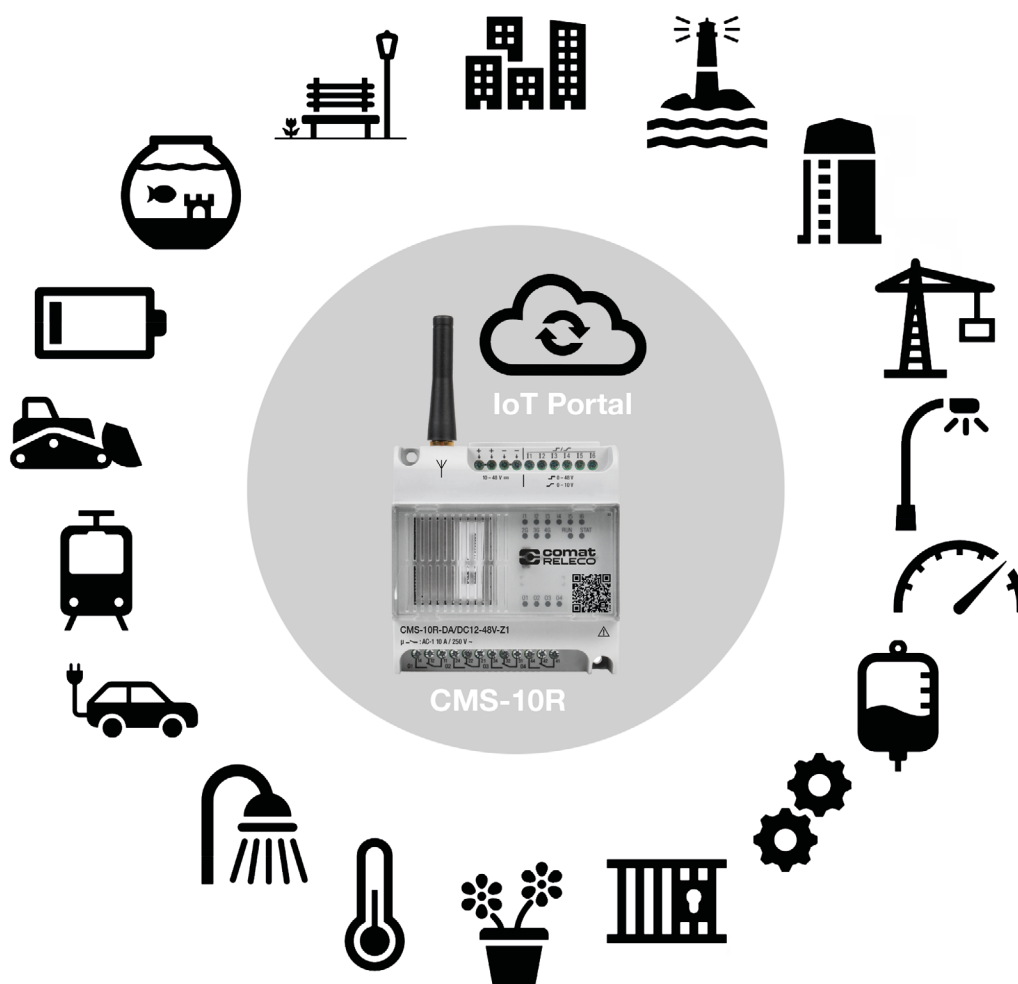




USER INFORMATION

CMS-10R



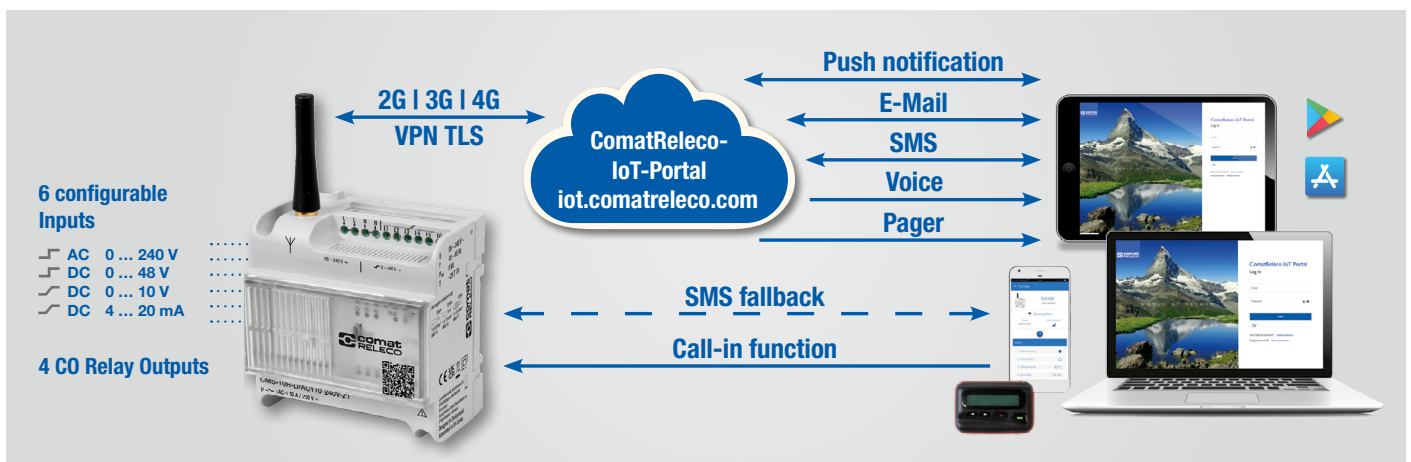
Index

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1. System overview	3
2. Communication channels	5
3. IoT Portal https://iot.comatreleco.com	6
4. Setup a device	17
5. Use the device	27
6. Application examples	32

More than a simple SMS relay

ComatReleco Messaging System CMS-10R



1. System overview

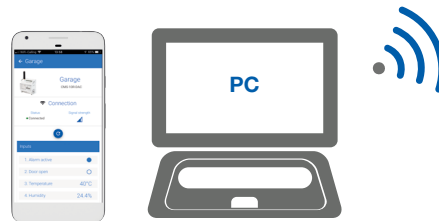
Digital and analog inputs:

Three device types are available, with different inputs



Plug and Play:

Wireless programming via the internet with PC, smart phone or tablet.



App and E-Mail, additionally SMS:

Push, e-mail, pager notification, voice call or SMS as standard communication options. They use the bidirectional communication channels according to their needs.



Easy device swap:

Upload the existing configuration file to the new CMS-10R.



All in one:

The CMS-10R has full out-of-the-box functionality. Mobile communication is included.



ComatReleco Messaging System CMS-10R

The CMS-10R is a remote monitoring and control system for industrial and building technology. It reports status changes to the digital or analogue inputs via the mobile phone network by push notification, email, pager notification, voice call or SMS. The outputs are controlled via the Smart App web browser. If necessary, the configured outputs can also be switched with SMS control messages and a call-in function (call to the device). The CMS-10R automatically selects the network generation with the highest field strength at the installation site.

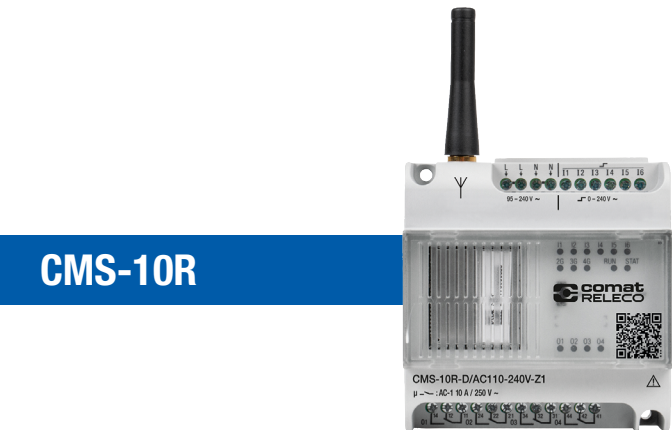
1. System overview

Main differences to older version of CMS



CMS-10F

- 2G communication.
- Separate SIM card from a mobile service provider of your choice.
- Communication costs incurred by service provider.
- Configuration via RS232 cable link.
- Size 88 x 90 x 55 cm.
- Different hardware versions with 6 inputs / 4 outputs.
- Notification and control via SMS.



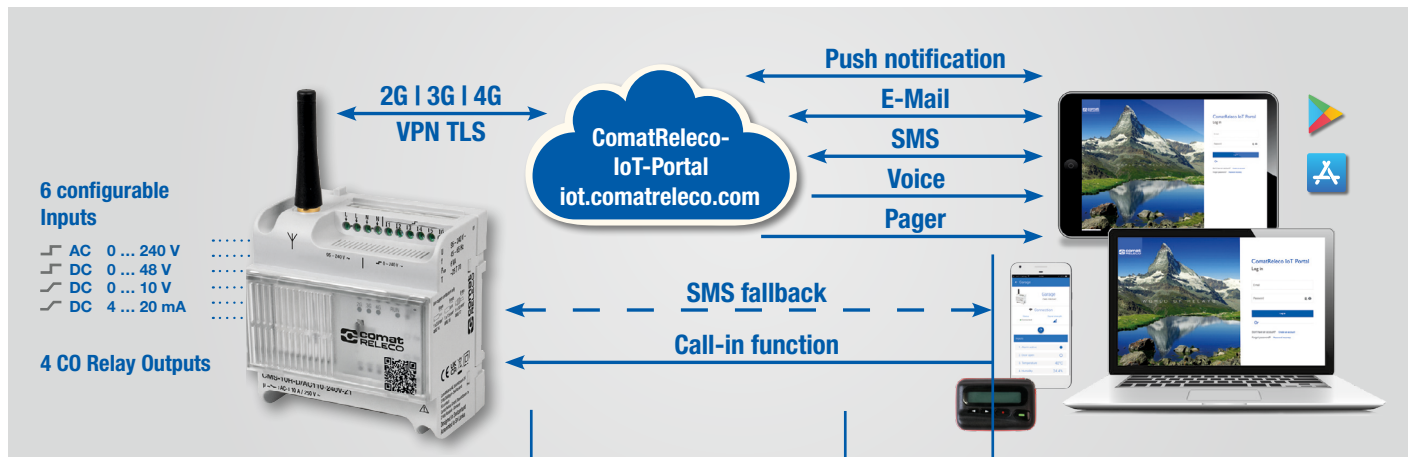
CMS-10R

- 2G, 3G and 4G communication.
- Integrated eSIM, works worldwide.
- Communication costs covered with the chosen service profile from ComatReleco IoT portal.
- Configuration via IoT portal. Configurations from old devices can be overtaken.
- Same size.
- Matching hardware versions available
- Wiring schematics remains the same as with CMS-10F, one-to-one replacement.
- Notification and control via push, e-mail, pager notification, voice call or SMS. Call-in and fallback functions included.



Previous version	Current device version
CMS-10F/AC110-240V	CMS-10R-D/AC110-240V
CMS-10F/DC12-48V oder CMS-10ADF/DC12-48V	CMS-10R-DA/DC12-48V
CMS-10ACDF/DC12-48V	CMS-10R-DAC/DC12-48V

ComatReleco Messaging System CMS-10R



The CMS-10R unit receives SMS messages with the unique unit phone number from the integrated eSIM. Same number is valid for call-in and SMS fallback.

SMS fallback is used in the rare occasion when the IoT portal is not available, i.e. during this time, SMS will be sent instead of email and push notifications.


The ComatReleco-IoT-Portal transmits SMS messages by default * with the number +41 79 807 55 54

SMS and Pager messages to machines are sent by default * with the number +41 79 807 20 06

We recommend to store this numbers on the mobile phone under the name «CoReM»

Devices > CMS-10R-DAC IoT > Overview

Overview



CMS-10R-DAC IoT
Application examples
CH-Professional

Managers

Owner
IoT owner
Installer
IoT installer

Device

Serial number
2151VS900034
SMS available for this month
30/30 (Reset on Nov 7, 2023)
Number of monthly events
1500/1500 (Reset on Nov 7, 2023)
Firmware
Up to date

Connection

Connection status
Connected
Mobile network
Swisscom (-67 dBm / Excellent)
Phone number
+41 77 085 69 31

The number of the CMS-10R unit can be found on the overview of the unit in the IoT Portal.

Example:
+41 77 129 24 10

We recommend to store this number on the mobile phone under the device name.

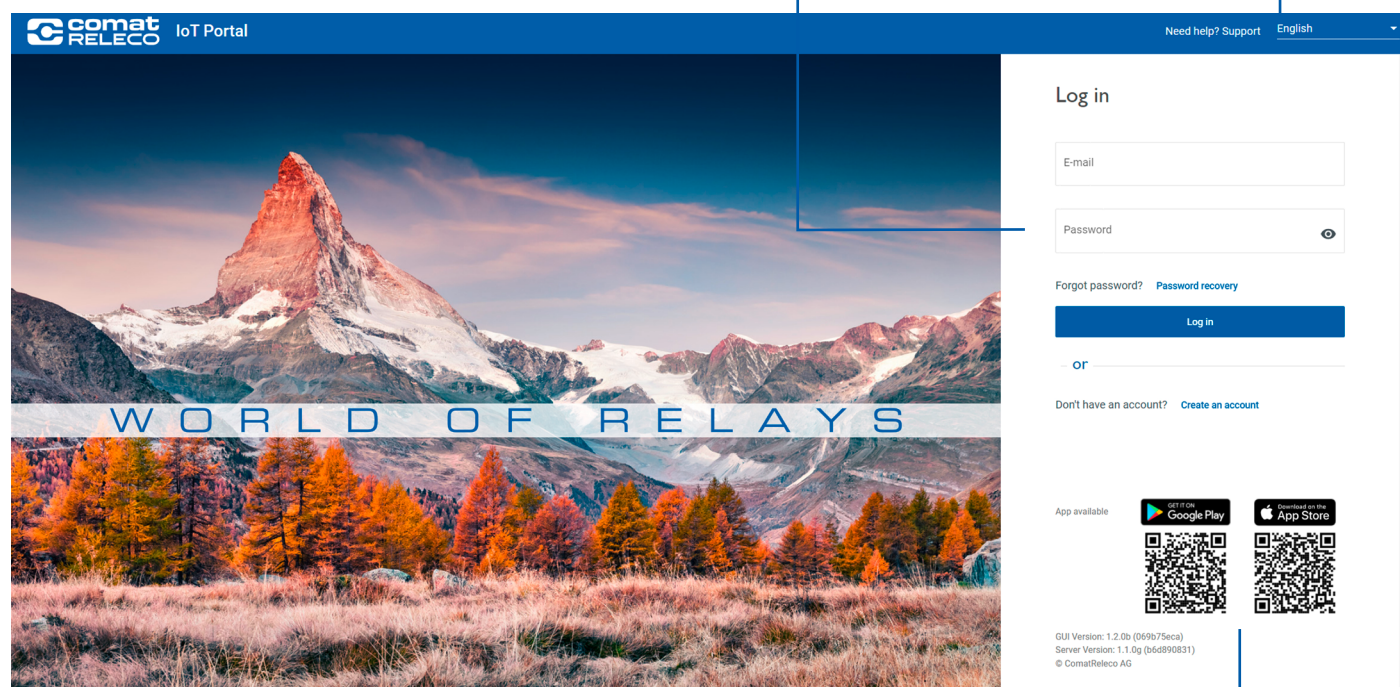
* For large projects, it is possible to create customer, local numbers at additional cost.

3. IoT Portal

<https://iot.comatreleco.com>

• All users need to have an account. Installers/owners also have the possibility to create user accounts, see page 15. Exceptions are «***machines***» as defined on page 16.

• Choose the language



• Apps are available for android and apple.

3. IoT Portal

User account

ComatReleco IoT Portal
Create an account

* = Mandatory fields

Change language
English

Country *

Company

VAT number

First Name *

Last name *

Address *

Building

Zip code *

City *

Mobile phone number *

E-mail *

Password *

Confirm password *

☐ I have read and I accept the privacy statement.
[Privacy statement](#)

Create an account

Defines the language of the IoT portal (can later be changed)

The country code influences the billing of the service profile

VAT number: Needed for businesses who claim VAT back

Postal address

International format: +41 23 123 45 67 (where messages from CMS-10R are being sent to)

E-mail address: (where e-mails from CMS-10R are being sent to)

3. IoT Portal

Account overview

My owned devices:

The devices I pay the invoice for with my account.

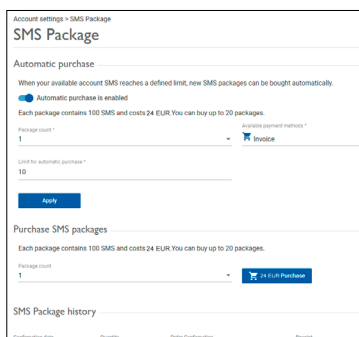
My assigned devices:

Devices from another account which I am a user of.

My installed devices:

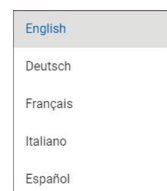
Devices I am the installer for, I can be the owner or someone else.

Buy SMS package



Shows the number of **SMS available for the account** (for all devices under this account).

Change language



comat

RELECO

IoT Portal

Account SMS available: 264

Need help? Support

English

CMS-10R owner

cr-iot.owner@comatreleco.com

Home

210 Devices

Search

My owned devices

My assigned devices

My installed devices

Name	Reference	Device model	Owner's e-mail	Status	Service profile	Expires on	SMS available for this month	Firmware
IoT-Portal	Device for printscreens	CMS-10R-DA	iot.portal.3076@gmail.com	Connected	WW-Professional	10/10/23	30 / 30	1.2.0m (dev)
Test box CoRe		CMS-10R-DA	iot.portal.3076@gmail.com	Not paired				
Test Z1		CMS-10R-DA	iot.portal.3076@gmail.com	Not paired				

Items per page 100

1 - 3 of 3

< >

Status information

Service profile

Included **SMS available for the device** per month, depending on the service profile.

3. IoT Portal

Device overview

Choose a device in the account overview

comat RELECO IoT Portal									
Account SMS available: 264 Need help? Support English CMS-10R owner cr-iot.owner@comatreleco.com									
Home	+ Add a device Disable notifications Refresh								
210 Devices	Name	Reference	Device model	Owner's e-mail	Status	Service profile	Expires on	SMS available for this month	Firmware
Search	IoT-Portal	Device for printscreens	CMS-10R-DA	iot.portal.3076@gmail.com	Connected	WW-Professional	10/10/23	30 / 30	1.2.0m (dev)
<input checked="" type="checkbox"/> My owned devices	Test box CoRe		CMS-10R-DA	iot.portal.3076@gmail.com	Not paired				
<input checked="" type="checkbox"/> My assigned devices	Test Z1		CMS-10R-DA	iot.portal.3076@gmail.com	Not paired				
<input checked="" type="checkbox"/> My installed devices	Items per page: 100 1 - 3 of 3								


Managers

Device details

Connectivity

Devices > CMS-10R-DAC IoT > Overview

Overview



CMS-10R-DAC IoT

Application examples

CH-Professional

Managers

Owner
IoT owner
Installer
IoT installer

Device

Serial number
2151VS900034
SMS available for this month
30/30 (Reset on Nov 7, 2023)
Number of monthly events
1500/1500 (Reset on Nov 7, 2023)
Firmware
Up to date

Connection

Connection status
Connected
Mobile network
(-67 dBm / Excellent)
Swisscom
Phone number
+41 77 085 69 31

Inputs

1. Button

2. Switch

3. Reed contact

4. Temperature 21.134 °C

5. Potentiometer 56.8 %

Last update: 11/1/23, 4:53 PM

Outputs

1. LED green

2. LED blue

3. Flashlight

4. Fan

Last update: 11/1/23, 4:51 PM

Documents

CMS-10R Documentation

Test

Test button status (press button on your device)

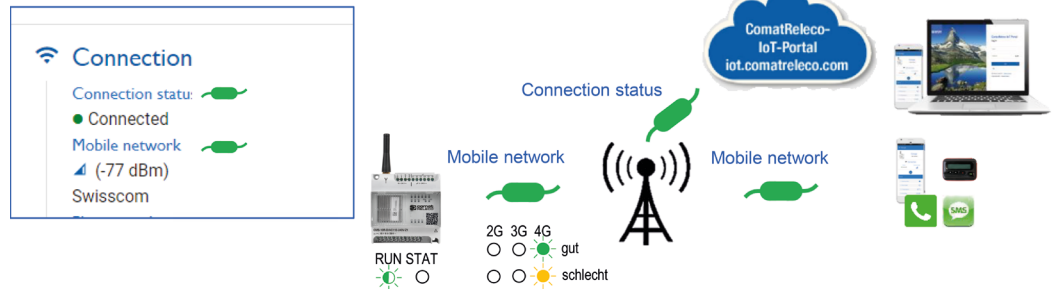
Link for documentation and release information.

I/O monitoring / control

3. IoT Portal

Device connection (fallback mode)

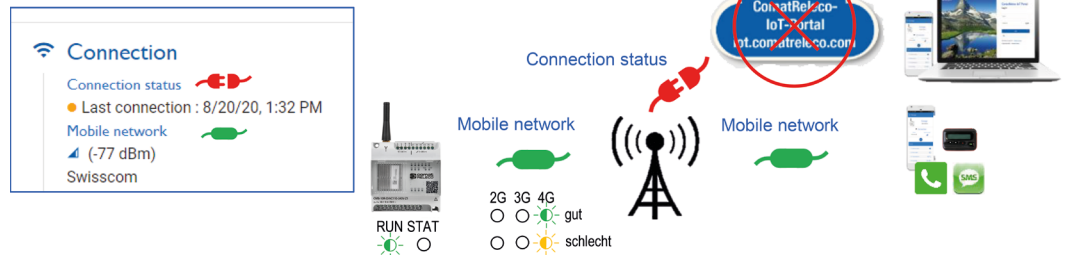
Normal operation



IoT portal is not available

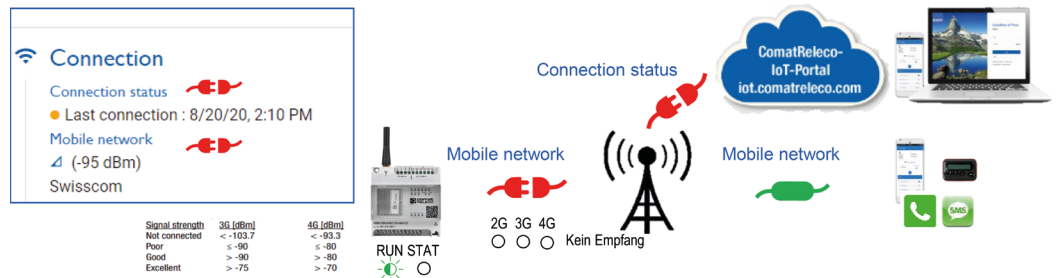
Device switches to fallback mode, i.e., during this time, SMS will be sent instead of email and/or push notifications.

[see next page](#)



No or very poor connection with mobile network.

Events are stored in the device and sent once connection is re-established.



3. IoT Portal

Device in fallback mode

In the unlikely case the device is in fallback mode and you might need to switch one or more outputs during this time, configure the device in advance accordingly.

Time after the activated output will be switched off again (00:00:01 to 23:59:59 hours possible).
Must be defined by call-in activation.

The screenshot shows the IoT Portal interface for a device named 'LED green'. The left sidebar contains navigation menus for DEVICES, EVENTS, INPUTS, OUTPUTS, SERVICE PROFILE, and SUPPORT. The main content area is divided into several sections:

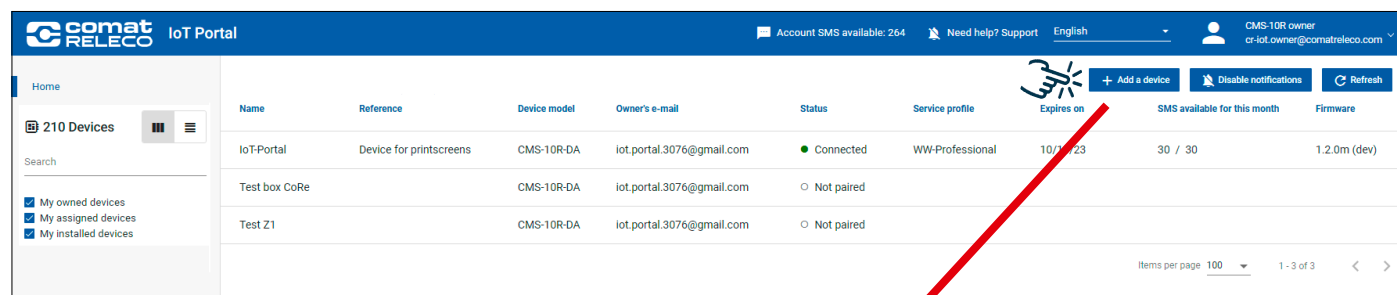
- Output I:** Includes a status toggle (Active), a name field (LED green), and an 'Auto switch OFF time' section with input fields for Hours (0), Minutes (10), and Seconds (0).
- Events:** Contains two panels: 'Output ON' and 'Output OFF', each with a message input field.
- SMS control:** Includes a section for 'SMS control messages' with input fields for 'Output ON' (1) and 'Output OFF' (0), and two toggle switches for 'Send confirmation' and 'Allow registered numbers only'.
- Phone control:** Includes a 'Control by call-in' toggle switch and a text area for 'Auto switch OFF time needed, time after which the output will be switched off'.
- Notifications:** A section titled 'Users / Machines' with a list of message receivers (5 max.) and a 'Find user / machine' button.
- Confirmation:** A section with a 'Waiting time to confirm' input field (min 1-60) and a 'Max. number of loops' input field (5).

Annotations with blue lines point to specific features:

- One annotation points to the 'Auto switch OFF time' section, stating: 'Time after the activated output will be switched off again (00:00:01 to 23:59:59 hours possible). **Must** be defined by call-in activation.'
- Another annotation points to the 'SMS control' section, stating: 'For security, the message can have a form of a password or similar, e.g. +23@LED_on'.
- A third annotation points to the 'SMS control' section, stating: 'As another security measure, you can choose that only registered users can control it.'
- A fourth annotation points to the 'SMS control' section, stating: 'As a security measure, by default, only registered users can control it.'
- A fifth annotation points to the 'Control by call-in' toggle, stating: 'It is possible to control the output with an SMS message.'
- A sixth annotation points to the 'Control by call-in' toggle, stating: 'It is possible to control the output by call-in, i.e. call the phone number of the device.'
- A seventh annotation points to the 'Status' messages in the 'Testbox Charles' screenshot, stating: 'In fallback mode a SMS message "Status" can be sent to the device, it returns the status of all inand outputs.'

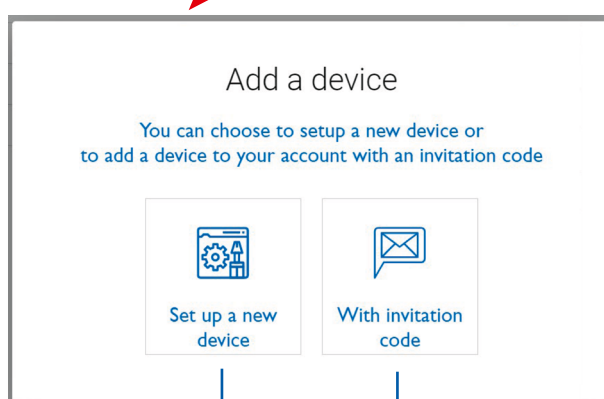
3. IoT Portal

Add a device to your account



The screenshot shows the IoT Portal interface. On the left, there's a sidebar with '210 Devices' and filters for 'My owned devices', 'My assigned devices', and 'My installed devices'. The main area displays a table of devices. A red arrow points from the '+ Add a device' button in the top right of the table to a callout box below.

Name	Reference	Device model	Owner's e-mail	Status	Service profile	Expires on	SMS available for this month	Firmware
IoT-Portal	Device for printscreens	CMS-10R-DA	iot.portal.3076@gmail.com	Connected	WW-Professional	10/11/23	30 / 30	1.2.0m (dev)
Test box CoRe		CMS-10R-DA	iot.portal.3076@gmail.com	Not paired				
Test Z1		CMS-10R-DA	iot.portal.3076@gmail.com	Not paired				

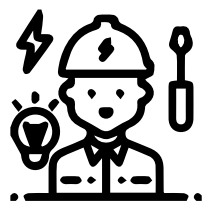


• Set up a new device ...
(see page 14)

• Accept and add a device to your account with an invitation code from another account (assigned device). The code has been received by e-mail or SMS.

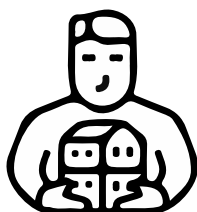
3. IoT Portal

Roles / business relationship with ComatReleco



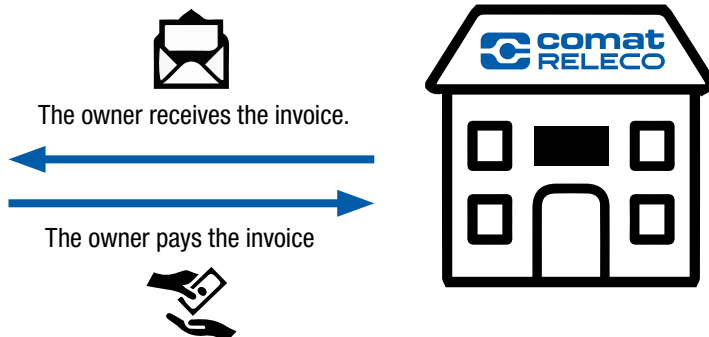
Installer

By default, the installer is also the owner. If you are not the owner (the bill recipient), you can transfer the device to the owner's account under **«Change owner»**.

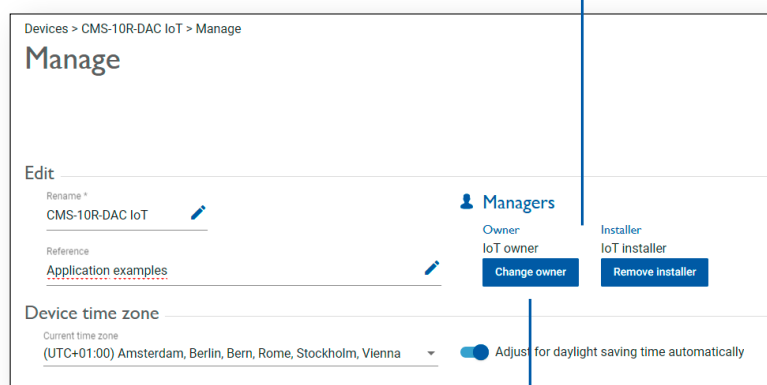
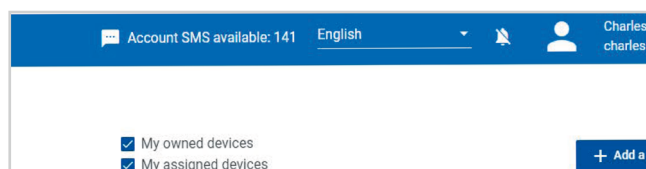


Owner

This means that the invoice is paid by the holder of this account.



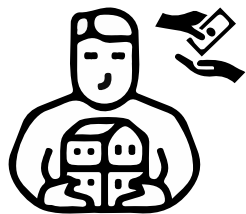
Bought SMS packages on the account cannot be transferred to another account.



Under **«Manage»** on the IoT Portal you can see who the installer and the owner of the device is.

3. IoT Portal

Setup a new device



- Choose if you are the owner, i.e. it will be your account paying the invoice, or not.

1. Define the owner
Add an owner for the device.

Are you the owner of the device? ☒ Yes ☐ No

Cancel Next

1. Define the owner
Add an owner for the device.

Are you the owner of the device? ☐ Yes ☒ No

Owner's e-mail

[Existing user](#)

Cancel Next

- Enter a device name (notifications and messages are being sent with this name).

2. Give the device a name
It is important that the device has a name, the name will appear on the device overview

Device name

Device model

Cancel Next

- Choose the model.

- If you are not the owner, you have to enter a valid e-mail address of the owner, he will then receive an email to accept the ownership. In this case you are the inststaller for someoneelses device.

3. Confirmation
Thank you, this device is ready to be used.

Congratulations, a new device has been created

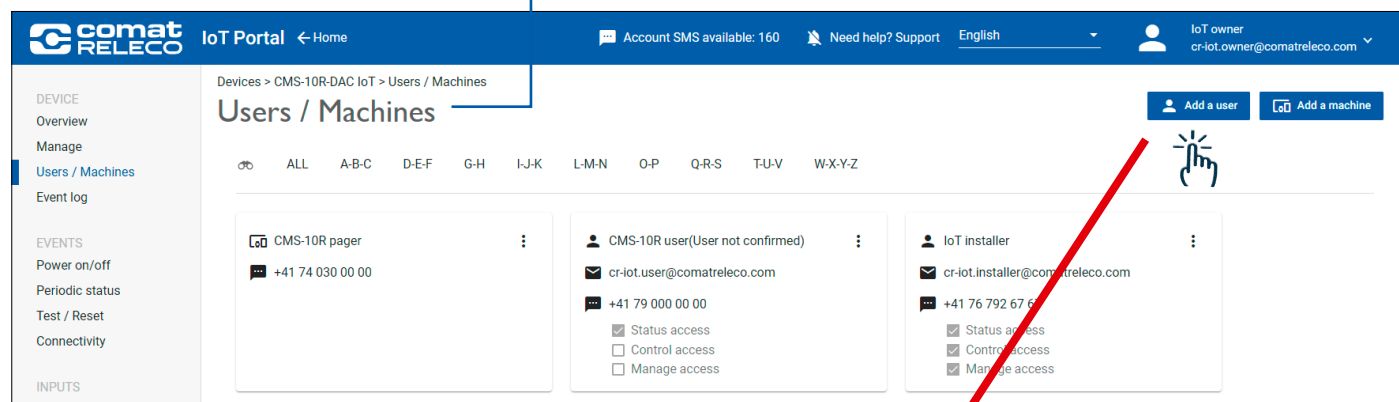
[Pair](#) [Configure](#) [Home page](#)

- You can now choose to pair, configure the device or go back the overview (Home page)

3. IoT Portal

Add another user to use a device

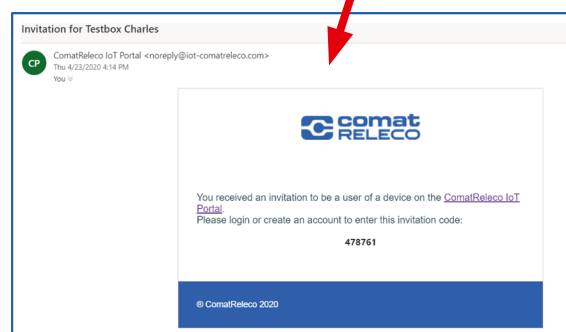
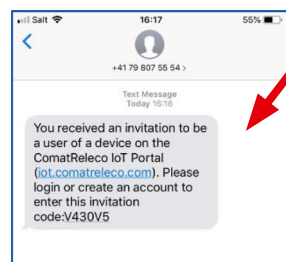
Number of users / machines according service profile (4, 10, 30).



Invite another user to use your device either by e-mail or SMS. The invited user receives a code to add the device in his account.

The 'Invitation' form is shown with the 'E-mail' tab selected. The 'E-mail' field contains 'cr-iot.user2@comatreleco.com'. A message box states: 'This user does not exist in the database. You will send an invitation to this e-mail address to join the IoT portal and to manage this device.' Below this is a 'Create an account' button and a dropdown for 'Invitation language' set to 'English'. The 'Privileges' section has checkboxes for 'Status access' (checked), 'Control access' (checked), and 'Manage access' (unchecked). At the bottom are 'Exit' and 'Send invitation' buttons.

Installer/owner has here the possibility to create an account for another user.

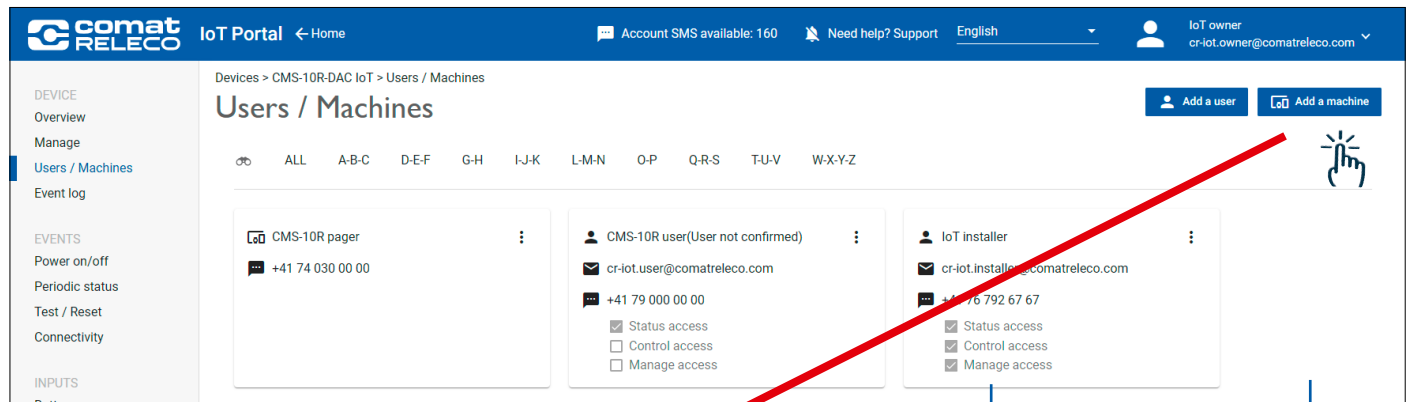


Different access levels can be chosen for the user.

The 'Create account' form is shown. It has fields for: First Name, Last Name, E-mail, Mobile phone number, Country, Language (set to English), Zip code, City, Address, Building, Company, VAT number, Password, and Confirm password. At the bottom are 'Cancel' and 'Create account' buttons.

3. IoT Portal

Add a «machine» to use a device

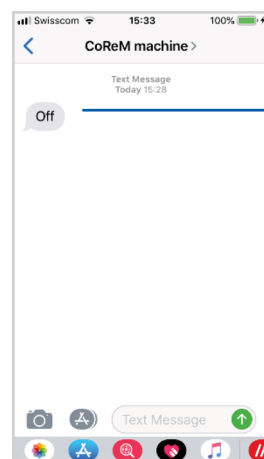


Is the user not a human being, e.g. a pager, alarm server, or other machine, to receive messages, it can be added here. It needs at least a **phone number or an e-mail address**.

It is also possible to define a **CMS-10R itself as a machine**, making it a very simple control system (see also page 34).

It is also possible to define a **person as a machine to receive SMS only**, without having to fill in all information needed for a user. They could then also send SMS to the device or call in to activate an output.

SMS to machine



SMS to machine is sent **without header and timestamp**, so it is compliant to most machines, such as pager, alarm servers, etc.

4. Setup a device

Configure a device

Go to «**Manage**»
on your device.

The screenshot shows the 'Manage' page for a device named 'CMS-10R-DAC IoT'. The left sidebar contains a navigation menu with sections: DEVICE (Overview, Manage, Users / Machines, Event log), EVENTS (Power on/off, Periodic status, Test / Reset, Connectivity), INPUTS (Button, Switch, Reed contact, Temperature, Potentiometer, Input 6), and OUTPUTS (LED green, LED blue, Flashlight). The main content area has a top bar with 'IoT Portal' and 'Home' links, and a user profile 'IoT owner' with email 'cr-iot.owner@comatreleco.com'. Below the top bar, the page title is 'Manage'. There are two tabs: 'Edit' and 'Managers'. The 'Edit' tab is active and shows fields for 'Rename *' (CMS-10R-DAC IoT) and 'Reference' (Application examples). The 'Managers' tab shows 'Owner' (IoT owner) and 'Installer' (IoT installer) with buttons 'Change owner' and 'Remove installer'. Below this is the 'Device time zone' section, showing 'Current time zone' as '(UTC+01:00) Amsterdam, Berlin, Bern, Rome, Stockholm, Vienna' and a toggle for 'Adjust for daylight saving time automatically'. At the bottom, there is a 'SMS output control' section with a 'Help message' button and a text box containing 'Allow the message receiver to request SMS output control messages'.



The device itself is set to UTC (GMT),
<https://www.timeanddate.com/worldclock/>,
therefore, set the time zone where you are,
UTC+/-x, to have the correct time of the event.

4. Setup a device

Configure a device

Choose the input you want to configure.

Activate the input to use it.

Choose analog or digital.

The screenshot shows the 'Button' configuration page in the IoT Portal. The left sidebar contains navigation menus for DEVICE, EVENTS, INPUTS, OUTPUTS, SERVICE PROFILE, and SUPPORT. The main content area is titled 'Button' and includes sections for 'Input I', 'Events', 'Notifications', and 'Confirmation'. The 'Input I' section has a 'Status' toggle set to 'Active' and a 'Name' field containing 'Button'. The 'Type' section has 'Analog' and 'Digital' buttons, with 'Digital' selected. The 'Events' section contains two panels: 'Input ON' and 'Input OFF', each with a 'Message' field and a 'Delay' section with 'Hours', 'Minutes', and 'Seconds' input fields. The 'Notifications' section is titled 'Users / Machines' and lists five message receivers: 'IoT owner (push)', 'IoT installer (SMS)', 'CMS-10R user (e-mail)', 'CMS-10R user (Voice Call)', and 'CMS-10R pager (Pager)'. The 'Confirmation' section has a toggle switch, a 'Waiting time to confirm' field set to 5, and a 'Max. number of loops' field set to 1.

All status events can be configured here.

Notifications, confirmation loops.

Sequential notification in the order of the users until the first one acknowledges the message. Number of loops according service profile (1, 3, 5).

4. Setup a device

Configure a device

Choose the output you want to configure.

Activate the output to use it.

Time after the activated output will be switched off again (00:00:01 to 23:59:59 hours possible). **Must** be defined by call-in activation.

The screenshot shows the IoT Portal interface for configuring a CMS-10R-DAC IoT device. The main content area is titled 'LED green' and includes sections for 'Output I' (Status: Active, Name: LED green), 'Auto switch OFF time' (Time after which the output will be switched off automatically, with fields for Hours, Minutes, and Seconds), 'Events' (Output ON and Output OFF), 'SMS control' (SMS control messages, Output ON: 1, Output OFF: 0, Send confirmation, Allow registered numbers only), and 'Phone control' (Control by call-in). A sidebar on the left lists various device types and services. A 'Users / Machines' section on the right shows a list of message receivers (5 max.) and a 'Confirmation' section with a 'Waiting time to confirm' field (1 min) and a 'Max. number of loops' field (5).

It is also possible to control the output by call-in, i.e. call the phone number of the device.

It is possible to control the output with an SMS message.

① As a security measure, only registered users can call.

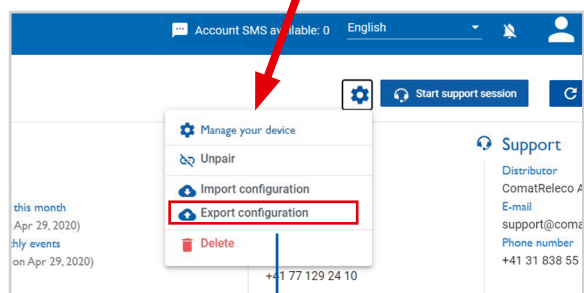
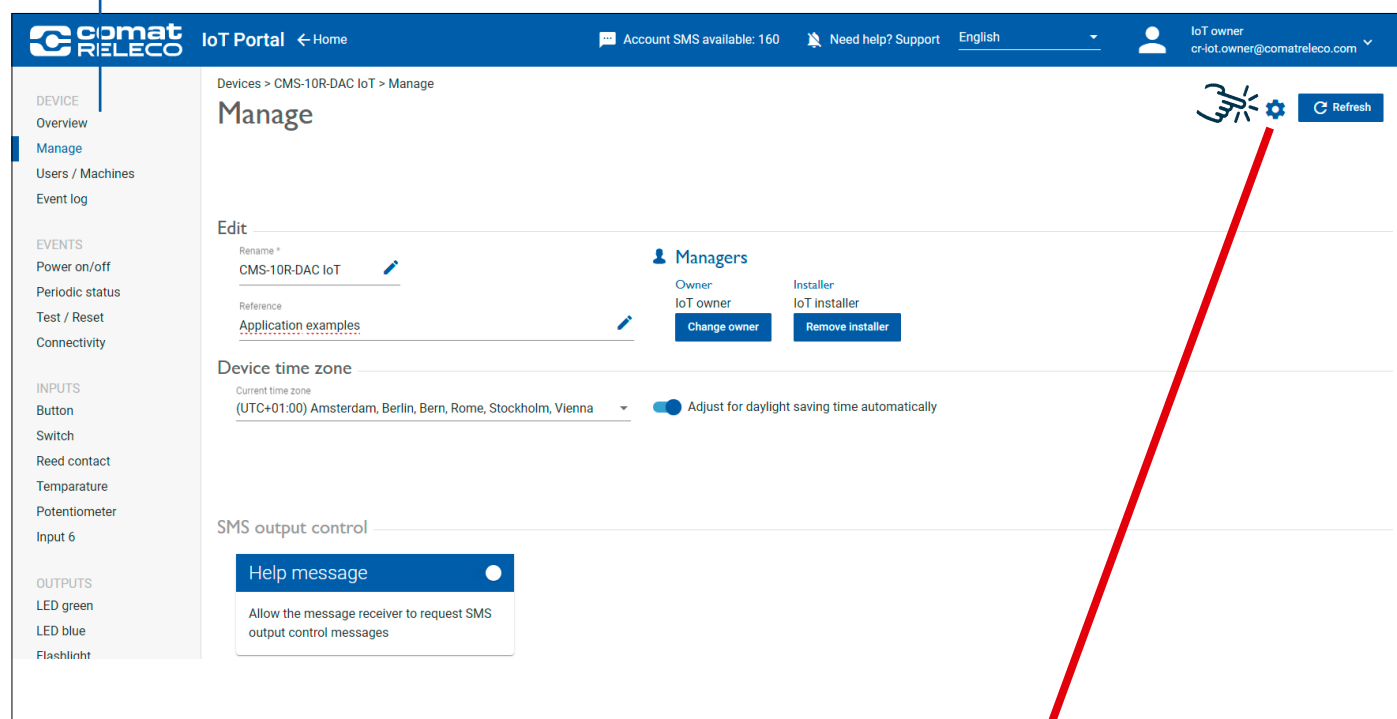
① For security, the message can have a form of a password or similar, e.g. +23@LED_ein

① As another security measure, you can choose that only registered users can control it.

4. Setup a device

Configure a device

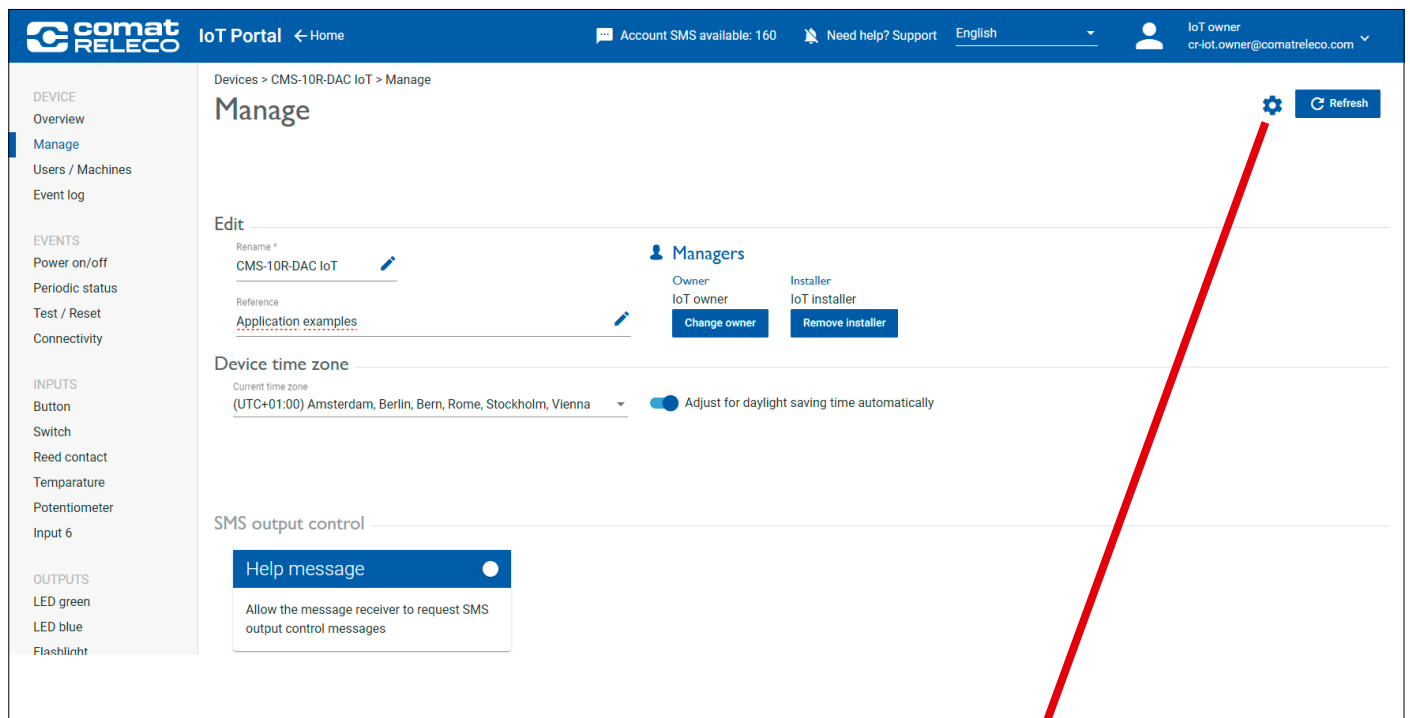
After you finished configuring the device, go back to **«Manage»** on your device.



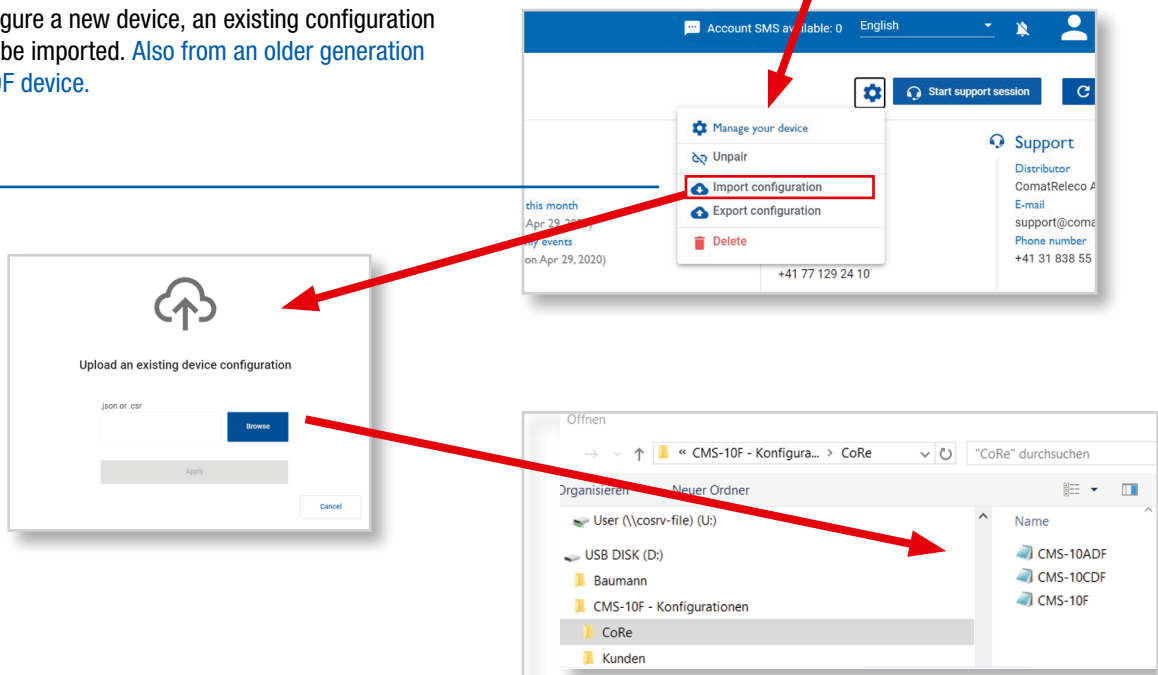
You can export the configuration and save it, a file **.json** will be created.

4. Setup a device

Configure a device

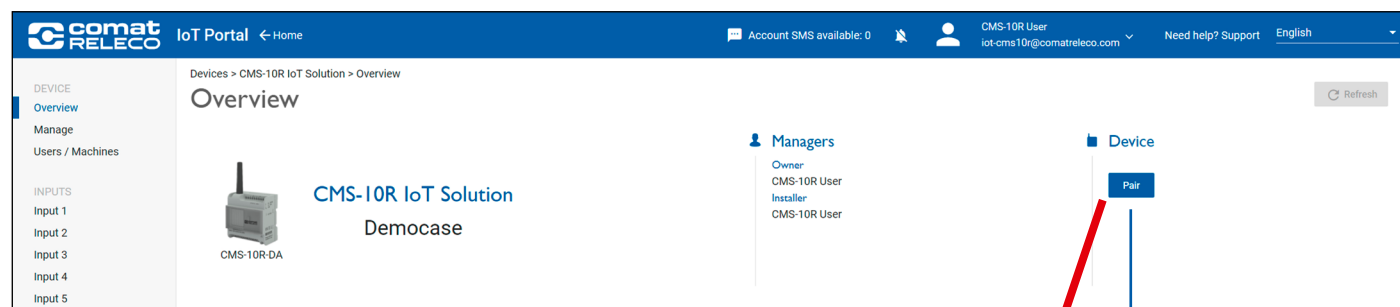


To configure a new device, an existing configuration file can be imported. Also from an older generation CMS-10F device.

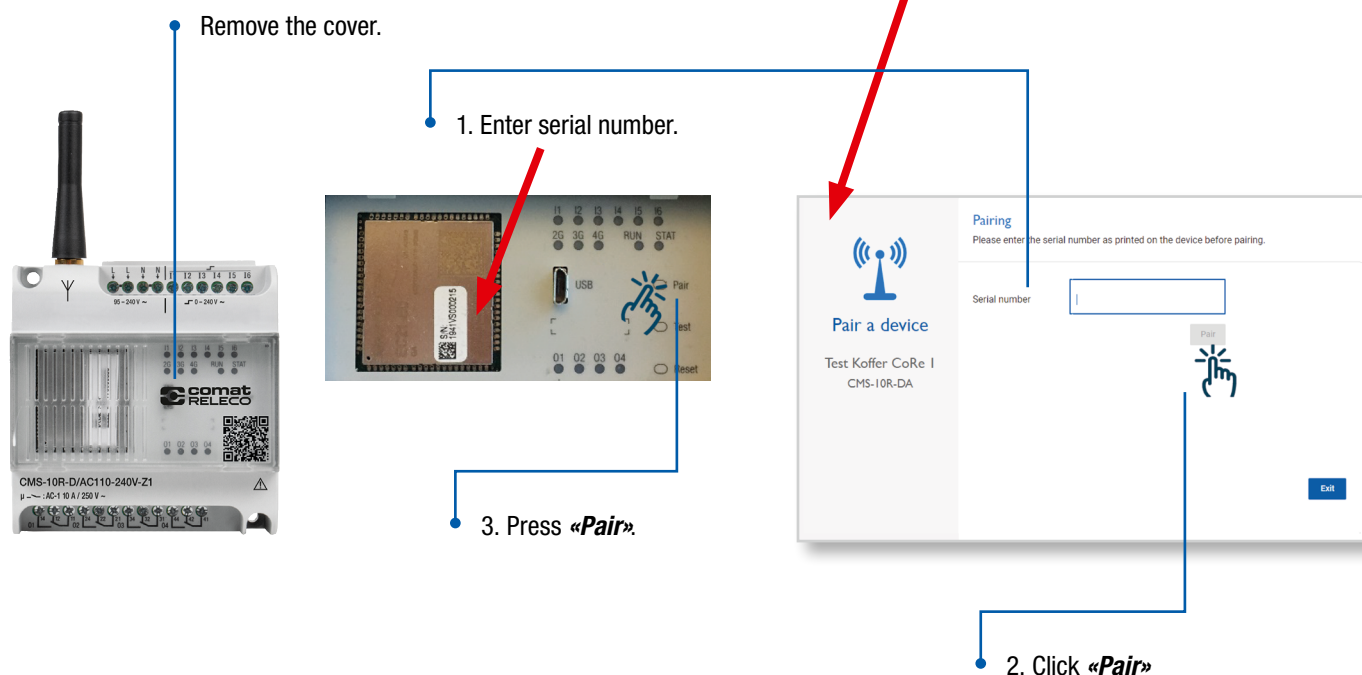


4. Setup a device

Pair a device

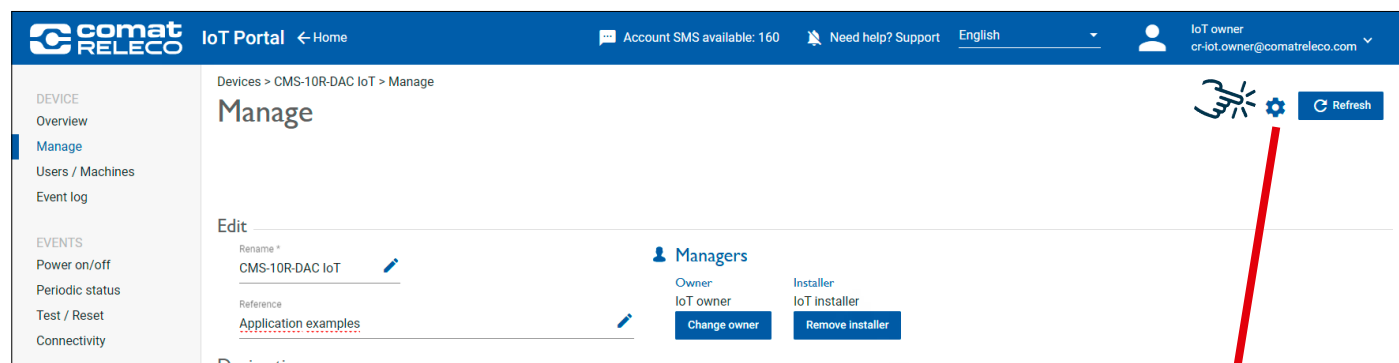


Pair device, i.e. connect the device with the IoT Portal and overtake the configuration. Make sure that the device is powered on. Then press **«Pair»**. With pairing the device, the **service profile** starts, i.e. start of invoicing.

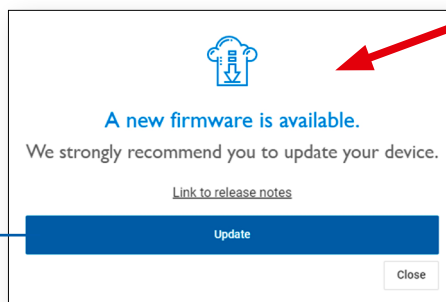
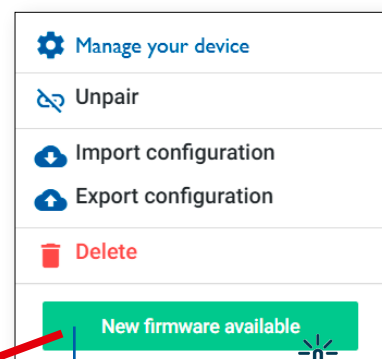


4. Setup a device

Firmware update



ComatReleco continuously enhances the functionality of the CMS-10R system according to customer needs, wishes and other feedback. Firmware updates include new functionalities and bug fixes.



The update takes about 2 minutes. During this time the device is not sending messages, etc. The device will restart after the update.

The window appears in case a new firmware is available.

4. Setup a device

Service profiles

IoT Portal ← Home Account SMS available: 160 Need help? Support English IoT owner cr-iot.owner@comatreleco.com

Devices > CMS-10R-DAC IoT > Service profile

Service profile

Details of the current service profile
CH-Professional
Start date: 10/7/23
End date: 10/6/24
Change service profile

Renewal of the service profile
☒ Auto renew
☐ Disabled
Apply

Purchase SMS packages
Each package contains 100 SMS and costs 24 EUR.
Package count: 1
24 EUR Purchase

Service profile history

Duration	Service profile name	Amount	Receipt
10/7/23 - 10/6/24	Service profile: CH-Professional	72.00 EUR	View PDF
10/7/22 - 10/7/23	Service profile: CH-Professional	28.80 EUR	View PDF

3 different service profiles are available.

Service profile configuration

This wizard will help you during the service profile selection

- Service profile selection
- SMS packages
- Summary

I. Service profile selection

Select a service profile for your device

	Eco	Standard	Professional
Price for the 1st year of operation	0.00 EUR/month	0.00 EUR/month	2.60 EUR/month
Price after the 1st year of operation	2.90 EUR/month	4.40 EUR/month	6.50 EUR/month
Available users / machines	4	10	50
Message receivers per input/output	2	5	5
Included events per month	60	600	Unlimited
Included SMS per month	0	10	30
Owner account SMS	At cost	At cost	At cost
Number of confirmation loops	1	3	5
Call-in per month	Not available	Unlimited	Unlimited
Retention period of logs	14 days	45 days	90 days
	Select	Select	Select

«Eco» and «Standard» are free of charge for the first year (starts when device is paired for first time).

During the one-year term of the service profile, you can switch to the next higher service profile at any time. You can only switch to a lower service profile after the term has expired.

4. Setup a device

Service profiles

Devices > CMS-10R-DAC IoT > Service profile

Service profile

Details of the current service profile

CH-Professional

Start date: 10/7/23
End date: 10/6/24

[Change service profile](#)

Renewal of the service profile

☒ Auto renew
☐ Disabled

[Apply](#)

Purchase SMS packages

Each package contains 100 SMS and costs 24 EUR.

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Service profile history

Duration	Service profile name	Amount	Receipt
10/7/23 - 10/6/24	Service profile: CH-Professional	72.00 EUR	View PDF
10/7/22 - 10/7/23	Service profile: CH-Professional	28.80 EUR	View PDF

Shows current active service profile which can be changed here.

Possibility to **“auto renew”** after one year.

SMS packages can be bought for an account.

Overview shows the number of SMS available for the account. All devices owned by this account can use SMS ...

Account SMS available: 264

[+ Add a device](#) [Disable notifications](#) [Refresh](#)

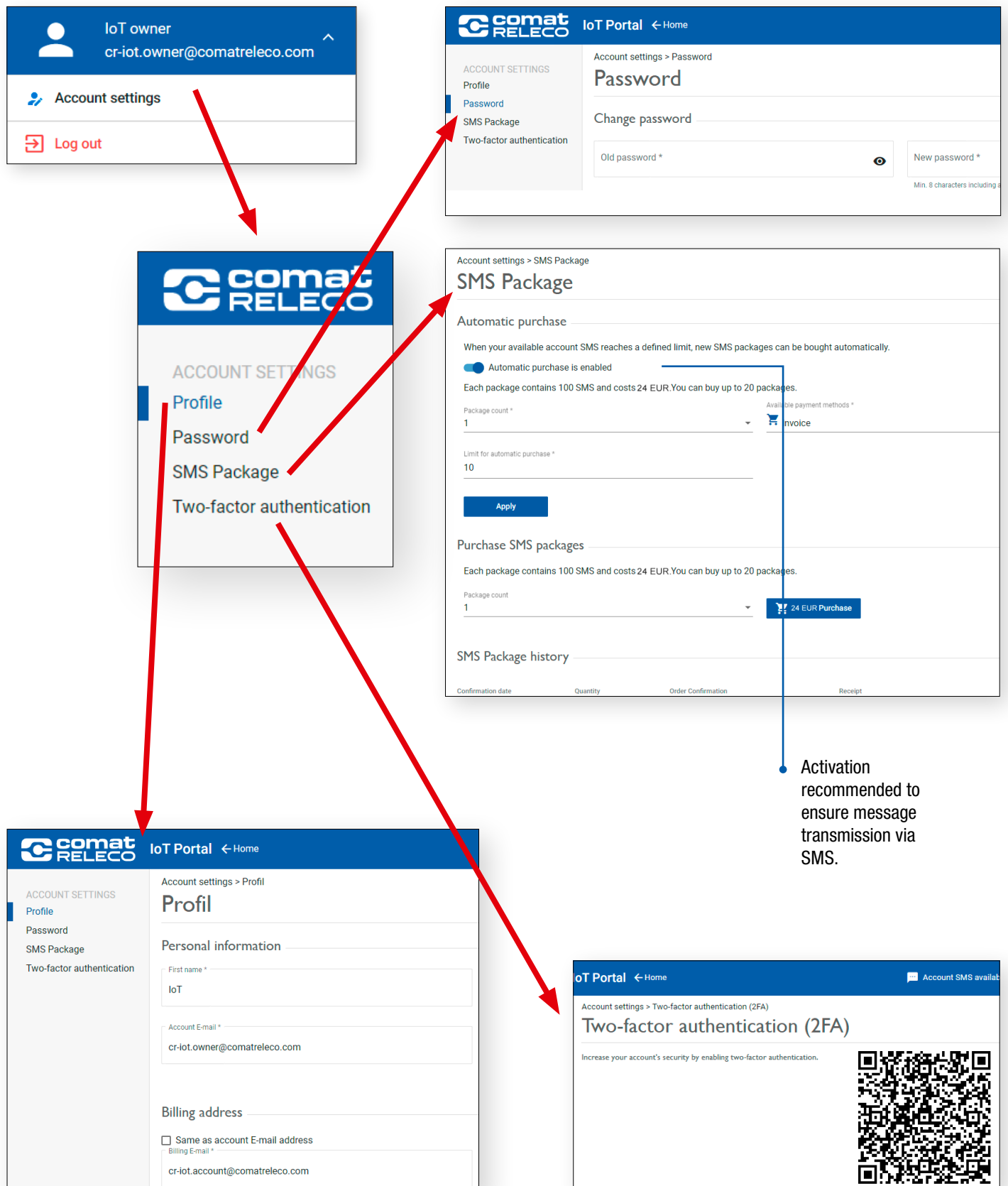
Name	Reference	Device model	Owner's e-mail	Status	Service profile	Expires on	SMS available for this month	Firmware
IoT-Portal	Device for printscreens	CMS-10R-DA	iot.portal.3076@gmail.com	Connected	WW-Professional	10/10/23	30 / 30	1.2.0m (dev)
Test box CoRe		CMS-10R-DA	iot.portal.3076@gmail.com	Not paired				
Test Z1		CMS-10R-DA	iot.portal.3076@gmail.com	Not paired				

Items per page: 100 1 - 3 of 3

... when monthly SMS of the device have been used.

4. Setup a device

Overview of your account settings



5. Use the device

Device overview

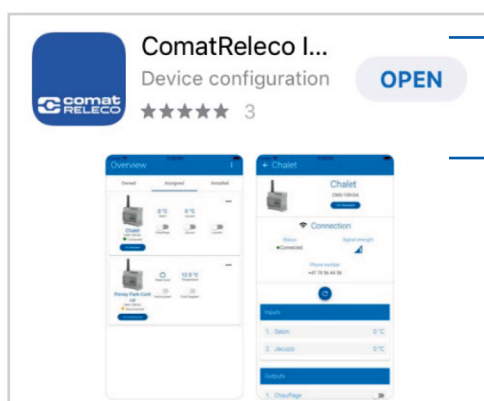
Manager

Device details

Connectivity

Link to documentation and release information.

I/O monitoring/control



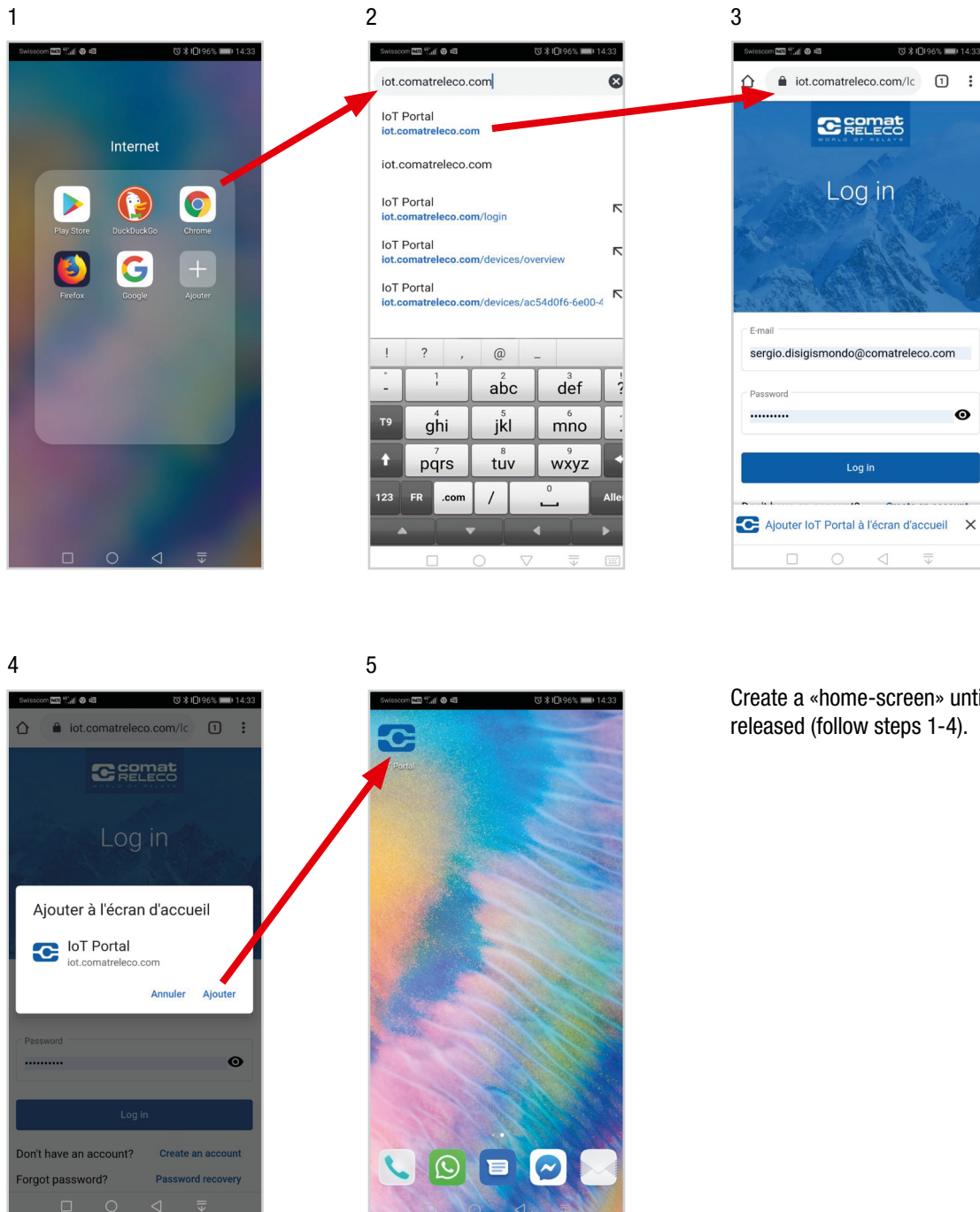
App: ComatReleco IoT Portal

App for Android phones:
Please make sure that the app is not part of
the power saving mode as this would stop
indicating push notifications!

5. Use the device

Create homescreen instead of using the app with android phones

Depended on android version and device type.



Create a «home-screen» until app is released (follow steps 1-4).

5. Use the device

I/O, Status messages / notifications

Notifications

Users / Machines

Message receiver (5 max.)

- 1. IoT owner (push)
- 2. IoT owner (SMS)
- 3. CMS-10R user (e-mail)
- 4. CMS-10R user (Voice Call)
- 5. CMS-10R pager (Pager)

Find user / machine

Confirmation

☒ It is possible to add an acknowledgment loop.

Waiting time to confirm

min (1-60)

1

Define the time to acknowledge a message.

Max. number of loops

5

Number of acknowledgment loops according service profile (1, 3, 5).

Users / Machines

Message receiver (5 max.)

Find user / machine

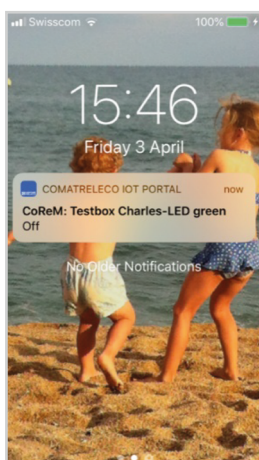
Charles Mosimann	push	SMS	e-mail
Daniel Herren	push	SMS	e-mail
Testbox Charles		SMS	

Define who will receive messages by push notification, email, pager notification, voice call or SMS.
Max. message receivers per input/output according service profile (2, 5, 5).

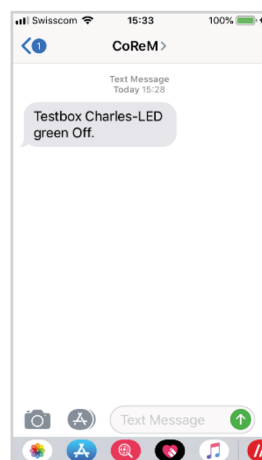


If a confirmation loop is selected, please note that a machine (or a person defined as a machine) cannot acknowledge the message. The machine only receives the notification message, without any link to confirm.

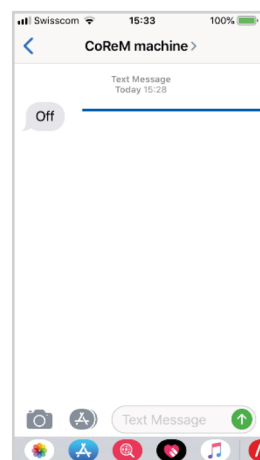
Push



SMS



SMS to machine



SMS to machine is sent **without header**, so it is compliant to most machines, such as pager, alarm servers, etc.

5. Use the device

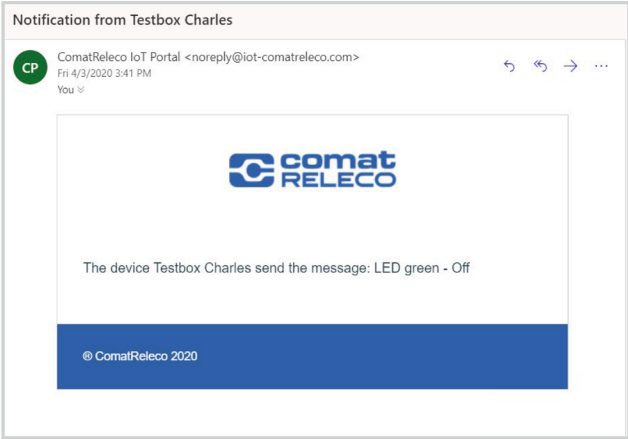


I/O, Status Messages / Notifications

E-mail

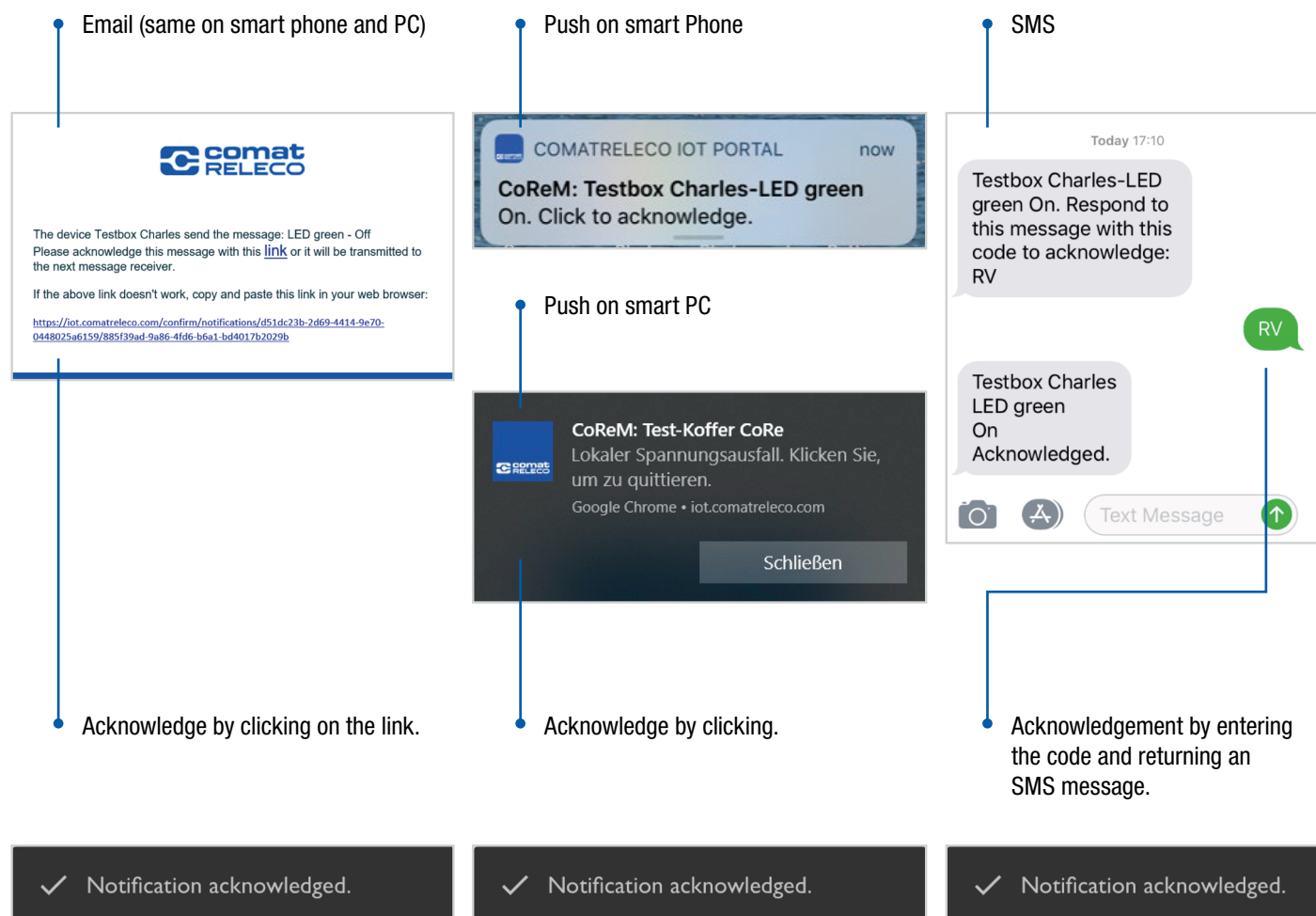


E-mail to machine



5. Use the device

Acknowledgement



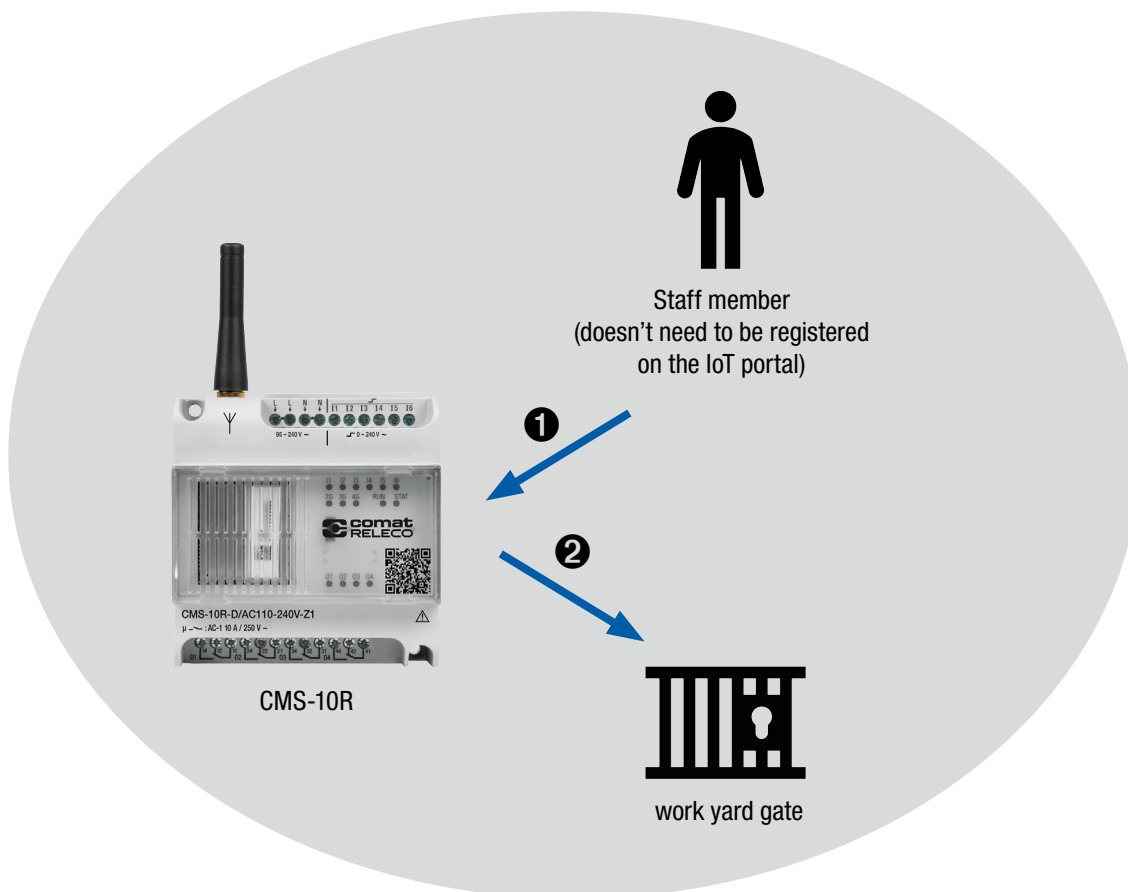
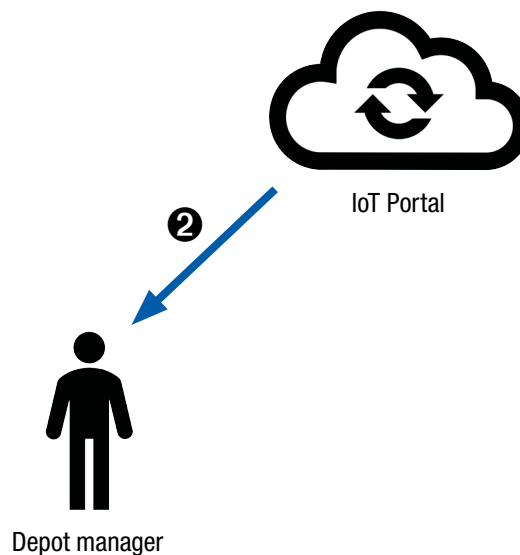
6. Application example

Access control

Access control of a work yard from a community with different employees.

Define an access code, i.e. SMS message, to switch an output. Distribute the access code to different people who can open the gate.

- 1 An employee sends the SMS code to CMS-10R.
- 2 CMS-10R switches the output, an e-mail is being sent to the manager that someone entered the work yard.

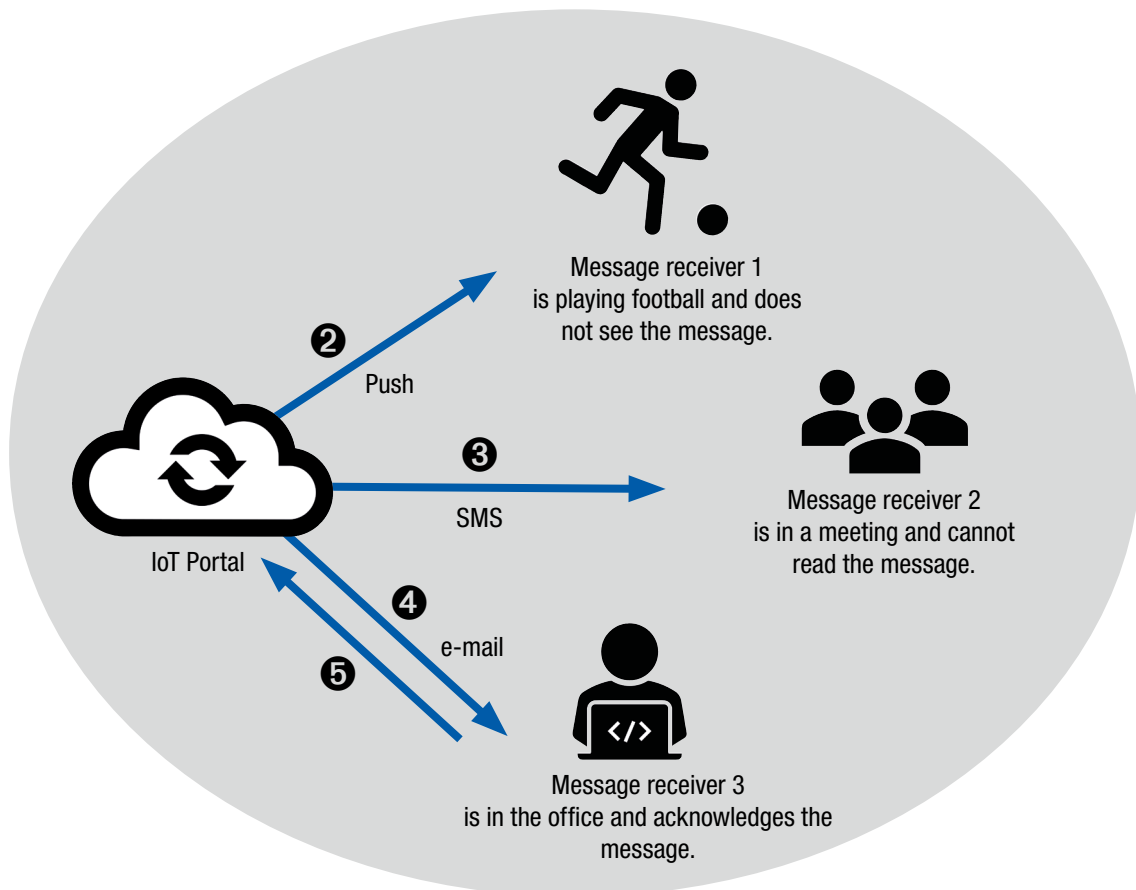
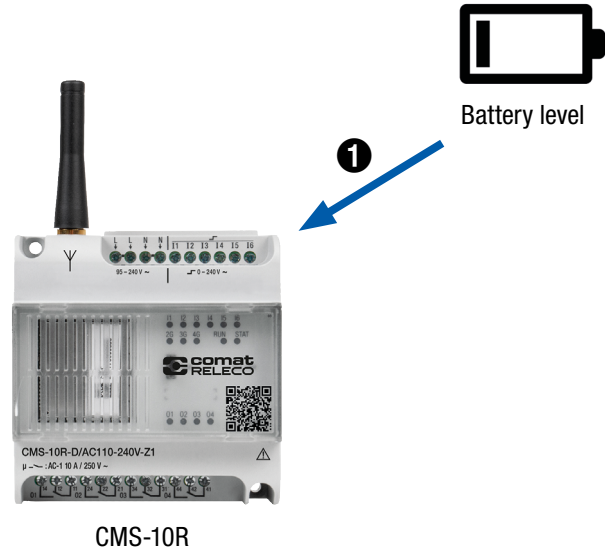


6. Application example

Acknowledgement with acknowledgement loop

Acknowledgement of a message from monitoring a battery charge.

- ❶ Level reaches threshold, input 1 of CMS-10R changes.
- ❷ IoT Portal sends a push notification with acknowledgment request to receiver 1.
- ❸ Not acknowledged within defined time. IoT Portal sends an SMS notification with acknowledgment request to receiver 2.
- ❹ Not acknowledged within defined time. IoT Portal sends an e-mail notification with acknowledgment request to receiver 3.
- ❺ Message receiver acknowledges.

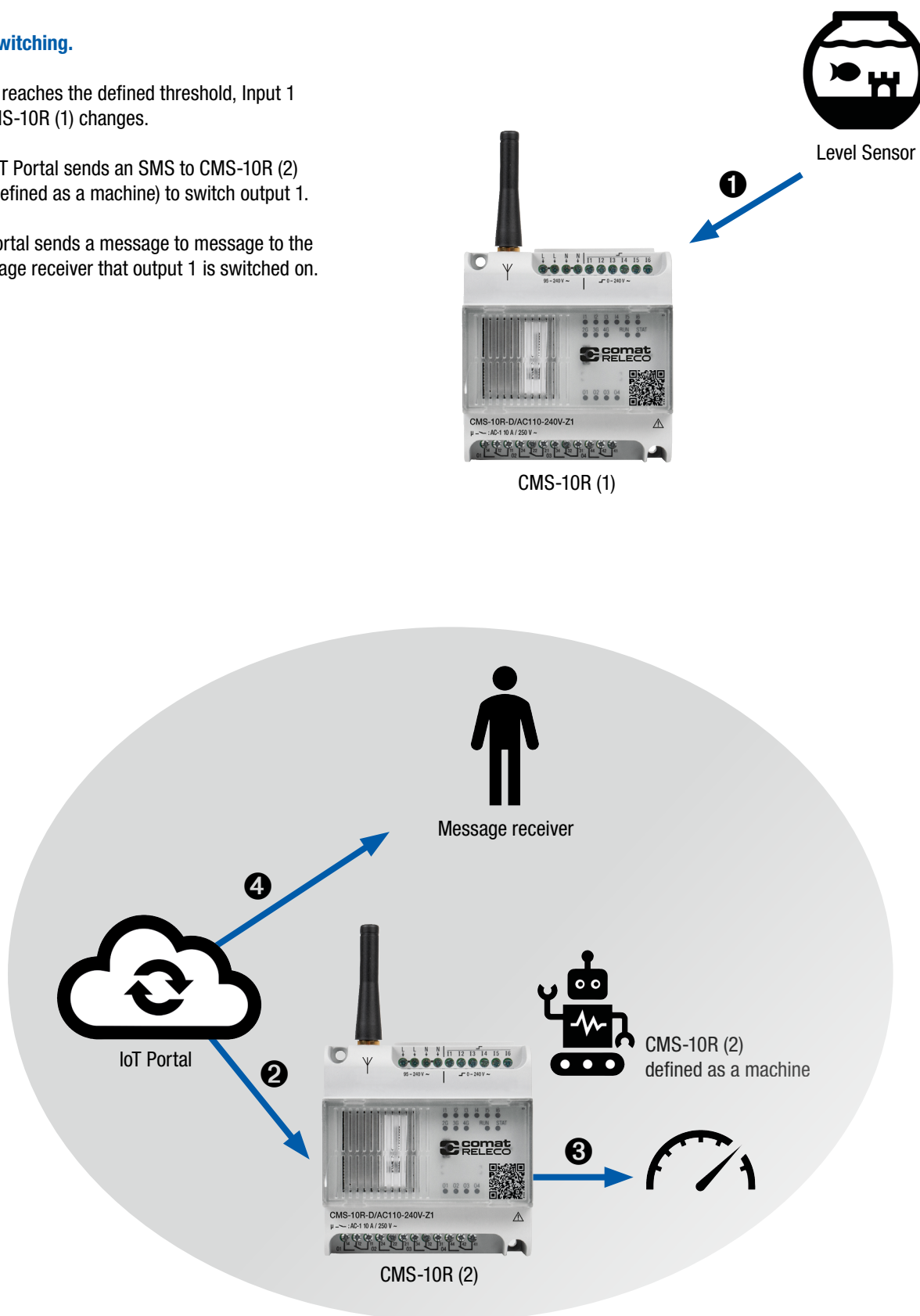


6. Application example

Remote control

Remote switching.

- ❶ Level reaches the defined threshold, Input 1 of CMS-10R (1) changes.
- ❷ ❸ IoT Portal sends an SMS to CMS-10R (2) (defined as a machine) to switch output 1.
- ❹ IoT Portal sends a message to the message receiver that output 1 is switched on.

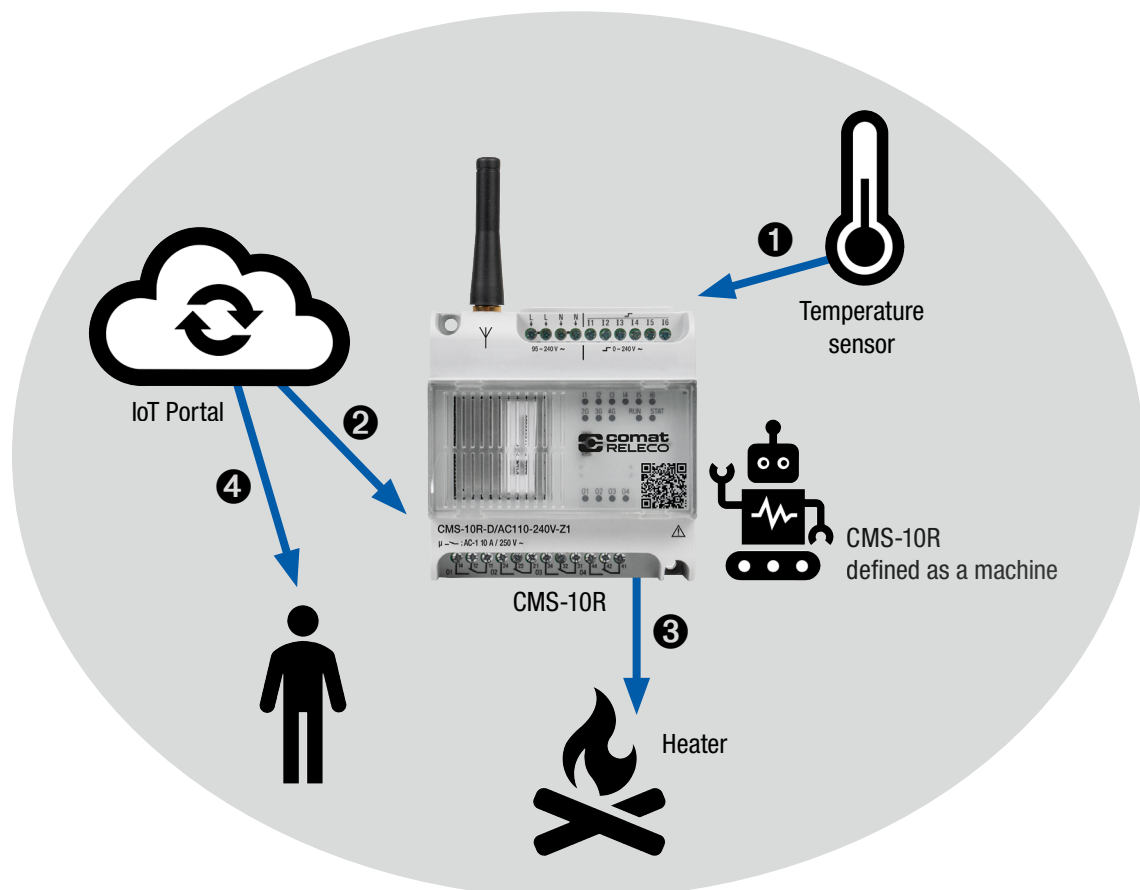


6. Application example

Very simple control system

Measure the room temperature and switch the heater automatically on with information to the owner.

- ❶ Temperature sensor indicates a temperature that reaches the threshold as defined in the configuration.
- ❷❸ IoT Portal sends an SMS to the CMS-10R (defined as machine itself) to switch output 1.
- ❹ IoT Portal sends a message to the owner that output 1 is switched on.



6. Application example

Pager, alarm server

CMS-10R sends messages from a control box to a alarm server.

- ❶ For example, the control box lost power, indicated on input 1.
- ❷ IoT Portal sends an SMS to the pager, alarm server and an e-mail to the technical manager in charge.
- ❸ The pager, alarm server sends an alarm to the service engineer on duty.

