

eCatcher Mobile App: Connect to an Ewon

And the Device(s) behind an Ewon

SOFTWARE DESIGN GUIDE

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Important User Information

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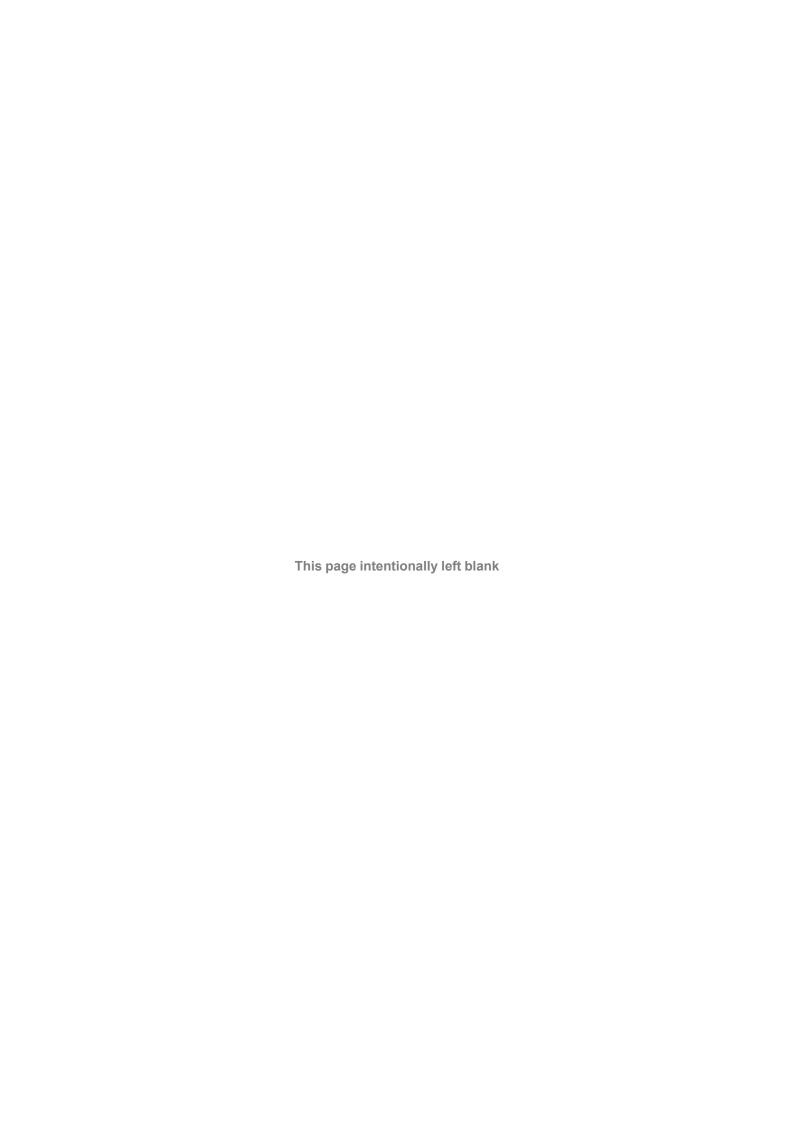
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1 Preface

1.1 About This Document

This document describes the process to connect to an Ewon through a secure Talk2M VPN tunnel using the eCatcher Mobile App.

For additional related documentation and file downloads, please visit www.ewon.biz/support.

1.2 Document history

Version	Date	Description
1.0	2020-05-06	Official release

1.3 Related Documents

Document	Author	Document ID
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1.4 Trademark Information

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Product Summary 4 (22)

2 Product Summary

2.1 Introduction

The eCatcher Mobile App is used to initialize secure remote access through Talk2M VPN tunnels.

Once you are connected to an Ewon through the eCatcher Mobile App, you are able to initialize HTTP(S), VNC or RDP connection to the devices linked to the connected Ewon thanks to a third-party app or reach the web interface of the Ewon via your Internet browser.

- Schneider Magelis
- Rockwell
- Siemens SIMATIC
- Beijer
- Hakko

Take advantage of the user-friendliness and security of eCatcher Mobile App by validating direct access to a Talk2M account through PIN code or fingerprint, similar to most mobile banking applications.

2.2 Requirements

You must respect some requirements to take advantage of eCatcher Mobile App:

- You can use the app only on smartphones and tablets running iOS* (v9.0 and later) or Android* (v4.4 Kitkat and later).
- The mobile device must have an Internet connection.
- The user must already have a Talk2M account (either Free+ or Pro) with device(s) registered to this account.

2.3 eCatcher – eCatcher Mobile App – M2Web

There are currently 3 methods to remotely access an Ewon which is connected to Talk2M.

2.3.1 eCatcher

eCatcher is the Windows-only desktop version of Talk2M. It is used for configuration, management and remote access to the Ewons.

The eCatcher software allows:

- the remote access to an Ewon through a Talk2M VPN tunnel;
- the remote access to a device linked to an Ewon through a Talk2M VPN tunnel;
- the configuration of parameter such
 - the Talk2M account itself;
 - the users and their groups;
 - the Ewons and their pools;
 - the third-party devices connection parameters;

For more information about eCatcher desktop version, refer to www.ewon.biz/support.

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2.3.2 eCatcher Mobile App

eCatcher Mobile App is a native application that runs on iOS° and Android°.

Similar to the desktop version, you can use the eCatcher Mobile App to access remotely an Ewon and the devices connected to this Ewon. However, it does not allow the configuration and management of the Talk2M account (e.g.: adding a user, create an Ewon pool, edit Ewon description, ...).

Once connected to an Ewon on his mobile device, the user is able to:

- open the web interface of the Ewon in a browser;
- connect to a device linked to an Ewon using VNC or RDP protocols thanks to a third-party app;
- use your standard app to connect to your industrial devices;
- display KPIs values of your installation.

2.3.3 M2Web

M2Web allows the remote access to the web interface of anEwon or the LAN devices behind it.

Unlike the eCatcher Mobile App, it doesn't use VPN protocol but secured HTTPS instead. M2Web supports only HTTP(S), VNC or RDP connections.

It makes this solution device independent: only a web browser is required.

However, similar to eCatcher Mobile App, M2Web doesn't offer the possibility to configure or manage the Talk2M account (e.g.: adding a user, create an Ewon pool, edit Ewon description, ...).

Use of eCatcher Mobile App 6 (22)

3 Use of eCatcher Mobile App

3.1 Installation

To get the eCatcher Mobile App on your mobile device, proceed as follows:

- 1. Download and install the eCatcher Mobile App from the relevant application store:
 - Apple App Store (iOS)
 - ► Google Play Store (Android)

Once you have installed the eCatcher Mobile App, tap on it to open the app.

3.2 Log in

As you tapped on the eCatcher Mobile App, the Talk2M splash screen appears followed by the form to log in to your Talk2M account.

To log in to your Talk2M account and display the list of reachable Ewons, proceed as follows:

- 1. Provide the <Talk2M account name>, your <username> and the associated <password>.
- 2. Check the **Keep me logged in** option if you wish to be remembered and avoid future log in requests.
- 3. Tap the **Login** button.

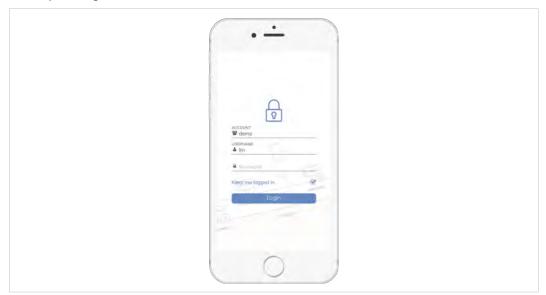


Fig. 1 Talk2M account login

For more information about the login form, refer to Login Form, p. 15

3.2.1 Two-Factor Authentication

If the administrator of the Talk2M account has activated the two-factor authentication, you will receive an SMS with a code to confirm the log in request.

3.2.2 Remember Me

If you checked the **Keep me logged in** option in the log in form, eCatcher Mobile App will ask you to set up a 4-digits PIN code and confirm this newly created code.

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This code is used to unlock the eCatcher Mobile App in case of inactivity for a certain amount of time or if you kill / force quit the app.

In case you have a mobile device with a fingerprint identity sensor, this sensor can be used instead of the PIN code.



Fig. 2 PIN Code Creation & Confirmation. Unlock eCatcher Mobile App with Fingerprint or PIN Code

For more information about the PIN code, refer to PIN Code / Fingerprint, p. 16.

3.3 Connection

3.3.1 To an Ewon

The main window of the eCatcher Mobile App displays a list of all Ewons — active or disabled—created in your Talk2M account.

To connect to an Ewon, it needs to be online thus with a blue colored border, in opposition to gray which indicates the Ewon is offline. For more information, please refer to *List of Ewons, p.* 19.

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To connect to an Ewon, proceed as follows:

1. Tap on the Ewon you wish to connect to from the main window.

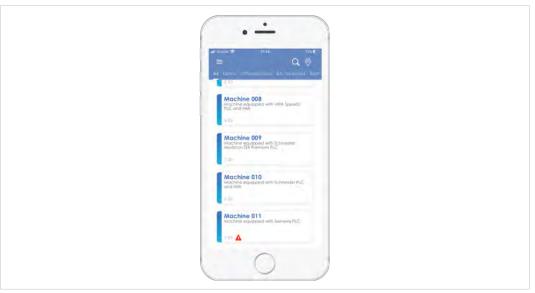


Fig. 3 Select your Ewon

→ eCatcher Mobile App now displays the details of this Ewon.



Fig. 4 Detail view of selected Ewon

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- 2. Tap on the **Connect** button.
 - → eCatcher Mobile App now tries to connect to the Ewon.
 - → The border color changes which indicates the status of the connection:
 - Orange: the VPN connection is being initialized.
 - Green: the VPN connection has been successfully established.
 - Red: the VPN connection could not be established or has been terminated.

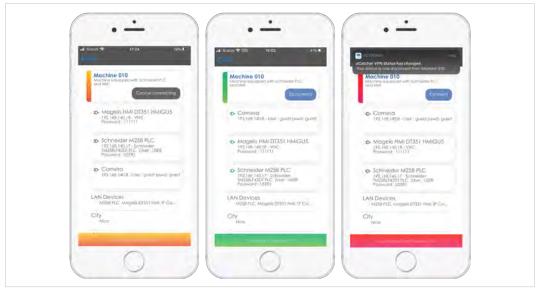


Fig. 5 Status of VPN connection



If the Ewon is based on a triggered connection and must be waken-up to turn on its VPN connection, you will see a **Wake up** button instead of the **Connect** button.

3.3.2 To Device(s) behind the Ewon

To connect to device(s) that are plugged in to an Ewon, you must first be connected to this Ewon. Follow the steps described in *To an Ewon*, *p. 7* to connect to the desired Ewon.

In this section, we will be connected to an Ewon *Machine 010* from the public *Demo* Talk2M account through the eCatcher Mobile App. This Ewon is plugged with an HMI that we will display on our mobile device through a third-party app: the Mocha VNC Lite* (for <u>iOS</u>* or for <u>Android</u>*).



If you want an access to the Demo Talk2m account, you can request one on the Ewon website: https://resources.ewon.biz/en/page/live-demo/flexy

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To connect to the remote device behind the Ewon, proceed as follows:

1. Tap on the Ewon you are currently connect to from the main view.

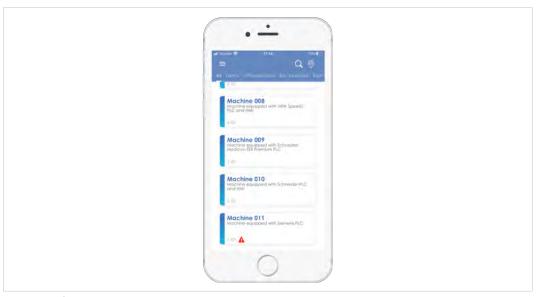


Fig. 6 Select your Ewon

2. Tap on the device you would like to connect to from the Ewon details view. In our case, it is an HMI: Magelis* DT 351 HMIGU5.



Fig. 7 Detail view of selected Ewon

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3. Tap on Copy device IP to clipboard.

→ The IP address of the remote device is copied and you can use it in the third–party app.



Fig. 8 Copy of the remote device IP address

4. Open the third-party app that you will use to establish the connection to the remote device. In our case, it is the Mocha VNC Lite* app.

You could also use the official Vijeo Design'Air Plus® app from Schneider®.

 $5. \quad \hbox{Configure the third-party app with the required credentials / parameters}.$

In our case, we configure the Mocha VNC Lite® app with the following parameters:

IP address: 192.168.140.18

Server port: 5900

VNC password: 111111



Fig. 9 Configuration of the third-party app

Use of eCatcher Mobile App 12 (22)

6. Connect to the remote device in the third-party app.



Fig. 10 Visualization of HMI

3.4 Disconnection

To disconnect from an Ewon, there are different methods.

Method #1

- Tap on <the name of theEwon> you are currently connected to from the main view.
- Tap on **Disconnect**.
- Confirm the disconnection.
 - → You are now disconnected from the Ewon and the VPN tunnel has been terminated.



Fig. 11 Disconnect from detail view

Use of eCatcher Mobile App 13 (22)

Method #2

- Tap the green bar at the bottom of the screen.
- Confirm you want to disconnect from the Ewon.
 - ightarrow You are now disconnected from the Ewon and the VPN tunnel has been terminated.

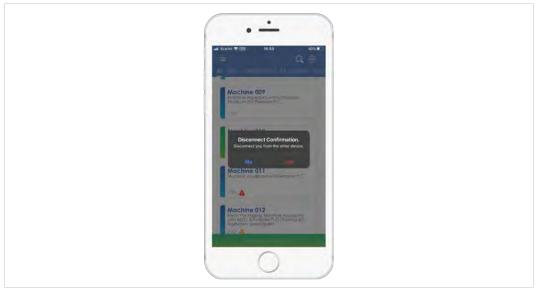
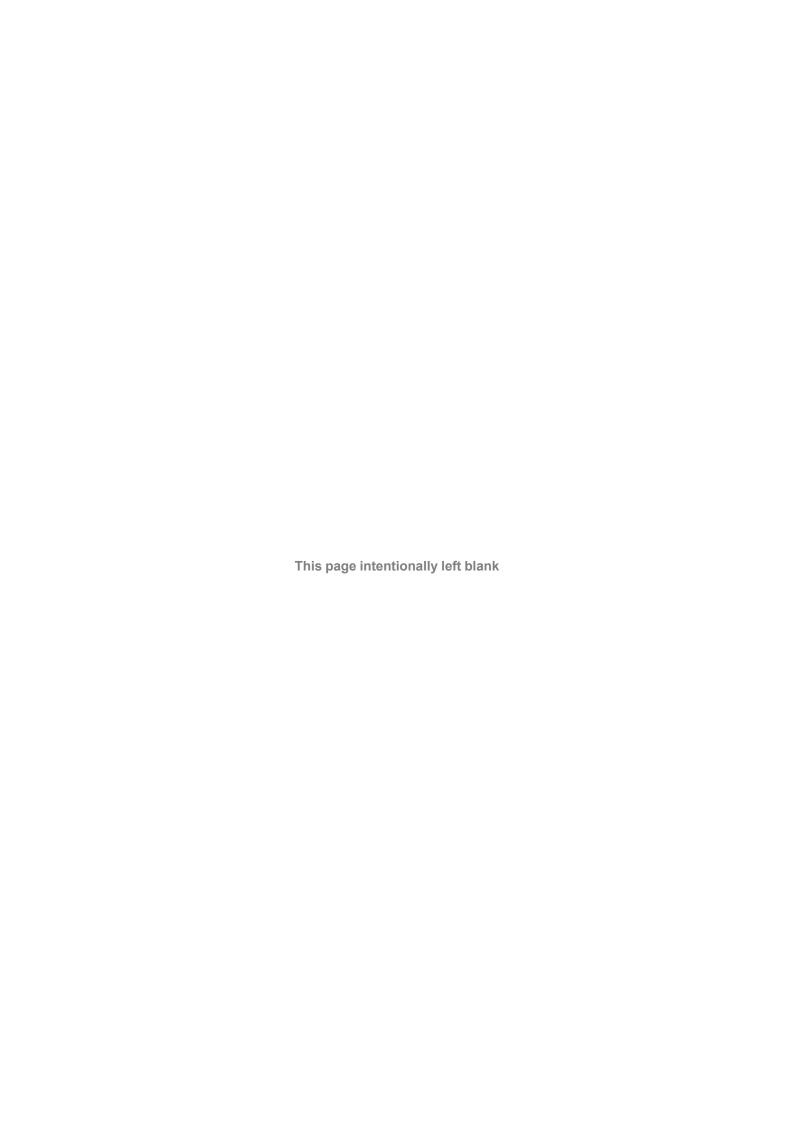


Fig. 12 Disconnect from status bar



Appendix A: User Interface 15 (22)

A User Interface

This section covers the different screens that can be seen during the eCatcher Mobile App experience.

A.1 Login Form



Fig. 13 Login Form

If you didn't open the eCatcher Mobile App previously (first time open, after a reboot, ...) or if somebody performed a proper logout from a Talk2M account, the login form will be the screen displayed when you open the eCatcher Mobile App.

To connect to a Talk2M account, several fields must be filled in:

- the account name
- the username
- the password

Optionally, you can check a Keep me logged in box.

Once those fields correctly supplied and the *Login* button tapped, eCatcher Mobile App will log you in your Talk2M account.

If the *Keep me logged in* box has been checked, it will first ask for a PIN code which will ease the future connections.

If a user is connected to a Talk2M account and performs a log out, the eCatcher Mobile App switches back to the login form with the account and username fields already prefilled.

Appendix A: User Interface 16 (22)

A.1.1 PIN Code / Fingerprint



Fig. 14 PIN Code Creation & Confirmation. Unlock eCatcher Mobile App with Fingerprint or PIN Code

The PIN code / fingerprin identity sensor is a security feature which aims at preventing a non-authorized person to access a remembered Talk2M account.

The code is created and confirmed right after a login form submission only if you checked the *Keep me logged in* box.



We recommend setting a strong PIN code different than the PIN code used to unlock the mobile device.

If a user kills the app, has been idle too long or reboots his mobile device while he was connected to a Talk2M account, the PIN code or the fingerprint authentication will be asked.

Once the PIN code correctly inserted or the fingerprint correctly recognized, eCatcher Mobile App will be unlocked and you can have access to the Talk2M account.

A.2 Main View

The main view is a screen with a list of all the Ewons registered on the Talk2M account.

Other options are available such as a sidebar offering app configuration, a search function, a map / list view selection or an Ewon pool selection if using a Talk2M PRO account.

Appendix A: User Interface 17 (22)

A.2.1 Sidebar Menu



Fig. 15 Sidebar Menu

The sidebar menu is accessible by tapping the top left button on the main view.

The sidebar menu offers 3 options:

Log out

By logging out, you perform a proper disconnection from the Talk2M account and a redirection to the login form occurs.

• TCP – UDP – TCP/UDP

eCatcher Mobile App offers the choice to select which protocol should be used to establish the connection to the Ewon. By default, it is set to **TCP/UDP**.

Notifications

Choose whether notifications should appear on the mobile devices when events occur in the app.

Appendix A: User Interface 18 (22)

A.2.2 Search

A search icon is available in the upper right corner.



Fig. 16 Search function

The search function offers the possibility to filter the list of Ewons available in the Talk2M account.

The search is only taking into consideration the **name** and the **description** of the Ewon. Custom fields and remote devices names are not considered.

You can also see a history of previous search under the search bar.

To clean the search bar or to erase an item from the history, click on the cross near the label.

A.2.3 List / Map View

By default, it is always the list view displayed in the main view.

However, a map icon is available in the upper right corner.

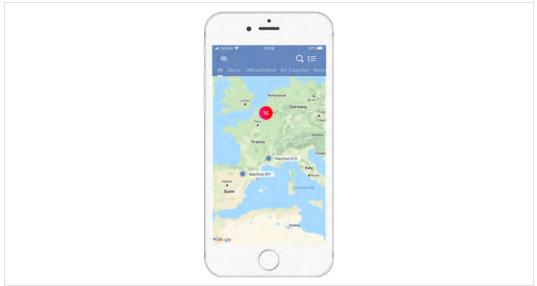


Fig. 17 Map view

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The map view is another possibility of displaying your Ewons in the eCatcher Mobile App.

You can zoom in / out to ungroup the Ewons if they are located in the same area and to close to one another.

If you select the map view, the map icon will switch to the list icon which offers the possibility to display a list of the Ewons instead of a map.

A.2.4 Pools

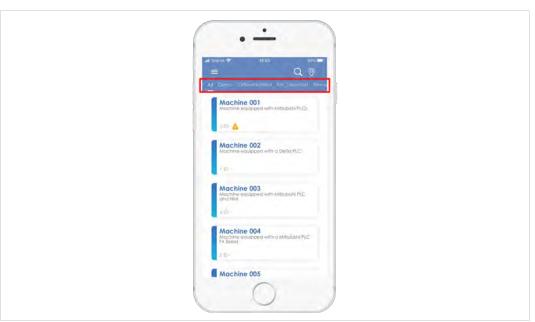


Fig. 18 Filtering by Pools

This section concerns the Talk2M Pro accounts only.

By default, when connected to a Talk2M account, the list of all the Ewons belonging to this Talk2M account are displayed. However, it is possible to sort the list and display the Ewons of a specific pool.

In the top menu, you can swipe the row listing the pools available in the Talk2M PRO account and tap on the desired pool to display the list of the Ewons belonging to the selected pool.

A.2.5 List of Ewons

The Ewons displayed are the ones you have been authorized to see. This configuration is done by the administrator of the Talk2M account in the eCatcher desktop version.

Each Ewon is characterized by:

- a name,
- [optional] a description,
- [optional] the number of devices illustrated by a plug icon connected to the Ewon (and configured in eCatcher desktop version),
- [optional] a wake-up sign illustrated by a clock icon if the Ewon is based on a triggered connection type,
- [optional] an alarm linked to KPIs illustrated by a warning icon.

Appendix A: User Interface 20 (22)

The border color of each Ewon represents its connectivity status:

Blue
The Ewon is online.

The Ewon is offline.
Two cases can be considered:
The Ewon is not connected to the Internet, thus appearing offline.
The Ewon is based on a triggered connection. A wake-up message needs to be sent to switch the device online.
This can be done by tapping on the Ewon, then the Wake Up button.

The VPN connection to this Ewon is being either established or terminated.

The VPN connection to this Ewon has been terminated.



If the user is already connected to an Ewon on another platform (eCatcher desktop version or even in another eCatcher Mobile App), a red bar appears at the bottom of the screen indicating there is already an active VPN connection with the current username.

A.3 Ewon Detailed View



Fig. 19 Detailed View of an Ewon

The detailed view of an Ewon shows different pieces of information:

the Ewon itself

The name and description of the Ewon appears on top of the screen.

A button is also available which purpose is:

- to connect to the Ewon if it is online.
- to wake up the eCatcher Mobile App if it is offline and based on a triggered connection type.

This button disappear if the device isn't connected to the Talk2M service.

Appendix A: User Interface 21 (22)

KPIs

If you have configured KPIs in your Ewon, their values and their alarms are shown under the name and description of the Ewon.

The alarm of the KPIs is based on a color definition:

Blue KPI is in normal state

Yellow The alarm is in Low or in High state.

Red The alarm is in LowLow or in HighHigh state.

For more information on how to manage KPIs on an Ewon, please refer to KB-0278-00: Configure Ewon Tags as KPI

Devices

If devices are plugged in the Ewon and have been defined / configured via the eCatcher desktop version, they appear underneath the name & description of the Ewon and its KPIs (if available) as a list.

Each remote device has its own wrapper containing its name, its IP address and a description if provided.

You can tap on each device which opens a multiple options frame. You will be able to:

- Copy the device IP address;
- Open the URL (IP address) in the mobile browser;
- Disconnect from the Ewon.

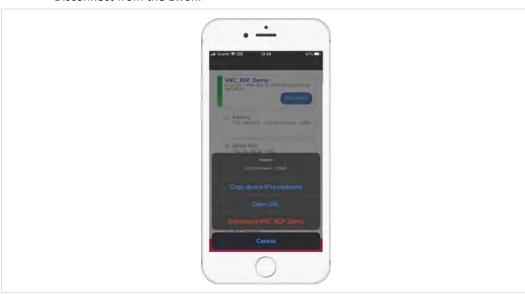


Fig. 20 Options of a remote devie

Custom Fields

The custom fields which are personalized by the admin of the Talk2M account are displayed at the bottom of the screen.

The custom fields bring extra information on the Ewon or the remote devices plugged in the Ewon.