MANUAL

ALARM MANAGEMENT

ALARM MANAGEMENT IN THE IOLIVING SERVICE

In alarm management, the administrative user defines the events that cause the alarm and to whom the alarm notification is forwarded. There can be multiple recipients of an alarm. The alarms are sent as both a text message (SMS) and an email.

The alarm is triggered by three events:
1. The measured value has exceeded or fallen below the limit
2. Measurement device is disconnected
3. Gateway is disconnected

1. **With the set temperature alarm limit**, the service user receives an alarm if, for example, the door of the freezer room is left open or the refrigeration appliance is broken. The temperature alarm limit can be used to avoid extensive damage by preventing cold chain breakage and food spoilage. In addition to temperature, the alarm limit can be set for humidity and carbon dioxide content.

2. **A disconnection of the measurement device will cause an alarm** if the device has not transferred the measurements to the ioLiving service within the last 4 hours. This may be due to, for example, running out of batteries or placing the meter out of range. If the measurement device has been switched on during the disconnection, the measurement results are stored in its internal memory. The data can be read and transferred to the service after an interruption with the ioLiving Handy application.

3. **A disconnection of the Gateway device causes an alarm** if the device has not been connected to the ioLiving service during the last 3 hours. The connection loss may be due to, for example, poor mobile network coverage or by accidentally unplugging the Gateway. Note that a Gateway disconnection usually also causes a measurement device disconnection, which is corrected when the problem that caused the Gateway disconnection is corrected. If the measurement devices have been switched on during the disconnection, the measurement results are stored in their internal memories. The data can be read and transferred to the ioLiving service after an interruption with the ioLiving Handy application.

The user must take immediate corrective action whenever an alarm is received. Managing alarms requires that your account has a valid ioLiving license.

SETTING ALARM RECIPIENTS

The account administrator directs alarms to the desired email addresses and / or SMS numbers. To activate the contact, the recipient of the alarm must acknowledge the confirmation message sent to the e-mail address and SMS number. This ensures that the correct and functional contact information has been entered into the service.

To add the alarm recipients, select:

- ➔ Account
- ➔ Alarms manager
- ➔ Recipients of the alarms

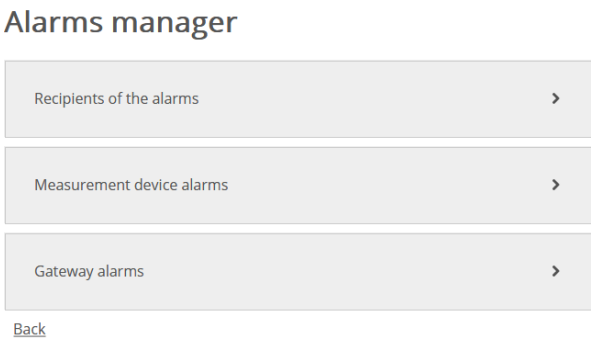


Figure 1.
Alarms manager
main menu.

In the Alarms manager main menu, go to the “Recipients of the alarms” menu, where the SMS numbers and e-mail addresses of the recipients are added. By selecting an alarm on a per-user basis, it is possible to select which alarm event is forwarded to which contact as a text message and / or e-mail. The same alarm can be transmitted to several users simultaneously.

To add recipients for alarms, select “Add new recipient”.

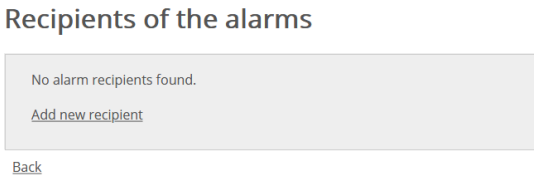


Figure 2.
Recipients of the alarms,
Add new

You can then select whether to add an email address or a phone number for the text message to your contacts.

Figure 3.
Select how the alarm
message is forwarded.

Figure 4.
Adding new alarm recipient email address.

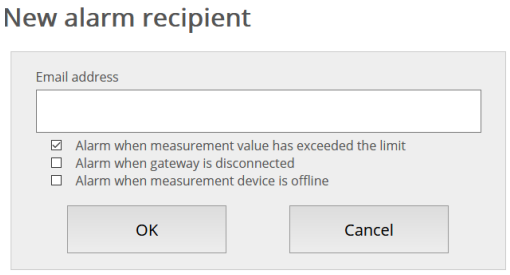
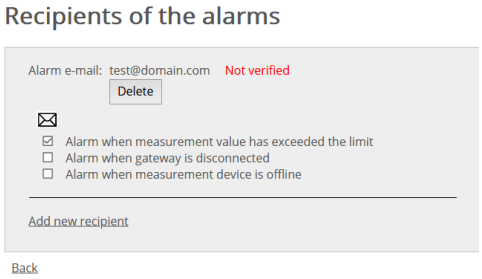


Figure 5.
Unverified alarm recipient email address entered in the service.

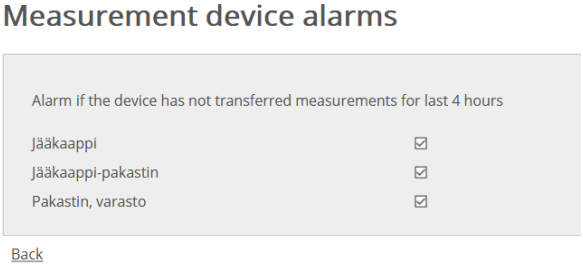


The verification link sent to the email address must be clicked / followed to verify the email address. When the verification is complete, the text "Not verified" after the email address will disappear. A corresponding link is also sent to the entered SMS number, which is clicked to verify the phone number. Note that a verification message will be sent as soon as OK is selected after adding the contact. If the verification message does not arrive, check your email spam folder.

SETTING ALARMS: Disconnection of the measurement device

In the “Measurement device alarms” menu, the administrator user selects which device will sent an alarm if no measurements have been transferred to the service during the last 4 hours. Disconnection alarms must always be selected on the measurement devices used in the kitchen environment. If the measuring device is used, for example, to record the temperature during food transport, in which case the connection will inevitably be lost, it is advisable to deselect it.

Figure 6.
Measurement device alarms menu.



SETTING ALARMS: Disconnection of the Gateway

The Gateway device must be registered in the user's account to receive alarms about disconnections. Usually, the communication device is already registered. From the Alarm Management main page:

➔ **Gateway Alarms**
The communication devices registered for the account are displayed. Select which devices will send an alarm if it has been disconnected from server more than 3 hours.

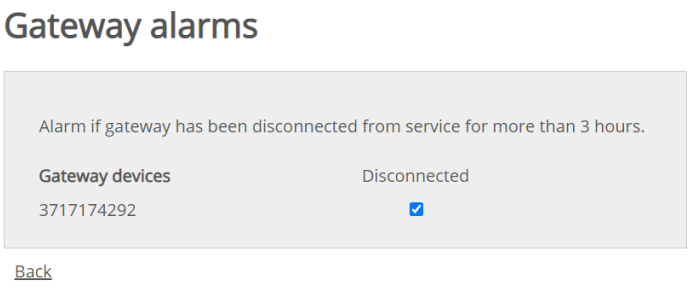


Figure 7.
Gateway alarms menu

If the gateway device in use does not appear here, it must be registered in the account. Registration is done by selecting from the main view:

➔ Device settings
➔ Gateway devices

The numeric serial number on the label of the Gateway device is entered here. After entering the number, check that the Gateway device is displayed in the Gateway alarms and that the alarm selection is on.

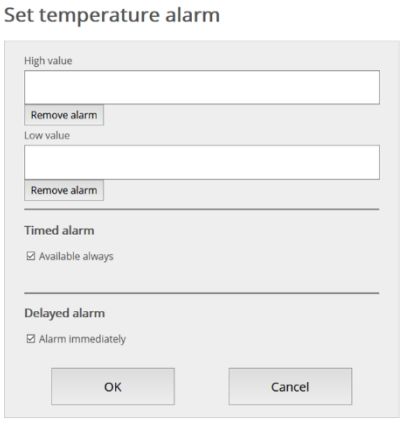
SETTING ALARMS: Temperature alarm limits

The user defined in the alarm management receives information by email or SMS when the measurement limit is exceeded or falls below (for example, the measured temperature is higher than the upper temperature limit). Alarms also appear in the ioLiving service, where they are easy to analyze later.

Set temperature alarm:

➔ Device settings
➔ Measurement devices: Choose the device for which you want to set an alarm.
➔ Set temperature limits: Enter the highest and lowest allowed value. Click OK.

Figure 8.
Setting alarm temperature limits.



➔ Timed alarms

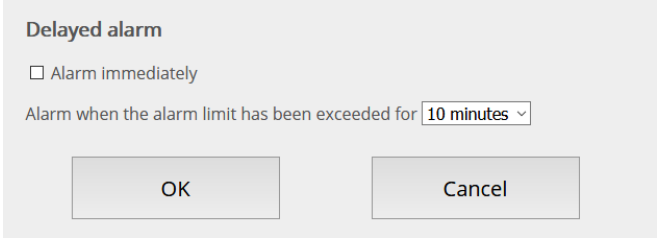
➔ If necessary, the administrator can enable alarms only at specified times. To enable timed alarms, clear the Available always check box. Select the days of the week on which you want the device to respond to alarm limits and, if necessary, set the times between which alarms should be monitored.

Figure 9.
Setting a timed alarm.

➔ Delayed alarms

If necessary, the administrator can set a delayed alarm for devices that may momentarily exceed or fall below the set limit. To enable delayed alarms, clear the Alarm immediately check box. A delayed alarm is only sent when the measurement has been continuously above or below a given limit for a specified time. In this way, the user avoids the so-called “unnecessary alarms”, for example when new products are added to the freezer.

Figure 10.
Setting a delayed alarm.



When the alarm settings are complete, click → OK to save.

The service now sends alarms (by email and / or SMS) if the measured value exceeds the maximum allowed value or falls below the minimum. In ioLiving, alarms are displayed on the front page. The bell icon next to the measurement device name indicates which device caused the alarm. When the device that triggered the alarm is selected, the user can see the latest alarm. The user must acknowledge the alarm and at the same time the cause can be recorded. Previous alarms are displayed below the graph.

Figure 11. A temperature alarm displayed in the service.

ALARM FUNCTION

The user defined in the alarm manager will be notified by email and / or SMS about the last alarm. If the previous alarm has not been acknowledged, the service will not send a new message. However, all notifications will appear on the ioLiving service.

The recipient of the alert notification must ensure that the problem that caused the alarm has been fixed and the alarm is acknowledged in the service.

A successful alarm also requires that the device has stored temperatures within the set limit before the measurement can cause an alarm. In other words, the measurements must exceed the alarm limit to generate an alarm.

The service always shows the last alarm that occurred. Selecting the "This device has alarmed at" link (see example in Figure 11. ("This device has alarmed at 11.12.2020 11:15") will take you to view the moment of the alarm. The alarm must be acknowledged, after which notifications of new ones can be sent.

Remove alarm

- ➔ Device settings
- ➔ Measurement devices → Select the device from which you want to remove the alarm
- ➔ Set temperature alarm → Choose Remove alarm in the limit values.