TC MOBILE APP GUIDE

**Getting started with the app for
TC MOBILE I/O X200...**

Technical note
107977_en_00

1 Description

This technical note describes how to use the app to switch outputs and monitor inputs.

The app can be used in combination with the following signaling systems:

Order No.	Designation	Link to product	
2903805	TC MOBILE I/O X200	phoenixcontact.net/product/2903805	
2903806	TC MOBILE I/O X200 AC	phoenixcontact.net/product/2903806	

⚠ **WARNING:**
This technical note does **not** replace the device-specific documents.
Please observe the safety notes in the associated packing slips and user manuals.

ℹ Make sure you always use the latest documentation.
It can be downloaded using the links provided above.

Table of contents

2 Installing the hardware

- Install the TC Mobile device as described in the packing slip. Observe the safety notes in the packing slip.

3 Configuration via the web browser

There are two options for logging in on the device:
- Via an IP address
- Via a NetBIOS name

IP address

- Start a web browser. We recommend the current version of Firefox.
- Deactivate the proxy server setting in your browser.
  In Firefox, you will find this setting under: "Options menu, Advanced, Network, Connection, Settings".
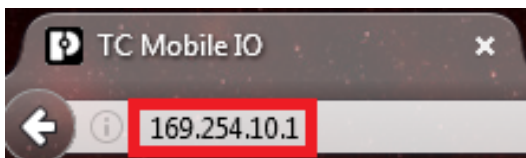- Enter the IP address 169.254.10.1 directly into the address line.

Figure 1   IP address

NetBIOS name

- Start a web browser.
- Enter "tcmobile" in the address line.

- Log in as an administrator with the correct user name and password.
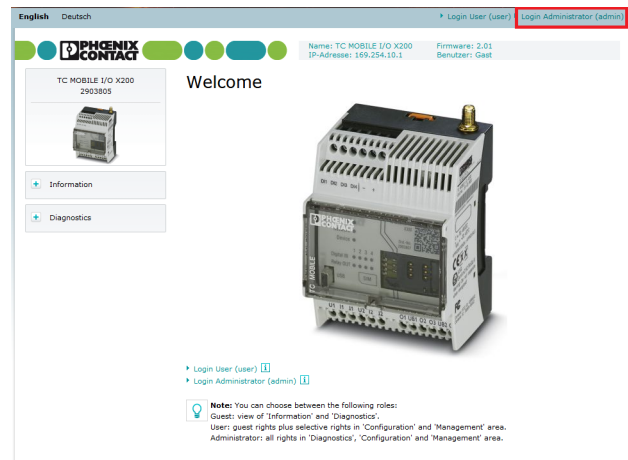 - User name: admin
  - Password: admin

Figure 2   Logging in

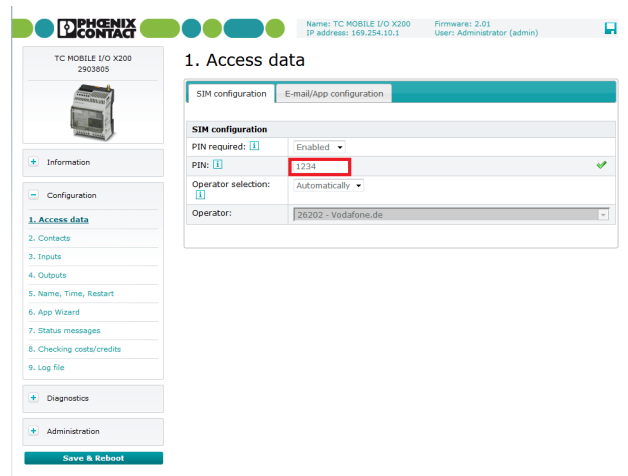- Under "Access data, PIN", enter the PIN for the SIM card.

Figure 3   Entering the PIN

• In the "E-mail/App configuration" tab, enter the APN. The APN can be obtained from your provider.
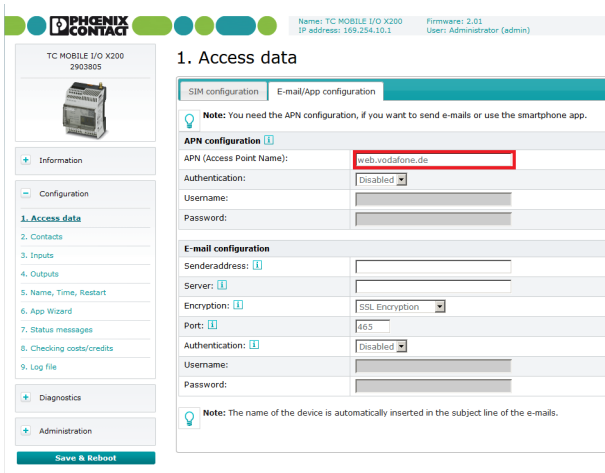

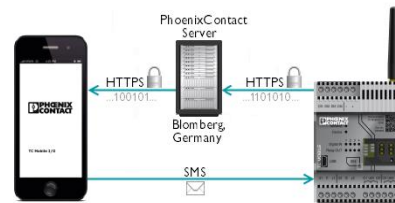Figure 4   Entering the APN

3.1   App Wizard

• Click on "App Wizard".

Figure 5   App Wizard

• Enable using the smartphone app.

6. App Wizard

Figure 6   Enabling

• To protect your device against unauthorized access, enter a password for the app.
• Choose who will have access to the device:
    – Everyone
    – All saved contacts[1]
    – Selected contacts[1]

Figure 7   Authentication for using the app

[1] Contacts must be saved to the address book for this option to be available.

- Choose whether status messages should be sent after a power failure or cyclically.

Due to technical reasons, communication is in the form of SMS commands only. The device response is transmitted as data and stored on a Phoenix Contact server. So, one update every minute results in around 15 MB of data traffic per month.
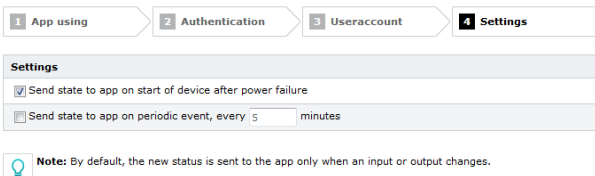
Figure 8   Status messages

3.2   Assigning a name

- Under "Name, Time, Restart", enter the name of the device.
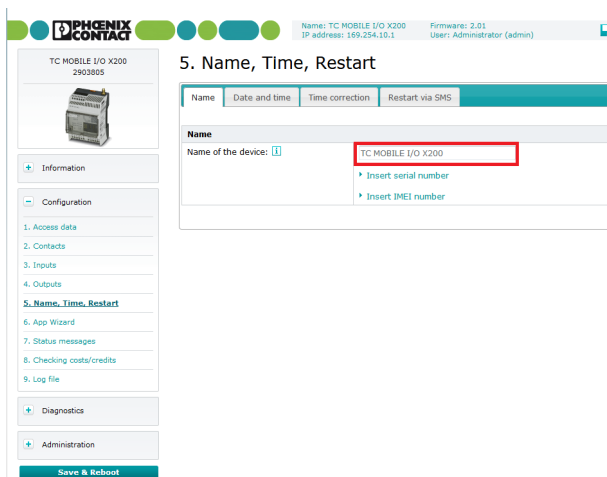
Figure 9   Assigning a name

- In the "Date and time" tab, set the current time.

3.3   Configuring the outputs

- Activate the outputs that you want to switch.
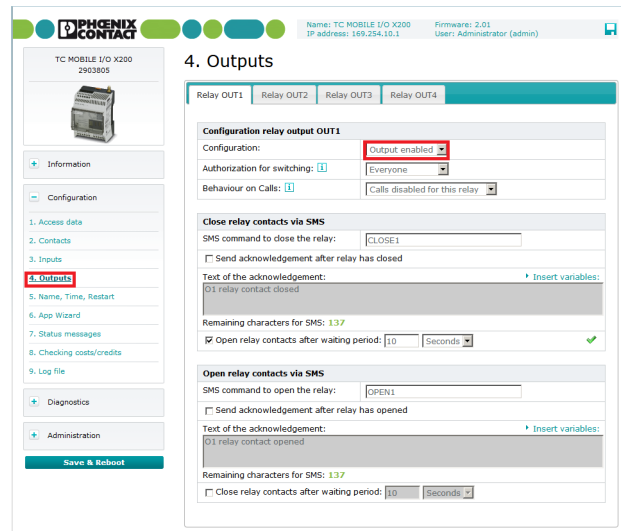
Figure 10   Activating the outputs

Opening relay contacts automatically

	If you want to use this function:
i	- Make sure that the automatic fall time is not set too low.

We recommend a fall time of at least 30 seconds. Depending on your application, it may be necessary to set a longer fall time.

Figure 11   Setting the automatic fall time

• Click on "Save & Reboot" to apply the settings.

Figure 12   Saving

4   App

• Download the "TC Mobile I/O" app from your smartphone's App Store.

Figure 13   Android

Figure 14   iOS

- Start the app.
- Click the plus symbol to add a device.

Figure 15   Adding a device

- Enter the following data:
  - Phone number of the SIM card in the TC Mobile device
  - Serial number of the TC Mobile device, which is printed on the side
  - Password you entered in the App Wizard (see Page 4)

Telephone number:

0123456789

Serial number:

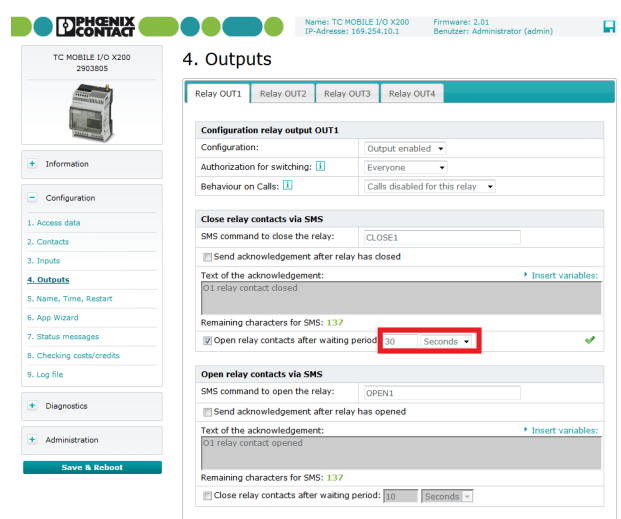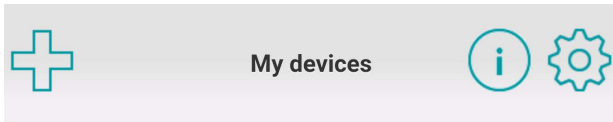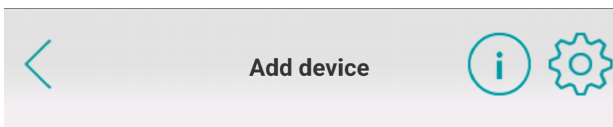1122334455

Password:

tcmobile

Add

Note! Beforde adding a device, make sure that the device is operating and that it has been configured via the app wizard on the configuration page of TC MOBILE I/O.

Figure 16   Entering the device data

- Click on "Add".

A connection is now established with the TC Mobile device. Once the connection has been established, you can use the app to operate the device. For more information, please refer to Page 8 onwards.

4.1   Possible errors

If the connection could not be established successfully, there are three possible reasons for this:

– Wrong phone number
– Wrong serial number
– Wrong password

Error messages

Error

No data on the server. Timeout during request of the relay: 1122334455 . Make sure that you and the TC MOBILE I/O have mobile reception and can communicate data. The desired action must also be permitted for the device.

OK
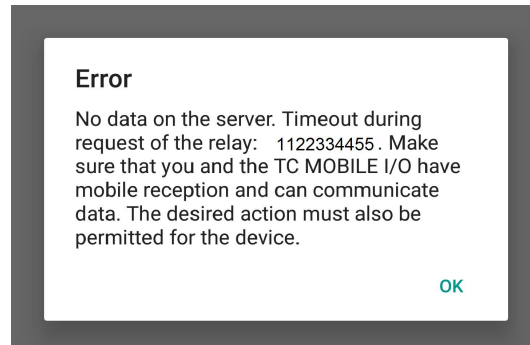
Figure 17   Wrong phone number

Error

No data on the server. Timeout during request of the relay: 1111111111. Make sure that you and the TC MOBILE I/O have mobile reception and can communicate data. The desired action must also be permitted for the device.

OK
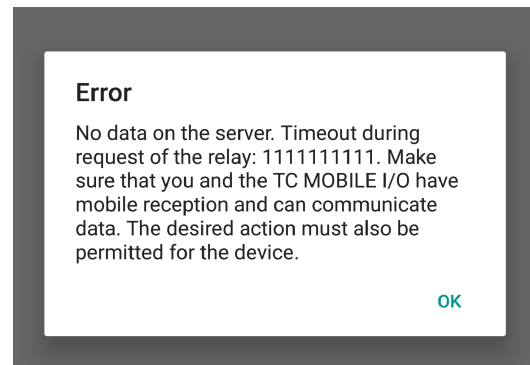
Figure 18   Wrong serial number

Wrong password

For: 1122334455 . Password of the app does not correspond to the password of the relay. Please check your configuration.

OK
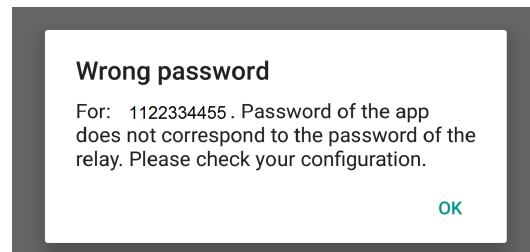
Figure 19   Wrong password

4.2 Switching the outputs

- Select the desired device from the device list.
- On the "Outputs" tab, click on "Rename outputs".

- Enter a name.
- Click on "Apply".

Figure 20   Renaming outputs

Figure 21   Saving

Now you can switch the outputs via SMS. This function is only available if you have previously activated the outputs in the web-based management of the TC Mobile device (see Page 5).
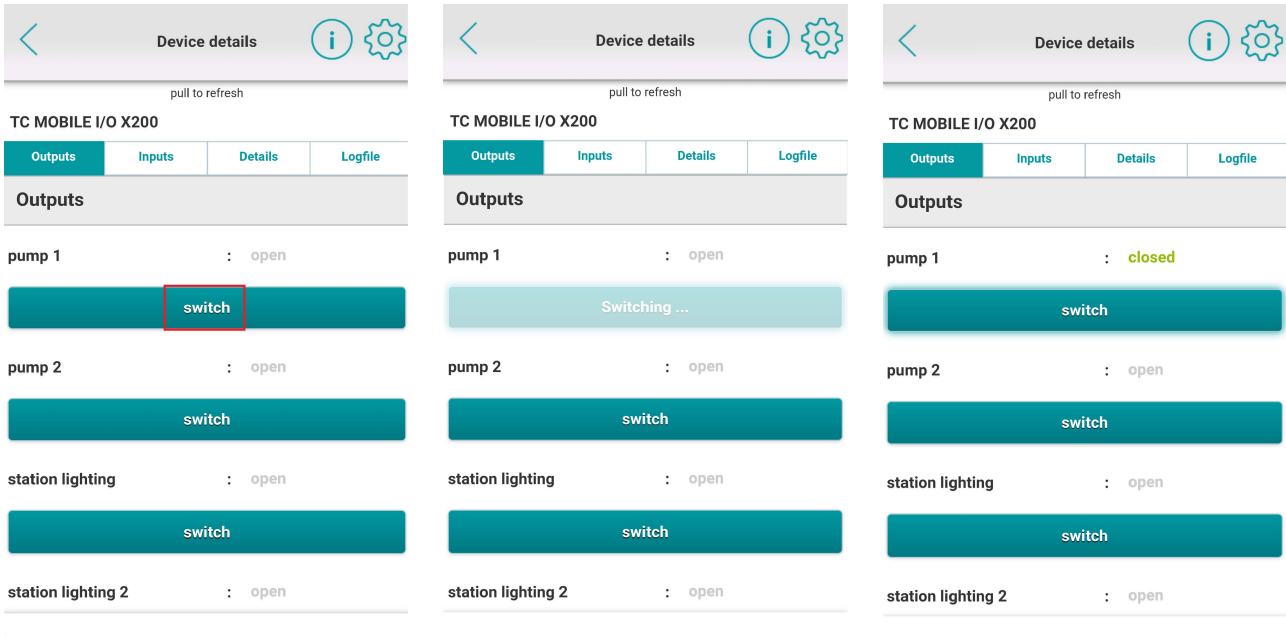
Figure 22   Switching the outputs via the app

4.3 Monitoring the inputs

- On the "Inputs" tab, click on "Rename inputs".

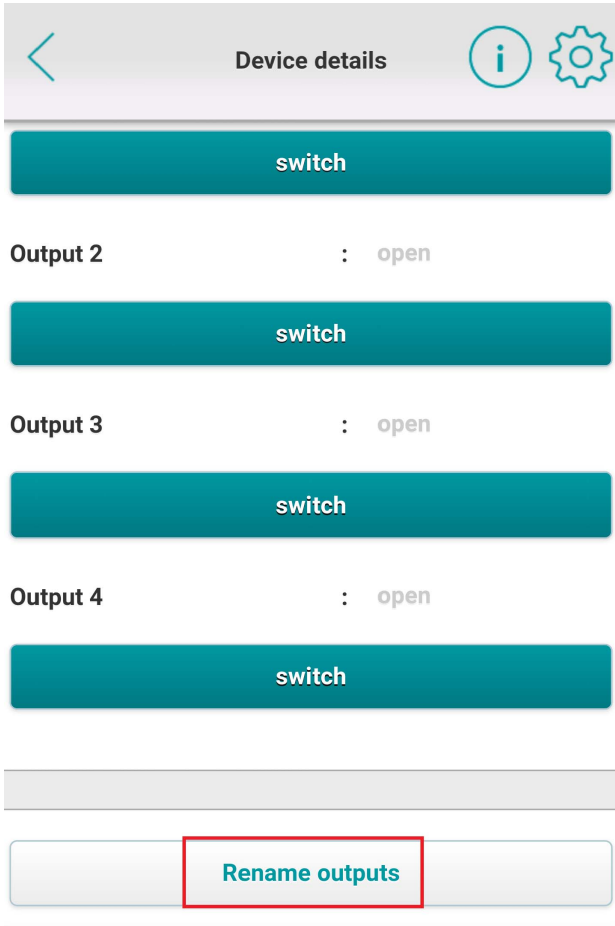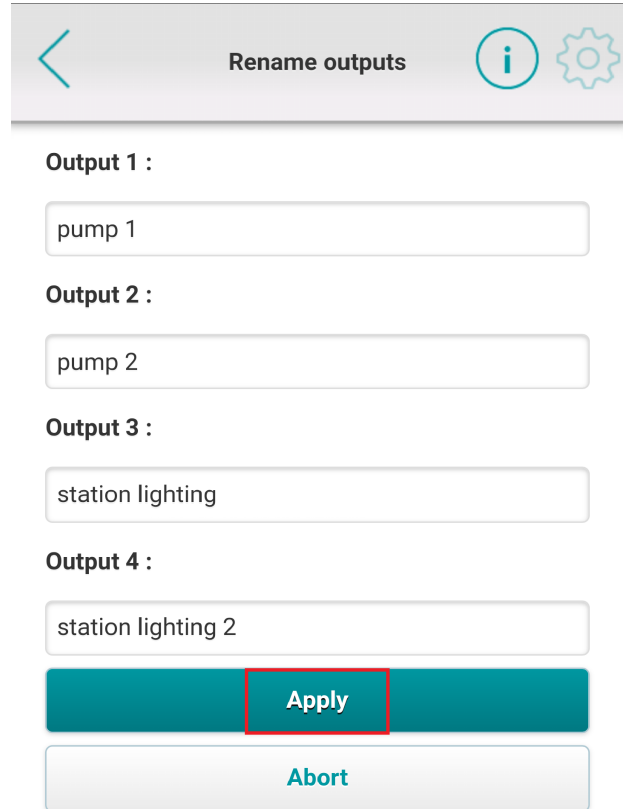|	
‹	**Device details** ⓘ ⚙
input 3	: Low
input 4	: Low
Analog inputs	
input 5	
2976 l/h	
input 6	
-90 degree	
Rename inputs	
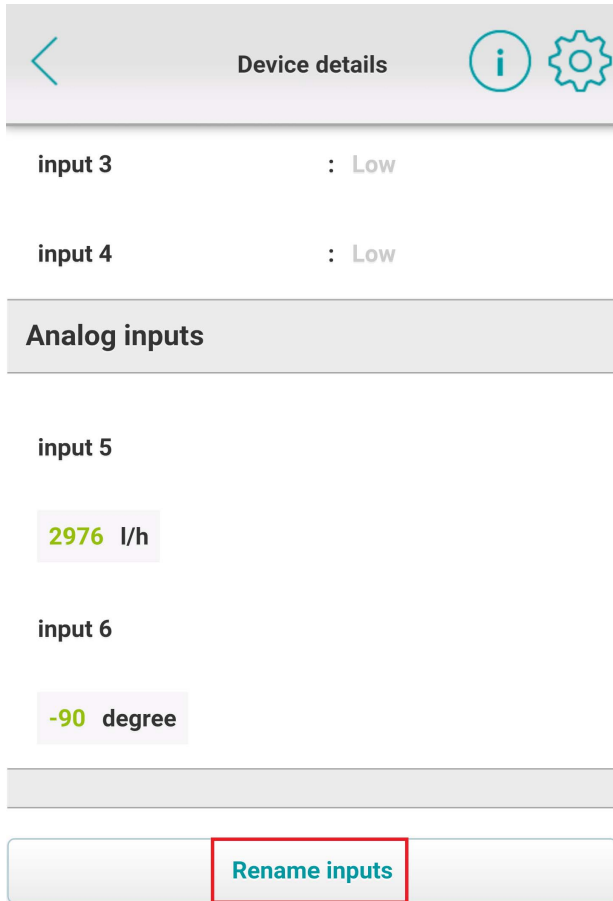
Figure 23   Renaming the inputs

- Enter a name.
- Click on "Apply".

‹ **Rename inputs** ⓘ ⚙
Digital input 2 :
error pump 2
Digital input 3 :
door contact
Digital input 4 :
not connected
Analog input 1 :
flow amount
Analog input 2 :
temperature
Apply
Abort

Figure 24   Saving

- Click on the cog symbol in the menu bar.
- Select whether you want to enable cyclical updating.
  - Cyclical polling does result in increased data traffic, but you receive up-to-date information automatically.
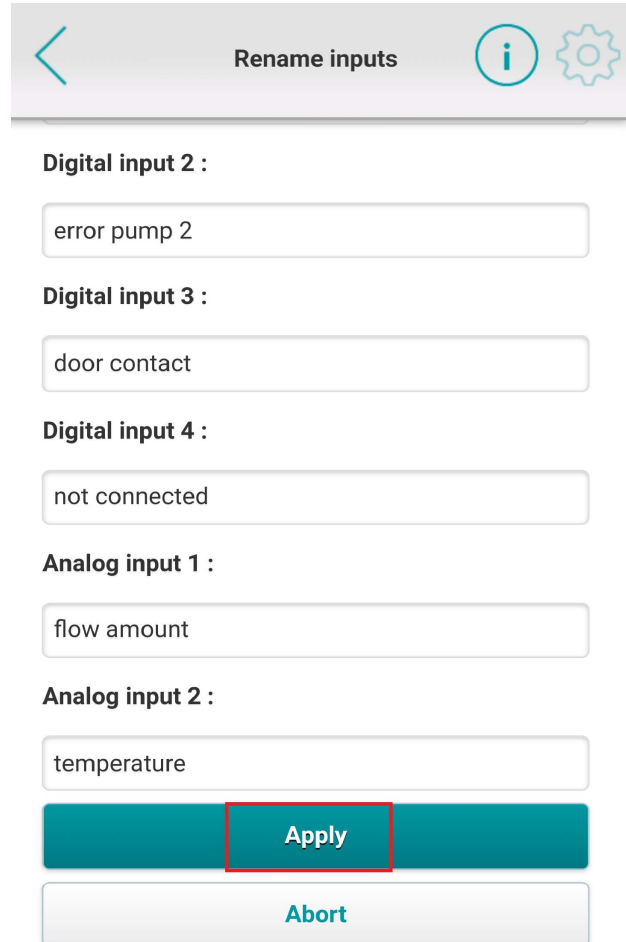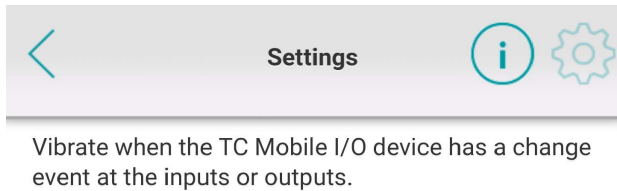 - With manual polling, you will have less data traffic and so lower costs.

Vibrate when the TC Mobile I/O device has a change event at the inputs or outputs.

Polling

Polling only works if the app is active. The app is not updated in the background.

The status stored on the communication server is automatically polled. This results in additional data traffic. An update interval of one hour means about 100 kB per month and device.

The periodic sending of the status must also be activated on the TC MOBILE I/O X200. Without this option, the values are only updated for change events at the inputs or outputs.

Enable polling :

Polling interval :

10   Seconds

Figure 25   Enabling cyclical polling

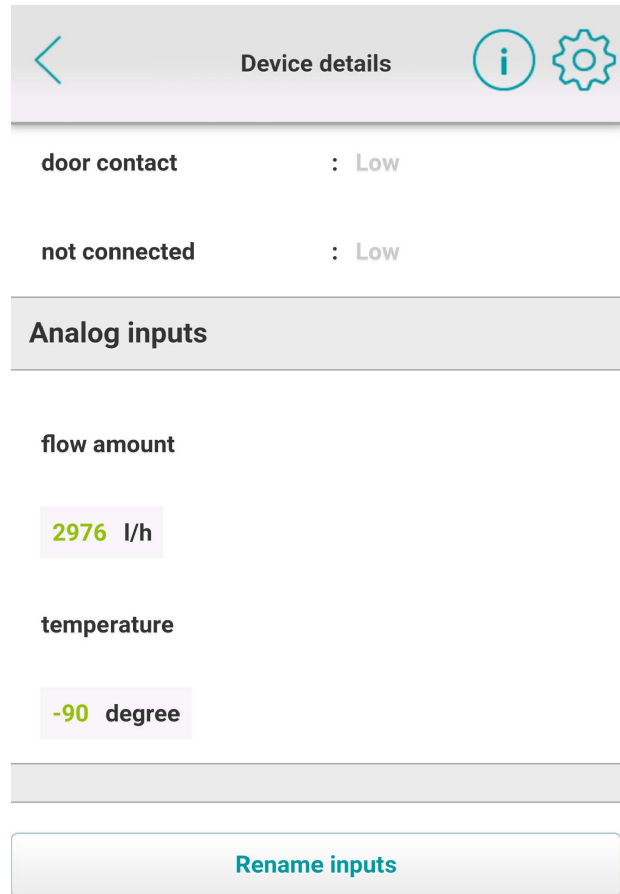Now you can monitor the status of digital and analog inputs.

Figure 26   Monitoring the inputs

4.4 Device information
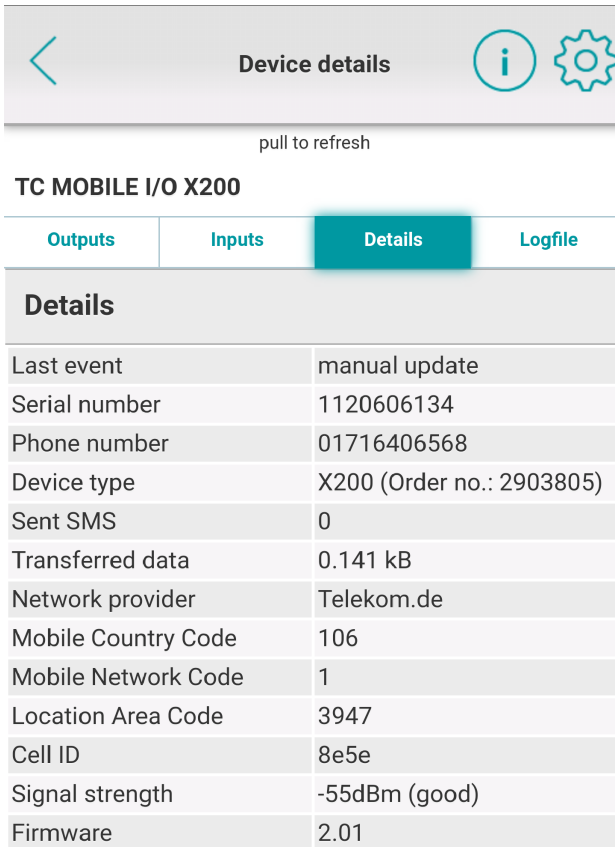
You will find information on the device under "Details".

<div style="text-align: center;">

‹   **Device details**   ⓘ ⚙

pull to refresh

</div>

TC MOBILE I/O X200

Outputs	Inputs	Details	Logfile

Details

Last event	manual update
Serial number	1120606134
Phone number	01716406568
Device type	X200 (Order no.: 2903805)
Sent SMS	0
Transferred data	0.141 kB
Network provider	Telekom.de
Mobile Country Code	106
Mobile Network Code	1
Location Area Code	3947
Cell ID	8e5e
Signal strength	-55dBm (good)
Firmware	2.01

Figure 27   Device details

The logfile shows the most recent activities performed by the device.

<div style="text-align: center;">

‹   **Device details**   ⓘ ⚙

pull to refresh

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TC MOBILE I/O X200

Outputs	Inputs	Details	Logfile

Logfile

Timestamp	Event
2000-01-01 03:37:21	Positive edge at digital input 1
2000-01-01 01:17:08	Negative edge at digital input 1
2000-01-01 00:07:36	Exceeded upper tolerance limit at analog input 1 / Exceeded lower tolerance limit at analog input 1
2000-01-01 00:07:31	Fallen below upper tolerance limit at analog input 1 / Fallen below lower tolerance limit at analog input 1
2000-01-01 00:04:46	Relay output 1 closed
2000-01-01 00:01:37	Relay output 1 closed
2000-01-01 00:00:09	Device started

Figure 28   Logfile

- Click on the i button in the menu bar for further informa-
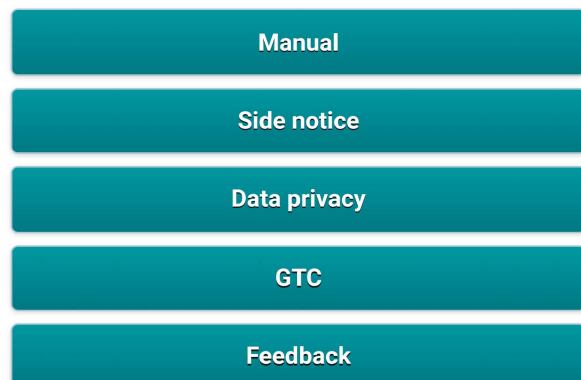 tion and documentation.
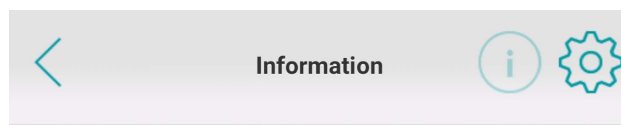
Figure 29   Information and feedback

> ℹ️ We look forward to receiving your suggestions on how we can make the app even more user-friendly.
> Just click on "Feedback".