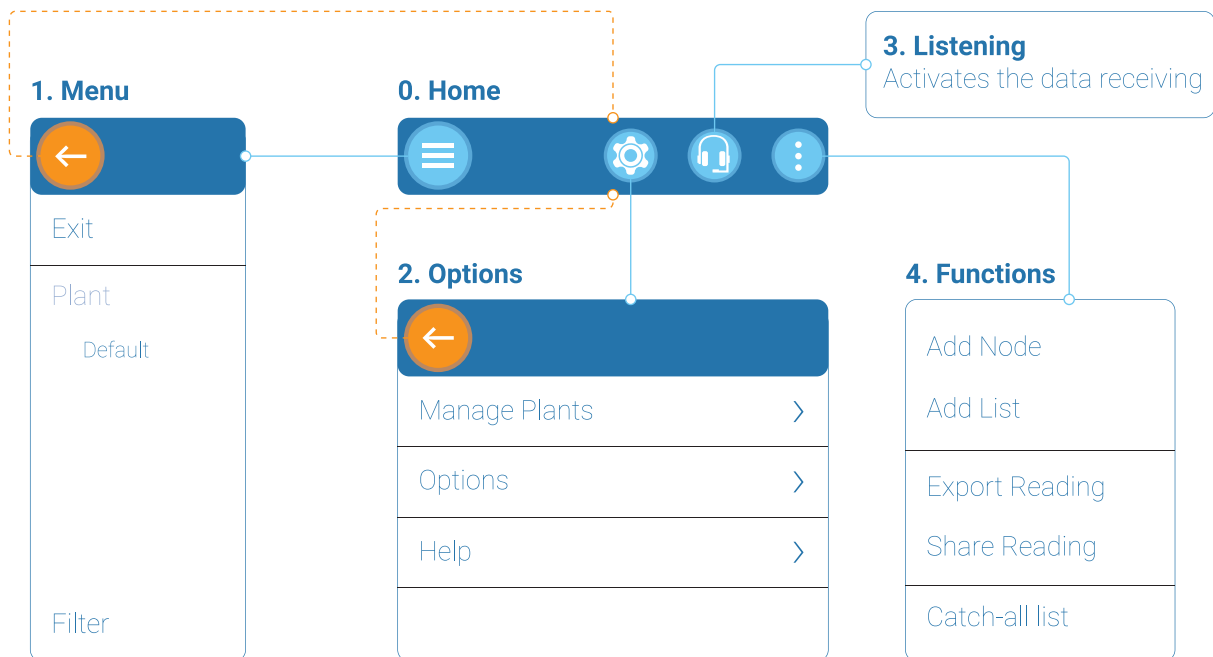→   Bluetooth receiver **RFM-RBT/RFM-RBT2**

Software requirements

→   from Android™ 5.0 to Android™ 12

## 3. App installation

To install the app, **click here** or scan the QR code ↓

## 4. User interface

**1. Menu**

Exit

Plant

Default

Filter

**0. Home**

**3. Listening**
Activates the data receiving

**2. Options**

Manage Plants   〉

Options   〉

Help   〉

**4. Functions**

Add Node

Add List

Export Reading

Share Reading

Catch-all list

### 1. Menu

**Exit**: quit the app.
**Plant**: list of the plants previously created or imported into the app.
**Filter**: applies a filter to the list of modules in the selected plant.

### 2. Options

**Manage Plants**: allows to manage the imported or created plants.
↳**Rename**: allows to rename the selected plant.
↳**Share**: shares the selected plant.
↳**Delete**: deletes the selected plant (if the app contains only one plant the command won't work).
↳**New**: allows to create and name a new plant.
↳**Import**: allows to import a plant from a *.db file previously exported through B METERING Software or another Hydrolink Mobile app.
**Options**: allows to manage global or individual AES keys and choose the format in which to export the reading files.

**HCA Password**: allows to set
↳a password for the heat cost allocators.
**AES Keys**: allows to set a
↳maximum of five global encryption keys for the modules or upload an AES key file (*.keys).
**Export**: allows to choose the file
↳extension (*.txt, *.csv, or *.xml) for the exportation. By default, it is set to export both a *.txt and a *.csv file.
**Help**: contains information about the manufacturer and the app version.

### 3. Listening

**Listening**: sets the device in receiving mode. The app will connect to the RFM-RBT/RFM-RBT2 receiver to initiate the exchange of WM-Bus data received from the devices.

### 4. Functions

**Add Node**: allows to create the main node of a tree structure. It is similar to the concept of folders.
**Add List**: allows to create a list of devices based on those installed. In addition to selecting the different types of devices that can be added (water meter, heat meter, humidity and temperature sensor, heat cost allocator, other (RFM-TXE), out of list. It's recommended to name both the list and the node in which the list will be created.
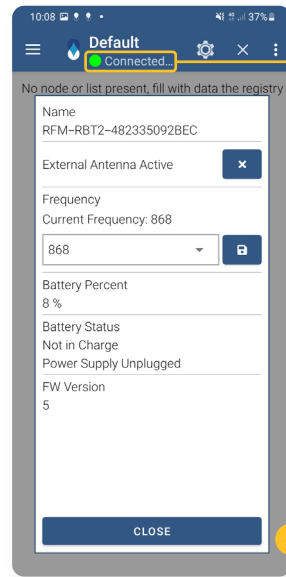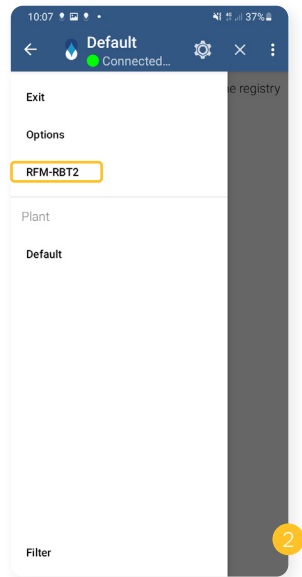**Export Reading**: allows to export the reading file (*.csv/ *.txt) of the selected list to a desired folder located into the smartphone's storage. The file type depends on the configuration chosen in the settings (Options → Export).
**Share reading**: this allows to share the reading file (*.csv/ *.txt) of the selected list via e-mail, text message, or any sharing app

available on the smartphone. The file type depends on the configuration chosen in the settings (Options → Export).
**Catch-all list**: allows to create a new 'read all' list. It will be possible to read all the data received from the radio modules nearby.
***Note**: this mode will display only the serial number of the radio module and the consumption. Furthermore, if the incoming data is encrypted, the values shown could be incorrect (unless the proper decryption key is entered).*

**1)** View all stored and/or available RFM-RBT devices. Select the correct interface to start reading.

**2)** When connected to the RFM-RBT2, an additional item will be diplayed in the left column of the menu, used to configure the receiver.

**3)** The RFM-RBT2 receiver configuration allows:

- ▶ Activate/Deactivate the external antenna.
- ▶ Set the reception frequency (867, 868, 921 Mhz).
- ▶ Battery percentage.

- ▶ Device status (charging, not charging, power supply connected or unplugged).
- ▶ See firmware version.

**4)** RBT interface connection status message can show:

- ▶ Connected (battery percentage only available with RFM-RBT2).
- ▶ Disconnected.
- ▶ Connection in progress.

- 🟢 Connected + battery percentage (RFM-RBT2 only)
- 🔴 Disconnected
- 🟡 Connection in progress

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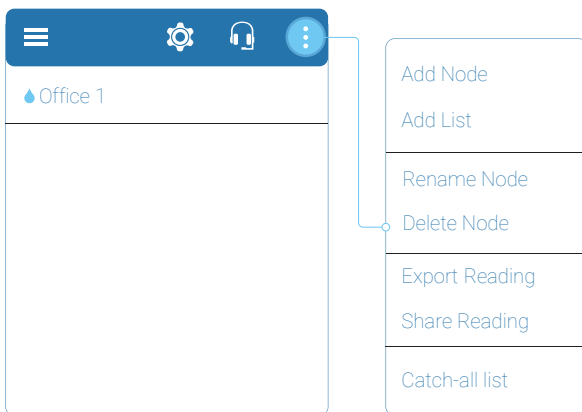


### ⦂ Node List Screen

This section consists of a central list of nodes. The section title is the node name.
Within the side menu, at the top of the menu, there is a '←' button to go back to the previous page.

**Add Node**: allows to create the main node of a tree structure. It is similar to the concept of folders.
**Add List**: allows to create a list of devices based on those installed. In addition to selecting the different types of devices that can be added (water meter, heat meter, humidity and temperature sensor, heat cost allocator, other (RFM-TXE), out of list. It's recommended to name both the list and the node in which the list will be created.
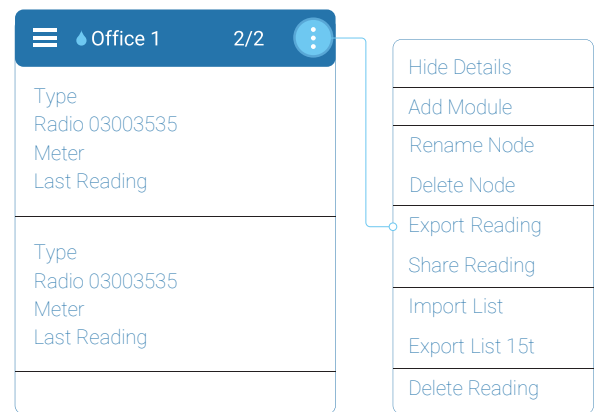**Rename Node**: allows to rename the selected node.
**Delete Node**: allows to delete

the selected node (a further confirmation will be required).
**Export Reading**: allows to export the reading file (*.csv/ *.txt) of the selected list to a desired folder located into the smartphone's storage. The file type depends on the configuration chosen in the settings (Options → Export).
**Share reading**: allows to share the reading file (*.csv/ *.txt) of the selected list via e-mail, text message, or any sharing app available on the smartphone. The file type depends on the configuration chosen in the settings (Options → Export).
**Catch-all list**: allows to create a new 'read all' list. It will be possible to read all the data received from the radio modules nearby.

### ⦂ Module List Screen

This section consists of a central list of modules. The section title is the node name.
Within the side menu, in the first line of the menu, there is a '←' button to go back to the previous page.
In the title bar there is an icon representing the type of list and the number of read devices/ total number of devices.

**Hide Details**: allows to show or hide the details like name, surname, etc.
**Add Module**: opens the 'Registry' window, allowing to add a module into the list.
**Rename Node**: allows to rename the selected node.
**Delete Node**: allows to delete the selected node (a further confirmation will be required).
**Export Reading**: exports the buffer and/ or the *.csv file of the readings,

based on the file type selected in the settings, by choosing an export path (opening explorer). The readings file (in *.csv and/ or *.xml) has the same format as the file that can be exported by B METERING Software.
**Share reading**: shares the buffer and/ or the *.csv file of the readings, based on the file type selected in the settings.
**Import list**: allows to import a *.15t list file from BMETERS' software (B METERING Software, Hydrolink, etc.).
**Export list 15t**: allows to export a *.15t list of devices to allow a subsequent importation into other softwares (B METERING Software, Hydrolink, etc.).
**Delete Reading**: allows to delete all the readings made (a further confirmation will be required).
***Note***: *this operation is not reversible.*
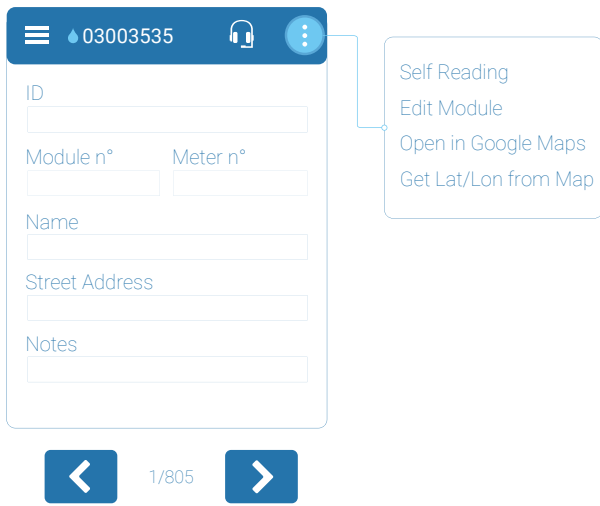
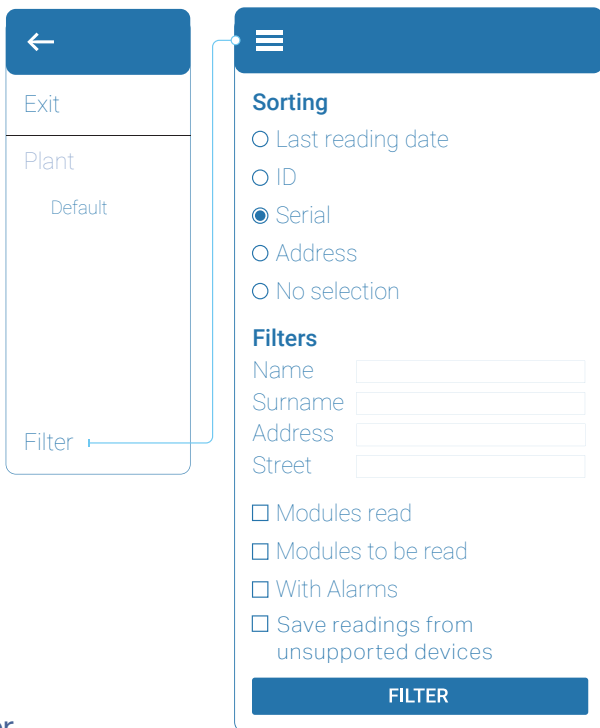The two directional buttons (previous/next) at the bottom allow to scroll through the list of modules.

## Module Screen

**ID**: alphanumeric field typically used for user identification.
**Module n°**: serial number (8 digits) of the radio module or device (for some products it coincides with the serial number of the measuring device). This field is mandatory.
**Meter n°**: serial number of the water meter where a radio module is mounted.
**Name**: user data/ installation point location.

*Note: if the selected meter already has "address" data set, the 'Name' field will be filled with the information automatically. If there are no latitude and longitude data, during startup the map will try to set a marker at that address. If there is no "address" data, it will be possible to fill the field with a complete address or save the desired point by setting a marker directly into the map. Pressing the device in the module list for a long time will open a drop-down menu with the option to move and/or delete the selected module.*

## Device List Screen

**Self-reading**: allows to manually insert a self-reading.
**Edit Module**: allows to edit the module information.
**Open in Google Maps**: opens Google Maps to get the exact location of the meter and all the functions of GMaps itself (navigation, street view etc.).
**Get Lat/Lon from Map**: allows to set the address directly from the map, in order to add latitude and longitude values in the list.
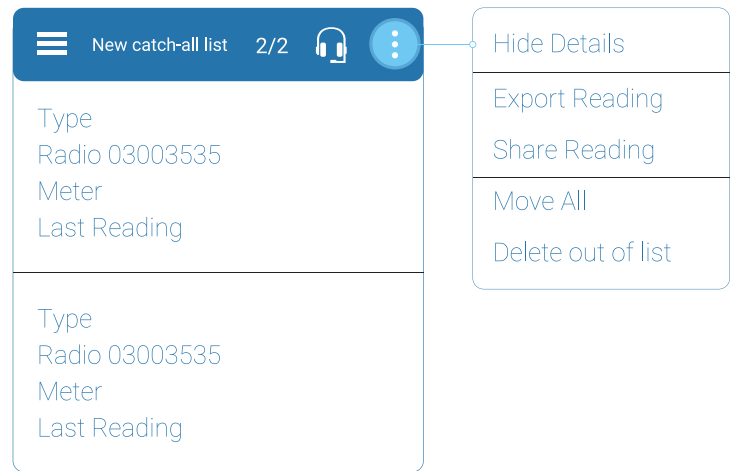


## Filter

With the filter function the user can refine the search and sort the different types of devices; it can be used both on the plant page and within the individual lists. To receive OMS telegrams from non-BMeters devices go to the "Filter" section.
**Note:** To receive from non-BMeters devices, it is necessary to move to a "Listen All" list.

## Catch-all List

**Listening**: sets the device in receiving mode.

**Hide Details**: allows to show or hide the details like name, surname, etc.
**Export Reading**: exports the buffer of the readings by selecting an export path (opening explorer). The readings file has the same format as the one that can be exported by the B METERING Software.
**Share reading**: shares the buffer of the readings by selecting an export path (opening explorer).
**Move all**: allows to move all the (unlisted) devices into a desired Node/List.
**Delete out of list**: allows to delete all device(s). A further confirmation will be required.

# 5. How to use the App

## "Step by step" procedure

1. Pairing with the RFM-RBT/RFM-RBT2 via smartphone Bluetooth. For the pairing procedure please see the RFM-RBT / RFM-RBT2 user manual
2. Enter the main screen of the app.
3. Press 🔵 and select the desired plant.
4. Once the plant is opened, it will be sufficient to press 🔵 and wait for data collection to finish.

   *Note: the reading procedure will be correctly started when, on the RFM-RBT, the yellow colored led will be permanently on, the red colored led will blink intermittently and on the app you will see the word "Connected". With the RFM-RBT 2 the start of the reading procedure will be confirmed*

   *by the green and blue leds, which will flash intermittently, and by the white led wich will flash for each correctly received telegram. The app will display "Connected" with a green icon and battery percentage.*
   A totalizer will be also available, and it shows the number of received devices. 🔋 2/2
5. Once all the readings have been received, stop the receiving procedure by pressing ✕.
6. Now it will be possible to export or share the reading file (*.csv/ *.xml) and the buffer file (*.txt) using the options 'Export Reading' and 'Share Reading'. The reading files will be saved in the folder selected the first time the function has been used.

# 6. How to understand the reading screen

## Water meters

**Name Surname**: visible only if the information has been manually inserted in the relative fields.

**0,0 m³**: water consumption data, expressed in cubic meters.

**Type**: this field indicates the type of radio module (RFM-TX1, RFM-TX1.1, RFM-TX2, RFM-TX2.1, RFM-TXE or RFM-TXE 1.1) or other devices (HYDRODIGIT-S1, IWM-TX5, etc.).

**Radio**: shows the serial number of the radio module.

**Meter**: shows the serial number of the water meter on which the radio module is mounted. It will appear only if the information has been manually inserted in the 'Meter N.' field.

**Last reading**: indicates the date and time of the last reading.

**Address**: refers to the device's location (Street, Flat, City, Postal Code).

**Errors**: each error will be reported with a different background color.

Meter not read  Meter OK  Reverse Flow  Module Removal
Wrong Installation  Sensor Fraud  Battery (less than 1 year remaining)
Water Loss  Magnetic Fraud  Qmax Overflow (after 10 min > Q3)
NFC Fraud  Multiple Errors  Burst (after 30 min of Qmax Overflow)

## Heat cost allocators

**Name Surname**: visible only if the information has been manually inserted in the relative fields.

**Type**: this field indicates the type of radio module (HYDROCLIMA-RFM, HYDROCLIMA 2).

**Radio**: shows the serial number of the device.

**Meter**: shows the serial number of the thermal energy meter if equipped with a non-integrated radio module. It will appear only if the information has been manually inserted in the 'Meter N.' field.

**Last reading**: indicates the date and time of the last reading.

**Address**: refers to the device's location (Street, Flat, City, Postal Code).

**0,0 [C]**: heating consumption data, expressed in heat cost allocators units.

**Number of telegrams**: number of radio packets received

**Errors**: each error will be reported with a different background color.

Meter not read  Meter OK  Multiple Errors

## Other (RFM-TXE gas and electricity version)

**Name Surname**: visible only if the information has been manually inserted in the 'name' and 'surname' of the tenants field.

**Type**: this field indicates the type of radio module (RFM-TXE)

**Radio**: shows the serial number of the device.

**Meter**: shows the serial number of the thermal energy meter if equipped with a non-integrated radio module. It will appear only if the information has been manually inserted in the 'Meter N.' field.

**Last reading**: indicates the date and time of the last reading.

**Address**: refers to the device's location (Street, Flat, City, Postal Code).

**XX,XX unit**: consumption data.

**Errors**: each error will be reported with a different background color.

Meter not read  Meter OK  Magnetic Fraud  Multiple Errors
Battery (less than 1 year remaining)

## Thermal energy meters

**Name Surname**: visible only if the information has been manually inserted in the relative fields.

**0,0 kWh**: heating consumption data.

**Cooling data 0.0 kWh**: (if enabled on meter) cooling consumption indication.

**Type**: this field indicates the type of radio module (RFM-TXH, RFM-TXE or RFM-TXE 1.1) or other devices (HYDROSONIS-ULC, HYDROCAL-M3, HYDROSPLIT-M3, etc.).

**Radio**: shows the serial number of the radio module.

**Meter**: shows the serial number of the thermal energy meter if equipped with a non-integrated radio module. It will appear only if the information has been manually inserted in the 'Meter N.' field.

**Last reading**: indicates the date and time of the last reading.

**Address**: refers to the device's location (Street, Flat, City, Postal Code).

**Errors**: each error will be reported with a different background color.

Meter not read  Meter OK  Sensor Error  Module Removal  Magnetic Fraud
Multiple Errors  Battery (less than 1 year remaining)

## Room sensors

**Name Surname**: visible only if the information has been manually inserted in the relative fields.

**Type**: this field indicates the type of radio module (RFM-AMB)

**Radio**: shows the serial number of the device.

**Meter**: shows the serial number of the thermal energy meter if equipped with a non-integrated radio module. It will appear only if the information has been manually inserted in the 'Meter N.' field.

**Last reading**: indicates the date and time of the last reading.

**Address**: refers to the device's location (Street, Flat, City, Postal Code).

**XX,XX °C**: average ambient temperature.

**Humidity XX.X %RH**: relative humidity percentage.

**Errors**: each error will be reported with a different background color.

Meter not read  Meter OK  Module Removal  Sensor Error  Multiple Errors
Humidity Exceeded  Temperature Exceeded  Battery (less than 1 year remaining)

## Out of list

**Name Surname**: visible only if the information has been manually inserted in the relative fields.

**Manifacturer**: indicates the initials of the manufacturer of the device.

**Radio**: shows the serial number of the device.

**Last reading**: indicates the date and time of the last reading.

**ID**: visible only if the information has been manually inserted in the relative fields.