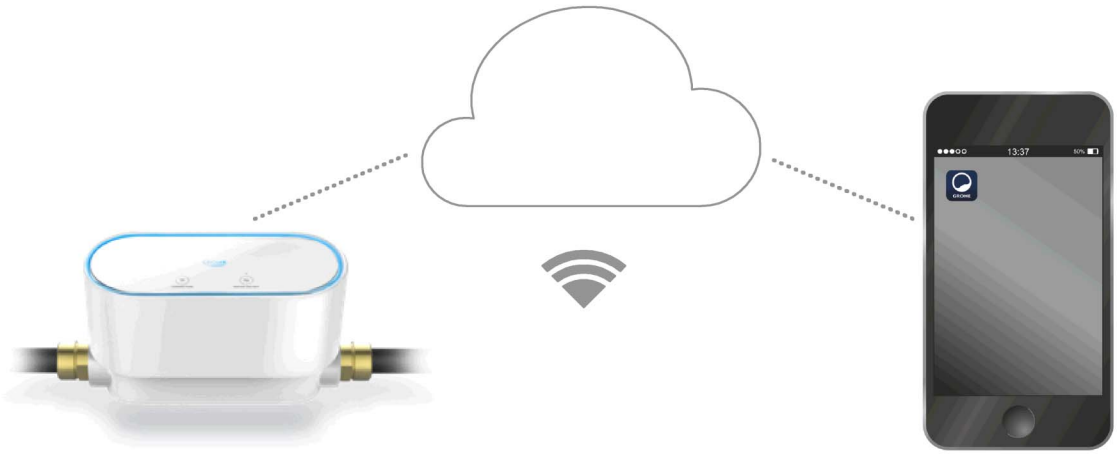
GROHE SENSE GUARD
DESIGN + ENGINEERING
GROHE GERMANY

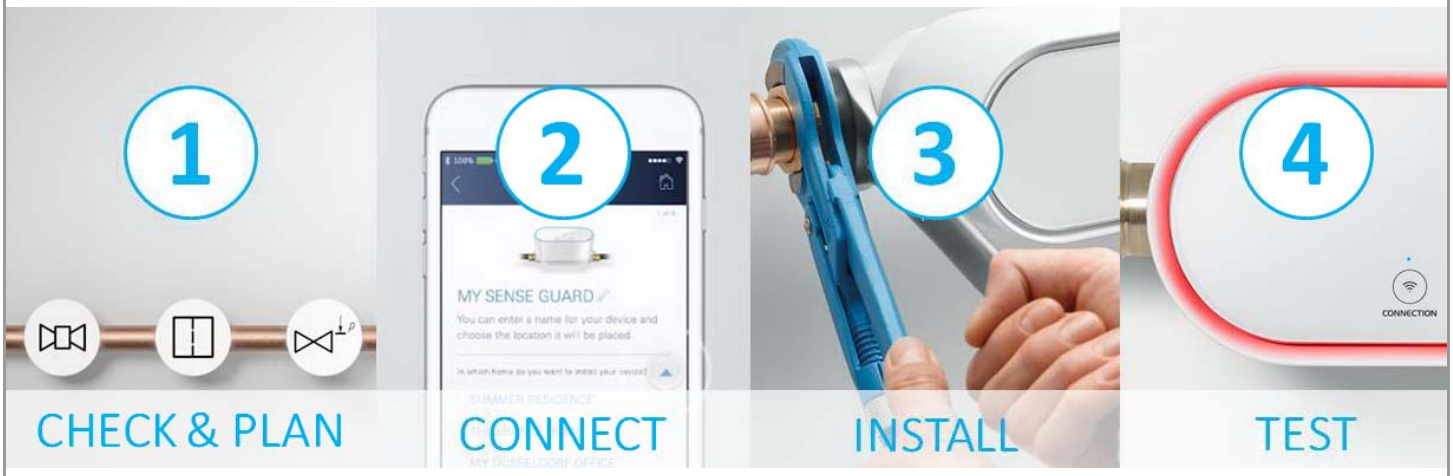
INT00018/ÄM 238835/08.18

www.grohe.com

Pure Freude an Wasser

GROHE





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Safety information

Hazard warnings:

- Avoid danger due to damaged connection cables. In the case of damage, the connection cable must be replaced by the manufacturer or its customer service department or an equally qualified person.

General instructions:

- If safety systems such as fire suppression sprinkler systems are connected to the building’s main water supply, the fitment of GROHE Sense Guard is not permitted. If there is leakage protection at the same time that the sprinkler system function is retained, there must be a branching of the supply line upstream of the GROHE Sense Guard.
- In addition to the operating instructions, the recognised rules of engineering and technical rules for safe and professional work must be adhered to.

Instructions on installation:

- Installation may only be performed in frost-free rooms.
- Installation must be carried out by a trained professional installer.
- The water supply must be shut off before installation.
- You should check after installation whether hot water still leaks from points of discharge in the house by manually triggering the cold water cut-off via GROHE Sense Guard. Leakage can be prevented by using GROHE thermostat fittings.
- The installation and the use of GROHE Sense Guard are subject to applicable national provisions.

Instructions on power supply:

- The valve stays open in the event of power failure. GROHE Sense Guard can thus be used as a permanent shut-off valve. The main shut-off valve needs to be closed when repairing leakage.
- The plug-in power supply is only suitable for indoor use.
- The plug-in connectors must **not** be directly or indirectly sprayed with water when cleaning.
- It must be possible to switch the voltage supply on/off separately.

Instructions on operation:

- The water to be used must comply with the European Drinking Water Directive. Before using with water of a different quality or containing additives, the manufacturer must be consulted.
- GROHE Sense Guard may only be used as outlined in the operating instructions. Any other usage or usage extending beyond that described is deemed improper use.
- GROHE Sense Guard must only be used in good order and condition, as intended, and with safety and hazard awareness by adhering to the operating instructions.
- Malfunctions must be immediately remedied.
- No liability is assumed for damage owing to non-compliance with the operating instructions.
- Use **only genuine spare parts and accessories**. The use of other parts will result in voiding the warranty and the CE marking, and could cause injury.

Software and internet connection:

- In order to ensure the device operates with full functionality, both the smartphone used and GROHE Sense Guard must be connected to the internet, and the device must have the GROHE ONDUS app successfully installed on it beforehand. Otherwise, the device is not configured and no warning messages can be issued.

  GROHE recommends familiarising yourself with the product and the app functions **before installing** GROHE Sense Guard in the water supply.

  For this, GROHE Sense Guard must only be connected to the power supply and integration performed via the GROHE ONDUS app. Once the internet connection has been established, you can familiarise yourself with the app and product in the absence of any function.

  The product and its functions can also be tested in the room in which the installation is carried out.
- GROHE takes all necessary measures to ensure safe and correct use. In the event of a malicious attack by third parties, GROHE advises to install the latest firmware and/or disconnect the device from the power supply grid until you receive further information from GROHE.

Intended use

GROHE Sense Guard is suitable for use in cold potable water up to a maximum water temperature of 40 °C.

GROHE Sense Guard is only permitted to be installed in potable water installations for detached houses and flats that have separate water supply lines (observe EN 806).

The GROHE Sense Guard meets the requirements of DVGW VP 638.

Applications

The GROHE Sense Guard constantly checks water consumption, flow rate and temperature and stores the collected data on the device and in online storage (GROHE Ondus cloud).

Through constant monitoring, leaks are detected in good time and water damage can be reduced by using automatic shut-off or smartphone warnings.

A 100% protection against water damage cannot be guaranteed for system-related reasons.

GROHE Sense Guard detects everyday water consumption and saves this as consumption data. On this basis GROHE Sense Guard responds to unusual situations.

There are many types of possible deviations:

- Burst pipe: an excessively large amount of water flows through the GROHE Sense Guard. The water supply is immediately shut off and a push notification is sent to the connected smartphone.
- Unusual water consumption: if a lot of water is taken in one discharge operation or there are small flow rates over several hours, a push notification is sent to the connected smartphone. In addition, the consumption is constantly measured and additional tests are carried out several times each day.
- Micro leakage: minute quantities of water leak out and a push message is sent to the interconnected smartphone. The micro-leakage test is carried out once every 24 hours. In the event that the measurement could not be completely carried out multiple times, a notification is likewise sent.
  The results of the measurement may be influenced by the characteristics of the pipe system or overlapped tapping processes.
- For more information see the table of faults or GROHE ONDUS App under Menu -> Help -> Frequently asked questions

The speed of detection depends on the previous consumption behaviour of the household, the length and type of the pipe system and the water flow rate and pressure.
In order to increase the detection speed of the leaks, a flood sensor (available in the GROHE product range) can also be used. If water flooding is detected, this sends an optical or acoustic alarm signal and sends a message of the detected event to the GROHE ONDUS app and GROHE Sense Guard, following which the water supply is automatically shut off. It must be ensured that both devices have a stable internet connection.

Operating conditions

In order to function properly, the GROHE Sense Guard **must** be connected to a wireless network (2.4 GHz, IEEE 802.11b/g/n) **with continuous internet access**.
Only WLAN channels 1 – 11 can be used.
After successful connection to the wireless network, it is **not** possible to assign the GROHE Sense Guard to another wireless network while it is in operation (RESET necessary).

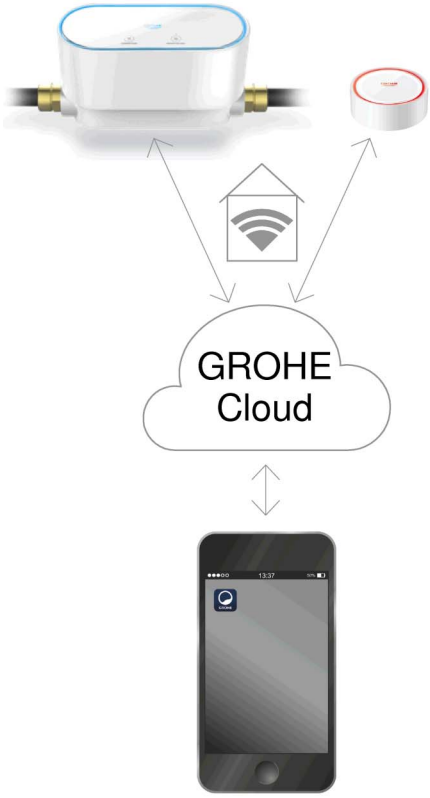
Technical data

• Flow pressure:	min. 0.05 MPa / recommended 0.1 – 0.5 MPa
• Operating pressure:	max. 1 MPa
• Test pressure:	1.6 MPa
• Flow rate:	2 – 85 l/min
• Water temperature:	3 °C – 40 °C
• Ambient temperature:	3 °C – 40 °C
• Voltage supply:	DC 12 V 2.5 A
• Power consumption:	30 W

Electrical test data

• Software class:	A
• Contamination class:	2
• Rated surge voltage:	2,500 V
• Temperature for ball impact test:	100 °C

• The test for electromagnetic compatibility (interference emission test) was performed at the rated voltage and rated current.



Apple:

• Operating system iOS 9.0 and higher

Android™:

• operating system 4.3 and higher

• recommended pixel density minimum 160 dpi

• resolution minimum 320 x 470 pixels

Current application

The latest version of the required app (GROHE ONDUS) must be installed on the smartphone, see initial installation.

Function range

• Leakage detection

• Frost warning

Connection settings

• GROHE Sense Guard must be connected to a wireless network with continuous internet access

• GROHE Sense Guard password: see nameplate.

• **Internet access must be permanently enabled** on the smartphone.
(Settings / mobile data / on)

• GROHE Sense Guard must be registered in the GROHE ONDUS app

When operating under unfavourable surrounding conditions, in rooms with reinforced concrete walls, steel and iron frames, or in the vicinity of obstacles (e.g. furniture) made of metal, WLAN reception can be impaired and interrupted.

Type of barrier	Interference or screening potential
Wood, plastic, glass	Low
Water, bricks, marble	Medium
Plaster, concrete, solid wood	High
Metal	Very high

GROHE Sense Guard operates in frequency band 2.4 GHz.
Installation in the vicinity of devices with the same frequency band (e.g. DECT telephones, Bluetooth devices etc. [observe manufacturer documentation]) should be avoided.

GROHE Sense Guard shuts off the water supply when leakage is detected in accordance with the previously made settings, even if no wireless network connection is available in the home.

However, without a wireless network connection no push message can be sent to the connected smartphone. The push message is received as soon as a wireless network returns.

If the “Control by Sense” function is activated in the GROHE Sense Guard settings, and GROHE Sense reports a leakage, the water supply cannot be shut off by GROHE Sense Guard without a wireless network connection since a transmission to GROHE Sense Guard is only possible via GROHE Cloud with an active wireless network connection.

If only the smartphone cannot establish an internet / wireless network connection, but the wireless network and internet connection in the home are working, GROHE Sense and GROHE Sense Guard will function as usual and water damage can be reduced.

The message is received when the smartphone reconnects to the internet.

Start-up after water supply shut-off

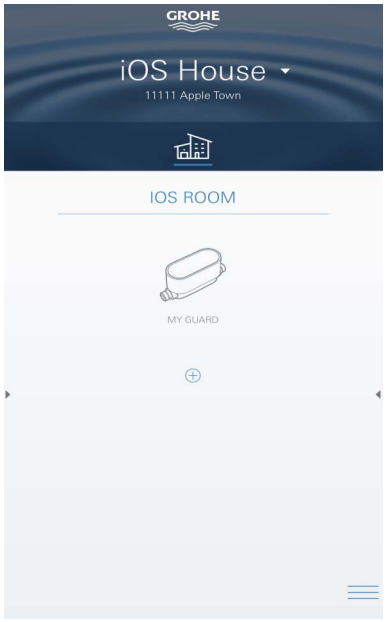
If the main shut-off valve is opened too quickly, GROHE Sense Guard immediately closes again automatically. This is a normal process.

Therefore, it is important to follow the prescribed order and re-open the water supply slowly.

1. Turn on GROHE Sense Guard.
2. Slowly open the main shut-off valve.

iOS

GROHE ONDUS app overview



Main screen (dashboard)

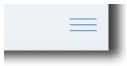
• Selection bar for administering connected houses.

• Selection bar for administering connected rooms, data retrieval or configuring linked products.

• Information on operating app:

Swipe from left to right:
product catalogue.

Swipe from right to left:
overview of integrated products.



Touch menu or swipe from bottom to top:
Menu overview (My Houses, Settings, Order Products, Help & Support, Legal and Logout).

Return to the previous screen by swiping in the opposite direction and touching BACK or HOME.

Initial start-up

Activate WLAN on the smartphone and ensure permanent access to internet.

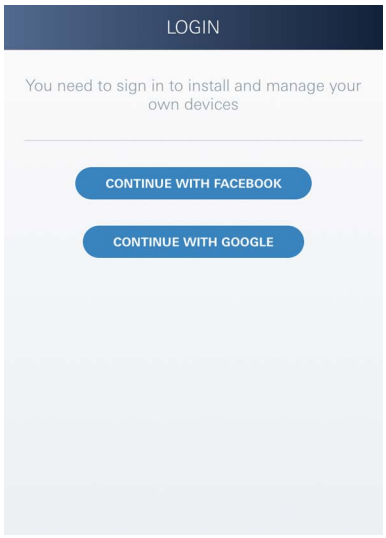
Installing the GROHE ONDUS app

The GROHE ONDUS app is free from Apple App Store (an account with Apple is required).

Important note:

To ensure that the warnings and alarms can be received as messages on the smartphone, the appropriate service for receiving push messages must be activated for the GROHE ONDUS app.

Push messages are only received on the smartphone if the user has logged in.

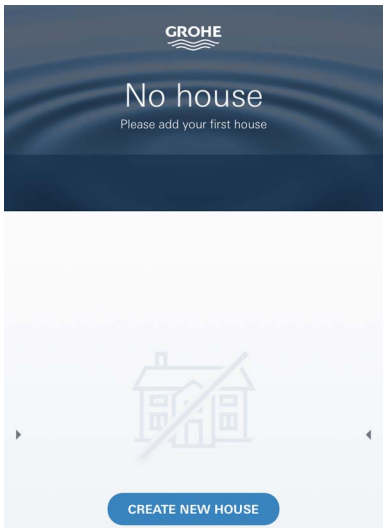


Starting the GROHE ONDUS app

Tap the app icon to start the application.

Login and registration:

- Using an existing Google or Facebook account.
- Via a new Google or Facebook account.
- Via a GROHE account.
- To use the GROHE ONDUS app you must accept the terms and conditions of use.
- Connection to the cloud is established automatically.
- The main screen (dashboard) is shown.



Adding GROHE Sense Guard to the network

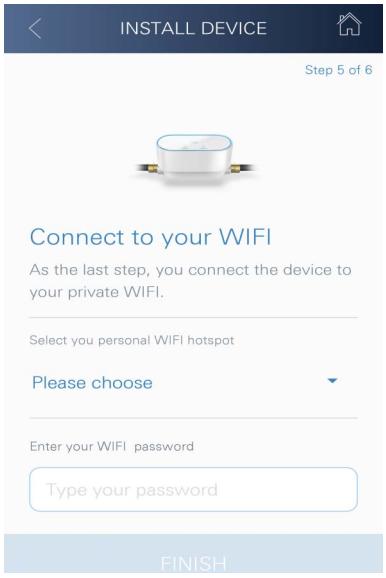
Follow the instructions on the app.

1. Set up a new house.
   (Enter address and contact information.
   Caution: do not use special characters!)
2. Install a new device (GROHE Sense Guard).
3. Issue device name.
   (Caution: do not use special characters!)
4. Set up a new room.
5. Configure auto-close settings.
6. Press the CONNECTION button for 3 seconds on GROHE Sense Guard.

Important note:

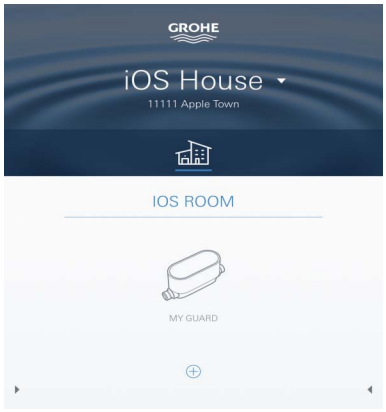
Configuration mode is active for a maximum of 5 minutes. Once 5 minutes have elapsed, the mode can be reactivated by briefly disconnecting and reconnecting the voltage supply (min. 30 seconds) and then pressing the CONNECTION button.

7. Switch to the WLAN settings on the smartphone.
8. Select and connect the GROHE Sense Guard network.
   SSID: GROHE_GUARD_xxxxxxxx
   GROHE Sense Guard password: see nameplate.
9. Return to the GROHE ONDUS app and connect GROHE Sense Guard to the private wireless network (the wireless network must have permanently active internet access).
10. Enter and confirm the wireless network password.
11. SETUP SUCCESSFUL is shown on successful connection.



GROHE Sense Guard is now registered in the GROHE ONDUS app and connected to the cloud.

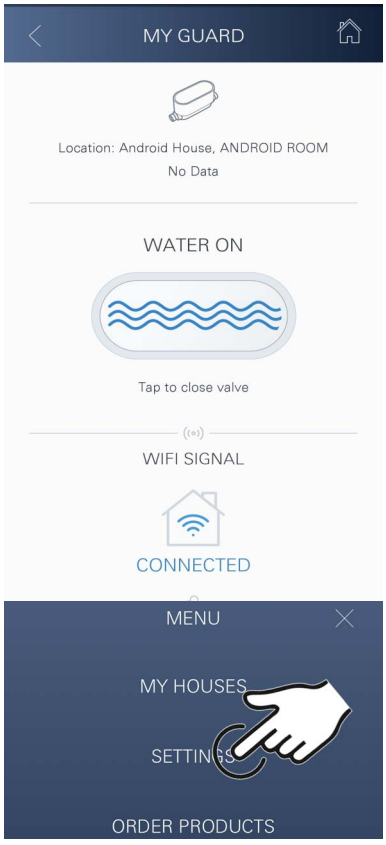
Temperature, flow rate and water pressure are recorded at 15 minute intervals and cached in GROHE Sense Guard.



Operation

Retrieving GROHE Sense Guard data

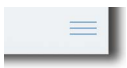
1. Tap the GROHE ONDUS app icon to start the application and, if necessary, log in.
2. Select the product.
3. The measured data transferred to the cloud is shown.



The time of the last synchronisation of the app with the cloud, whether the valve is open or closed, the last saved values for temperature, flow rate and water pressure, and the GROHE Sense Guard WLAN connection status are shown.

You can select the display period by swiping from right to left (CURRENT/WEEK/MONTH/3 MONTHS).

Changing names/settings



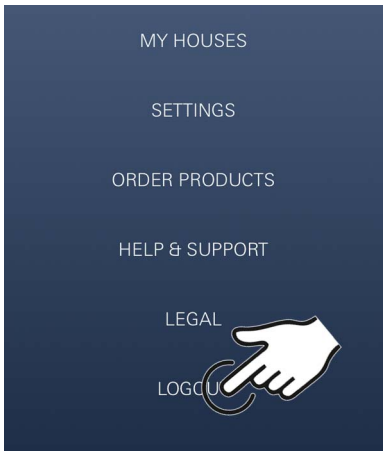
1. Touch menu or swipe from bottom to top.
2. Select menu option MY HOUSES.
   Here you can edit, delete or add houses, address data and rooms.
3. Select the required menu option.

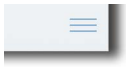
Note

Any changes to names/settings are transferred immediately to the cloud.

Restore factory settings:

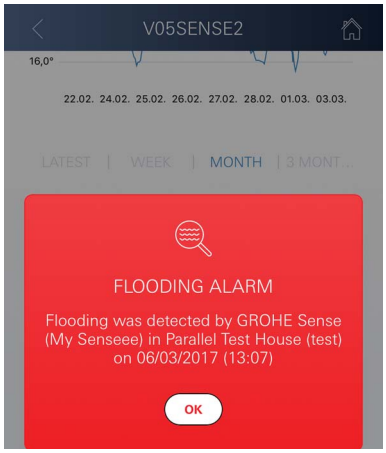
- Disconnect and reconnect the voltage supply.
- Keep both buttons pressed down for three seconds.
- Release the buttons as soon as the entire blue signalling extinguishes
- Reset occurs (all settings are reset to factory settings).





Logout

1. Touch menu or swipe from bottom to top.
2. Tap LOGOUT.
3. Close the GROHE ONDUS app.



Messages

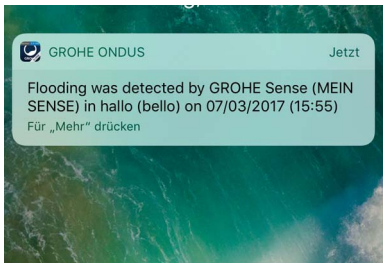
GROHE Sense Guard measures temperature, flow rate and water pressure in a 15-minute measurement interval. Observed deviations are displayed as a message within the app and via a push message on the connected smartphones.

If there is **detection of leakage**, an optical and acoustic signal also appears on the product.

The signal can be switched off manually by pressing the button WATER ON/OFF (for 3 seconds) or by using the app. It should be ensured that the solenoid valve opens and the water supply is again released. If there is micro-leakage, another signal will appear no sooner than 24 hours later.

In the case of greater leakage, a signal will appear straight away. The main shut-off valve must be closed before opening the valve by pressing the WATER ON/OFF button (for 3 seconds) or by actuating the app.

If the app or the device firmware requires updating, the smartphone must be located in the immediate vicinity of the GROHE Sense Guard. In this way, possible interruptions in function can be controlled and rectified.



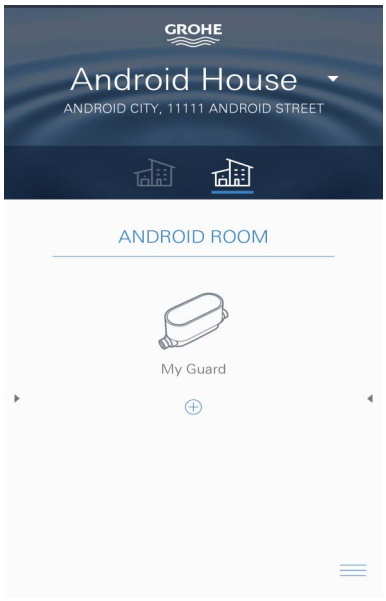
Important note:

Push messages must be activated for the GROHE ONDUS app on the smartphone.

Push messages are only received on the smartphone if the user has logged in.

Android

GROHE ONDUS app overview



Main screen (dashboard)

• Selection bar for administering connected houses.

• Selection bar for administering connected rooms, data retrieval or configuring linked products.

• Information on operating app.
Swipe from left to right:
product catalogue.

Swipe from right to left:
overview of integrated products.

Swipe from bottom to top:
Menu overview (My Houses, Settings, Order Products, Help & Support, Legal and Logout).

Return to previous screen by touching BACK or HOME.

Initial start-up

Activate WLAN on the mobile terminal device and ensure permanent access to internet.

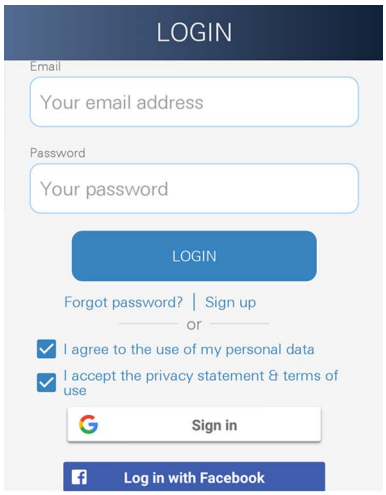
Installing the GROHE ONDUS app

GROHE ONDUS app is free from Google Play Store (a Google account is required).

Important note:

To ensure that the warnings and alarms can be received as messages on the smartphone, the appropriate service for receiving push messages must be activated for the GROHE ONDUS app.

Push messages are only received on the smartphone if the user has logged in.

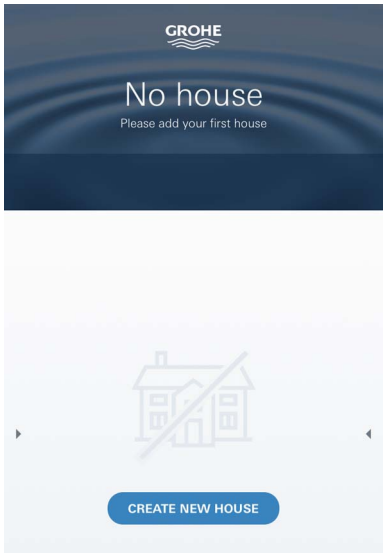


Starting the GROHE ONDUS app

Tap the app icon to start the application.

Login and registration:

- Using an existing Google or Facebook account.
- Via a new Google or Facebook account.
- Via a GROHE account.
- To use the GROHE ONDUS app you must accept the data protection statement.
- Connection to the cloud is established automatically.
- The main screen (dashboard) is shown.



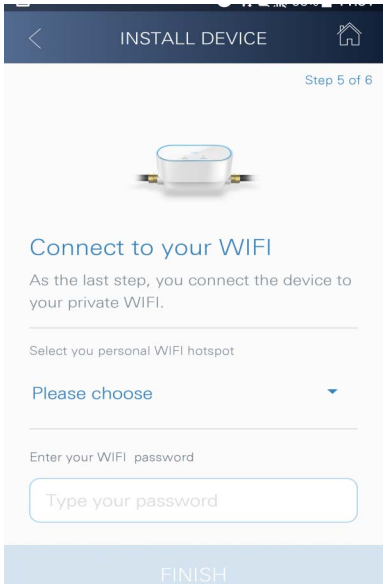
Adding GROHE Sense Guard to the network

Follow the instructions on the app.

1. Set up a new house.
   (Enter address and contact information.
   Caution: do not use special characters!)
2. Install a new device (GROHE Sense Guard).
3. Issue device name.
   (Caution: do not use special characters!)
4. Set up a new room.
5. Configure auto-close settings.
6. Press the CONNECTION button for 3 seconds on GROHE Sense Guard.

Important note:

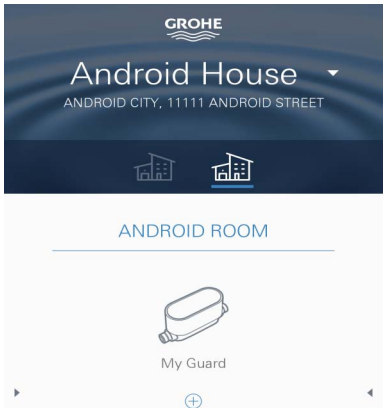
Configuration mode is active for a maximum of 5 minutes. Once 5 minutes have elapsed, the mode can be reactivated by briefly disconnecting and reconnecting the voltage supply (min. 30 seconds) and then pressing the CONNECTION button.



7. Select and connect the GROHE Sense Guard network.
   SSID: GROHE_GUARD_xxxxxxxx
   GROHE Sense Guard password: see nameplate.
8. Connect GROHE Sense Guard to the private wireless network
   (the wireless network must have permanently active internet access).
9. Enter and confirm the wireless network password.
10. SUCCESS appears upon connecting successfully.

GROHE Sense Guard is now registered in the GROHE ONDUS app and connected to the cloud.

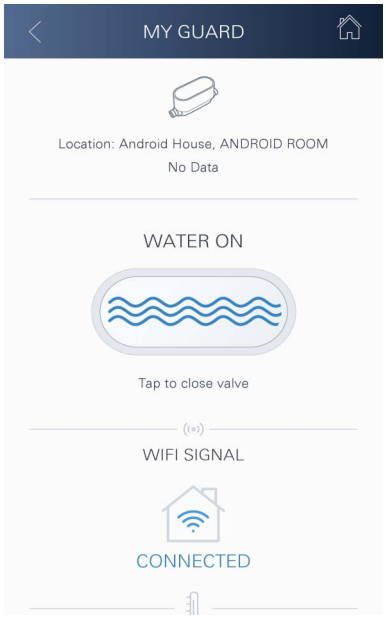
Temperature, flow rate and water pressure are recorded at 15 minute intervals and cached in GROHE Sense Guard.



Operation

Retrieving GROHE Sense Guard data

1. Tap the GROHE ONDUS app icon to start the application and, if necessary, log in.
2. Select the product.
3. The measured data transferred to the cloud is shown.



The time of the last synchronisation of the app with the cloud, whether the valve is open or closed, the last saved values for temperature, flow rate and water pressure, and the GROHE Sense Guard WLAN connection status are shown.

You can select the display period by swiping from right to left (CURRENT/WEEK/MONTH/3 MONTHS).

Changing names/settings

1. Swipe from bottom to top.
2. Select menu option MY HOUSES.
   Here you can edit, delete or add houses, address data and rooms.
3. Select the required menu option.

Note

Any changes to names/settings are transferred immediately to the cloud.

Restore factory settings:

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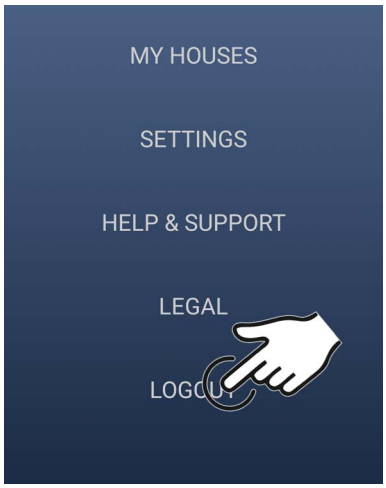
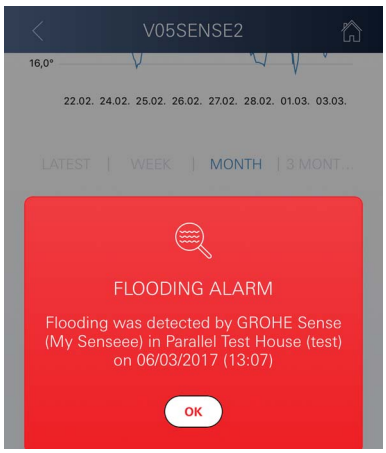
- Release the buttons as soon as the entire blue signalling extinguishes
- Reset occurs (all settings are reset to factory settings).



Logout

1. Swipe from bottom to top.
2. Tap LOGOUT.
3. Close the GROHE ONDUS app.



Messages

GROHE Sense Guard measures temperature, flow rate and water pressure in a 15-minute measurement interval. Observed deviations are displayed as a message within the app and via a push message on the connected mobile terminal devices.

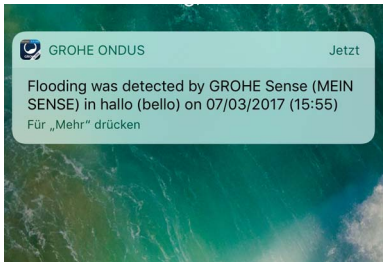
If there is **detection of leakage**, an optical and acoustic signal also appears on the product.

The signal can be switched off manually by pressing the button WATER ON/OFF (for 3 seconds) or by using the app. It should be ensured that the solenoid valve opens and the water supply is again released. If there is micro-leakage, another signal will appear no sooner than 24 hours later.

In the case of greater leakage, a signal will appear straight away. The main shut-off valve must be closed before opening the valve by pressing the WATER ON/OFF button (for 3 seconds) or by actuating the app.

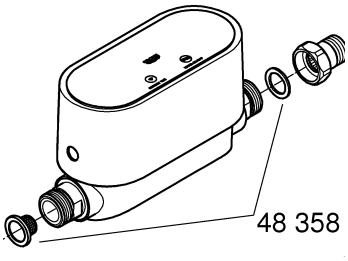
If the app or the device firmware requires updating, the smartphone must be located in the immediate vicinity of the GROHE Sense Guard. In this way, possible interruptions in function can be controlled and rectified.

Important note:



Push messages must be activated for the GROHE ONDUS app on the smartphone.

Push messages are only received on the smartphone if the user has logged in.



Maintenance

Electronic and electrical components are maintenance-free.

The filter and seal should be regularly cleaned and/or replaced (order number 48 358).

Faults

GROHE Sense Guard measures temperature, flow rate and water pressure in a 15-minute measurement interval. Observed deviations are displayed as a message within the app and via a push message on the connected mobile terminal devices.

The signal can be switched off manually by pressing the button WATER ON/OFF (for 3 seconds) or by using the app. It should be ensured that the solenoid valve opens and the water supply is again released. If there is micro-leakage, another signal will appear no sooner than 24 hours later.

In the case of greater leakage, a signal will appear straight away. The shut-off valve must be closed before pressing the button WATER ON/OFF (for 3 seconds) or by actuating the app.

A fault can have several causes.

The following table (page 17) indicates possible causes.

All indicated causes must be checked.

If none of the measures leads to rectification of the error message, then there is a leak. Any leaks must be rectified by a professional installer.

Fault signal	Cause	Solution
Micro-leakage detected	Dripping tap	- Check and shut off all taps in the house and garden.
	Device continuously consuming water.	- If, for example, a lawn sprinkler is connected, it must be disconnected.
	Influence by hot water system (e.g. pressure increase by instantaneous heater and subsequent pressure drop).	- Do not draw hot water between 01:00 a.m. and 03:00 a.m.
	Incorrect position of other devices in house installation (e.g. pressure-reducing valve, pressure booster).	- Check the fitting sequence against the accompanying technical product information. The fitting sequence must be changed by a specialist if incorrect.
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