

Konfiguration von externen Sensoren am AlarmManager

External sensors can be connected to the AlarmManager using I/O modules.

Three Kentix I/O modules are available for this purpose ([KIO7052](#), [KIO7053](#), [KIO7017](#)).



The wiring should only be done by a specialist with electrotechnical knowledge. Incorrect wiring can lead to short circuits and defects.

Configuration Kentix [Outdoor Temperature Sensor](#) in combination with [KIO7017](#)

Connection and important information

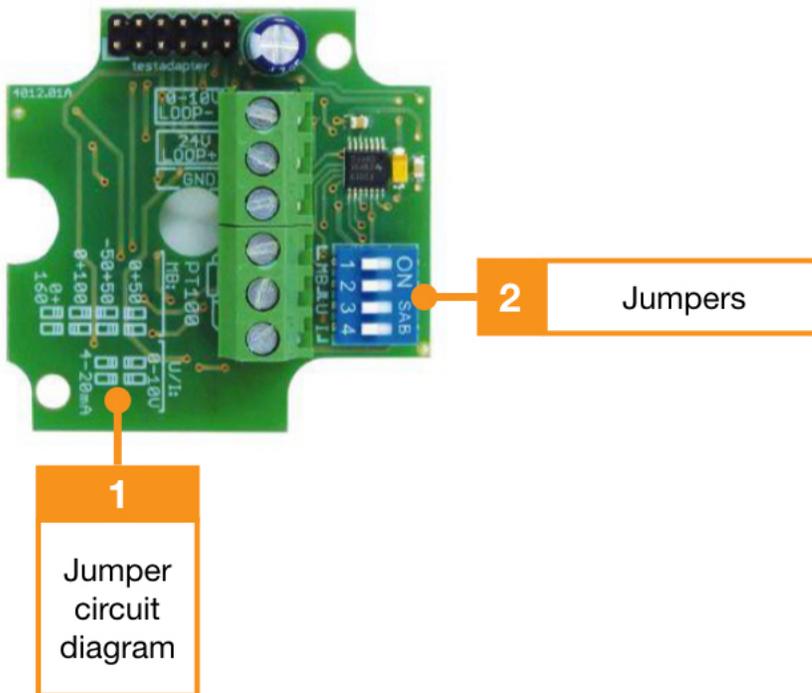


Make sure that the components are connected correctly. Refer to the connection diagrams of the used sensor and the KIO module ([KIO70xx](#)).

Note that the sensor and measuring transducer of the Kentix Outdoor Temperature Sensor (KESAN1) are located in the same case.

Make sure that the jumpers (2) inside the temperature sensor are set to output the range you have selected (-50°C - +50°C, 0°C - 100°C, 0°C - 50°C) and the output signal type is correct (voltage or current).

By default, the temperature sensor jumpers are set to -50 - +50°C and voltage output (0-10V). For all other configurations, the measuring transducer jumpers must be adjusted according to the jumper circuit diagram (1).



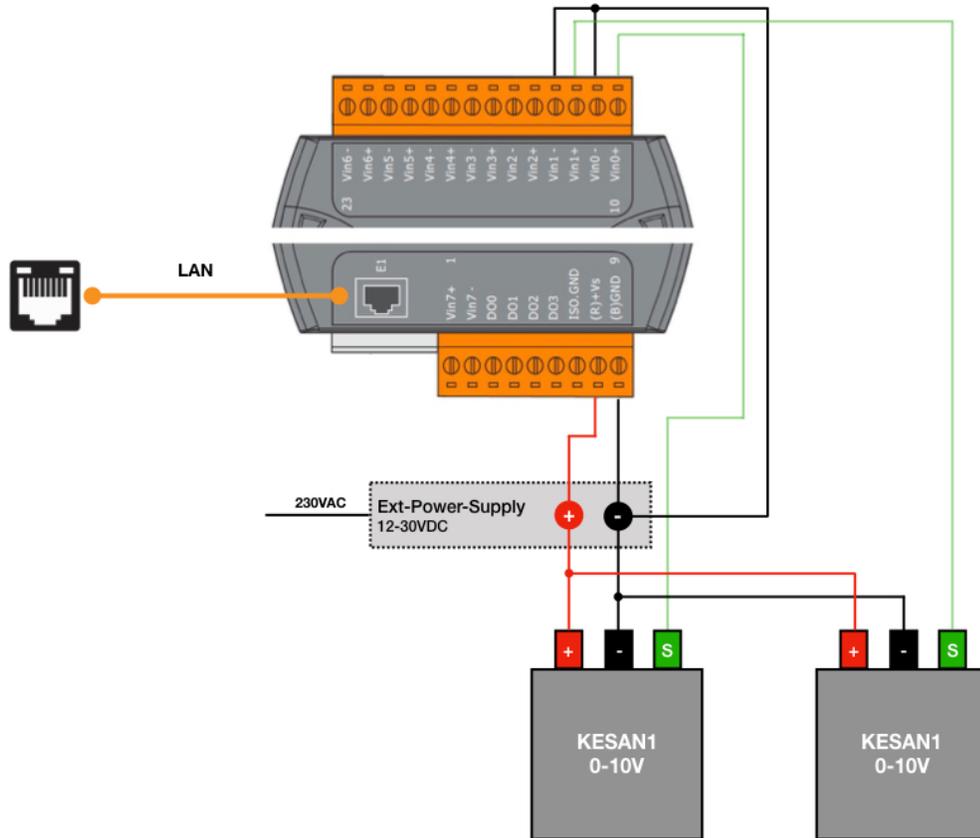
If you use a sensor that is not from KENTIX or a partner, it is important to know the following data from the manufacturer:

- Supported measuring ranges of the sensor (0-100% oxygen, 0-250°C or 50-300°C etc.)
- Is the sensor/transducer passive and requires external power supply?
- What output signal type and range does the transducer have? (voltage 0-10V or current 4-20mA)
- Possible settings of the transducer - are there jumpers or adjustment possibilities to change measuring ranges and output signals?
Errors in the configuration of the transducer lead to incorrect values in the AlarmManager!

If the sensor/transducer is configured and connected to the KIO7017, the power supply must be established. The KIO7017 can be supplied either through PoE or with an external power supply, e.g. [KIO3](#) (12-30VDC).

The Kentix Outdoor Temperature Sensor requires an external power supply as well (12-30VDC). This also can be done with a KIO3. The KIO7017 can be supplied by the same KIO3 as the sensor if a supply by PoE is not possible or desired.

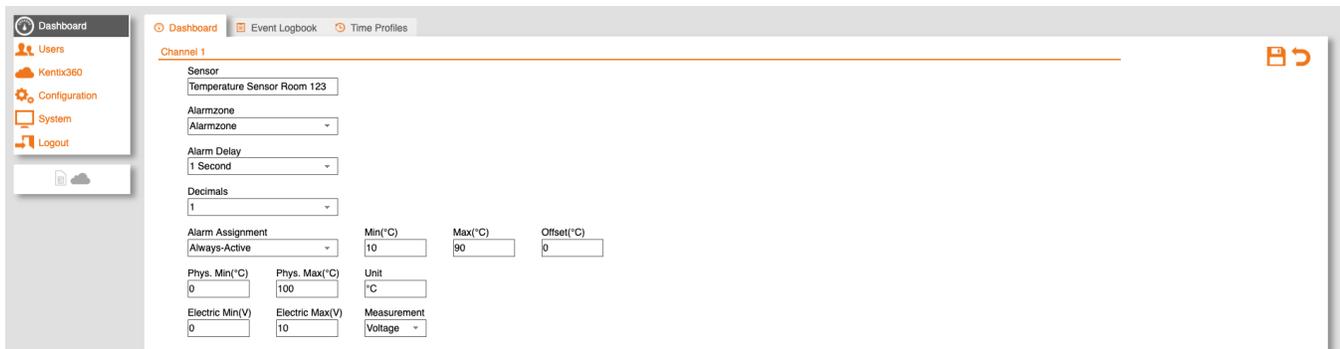
In the connection example below with 2 sensors, the I/O module is supplied by an external KIO3 adapter.



After all devices are connected, the KIO can be integrated into the AlarmManager.

Configuration of the KIO and Sensor in the AlarmManager

The sensor must now be configured under the appropriate channel in the settings of the KIO.



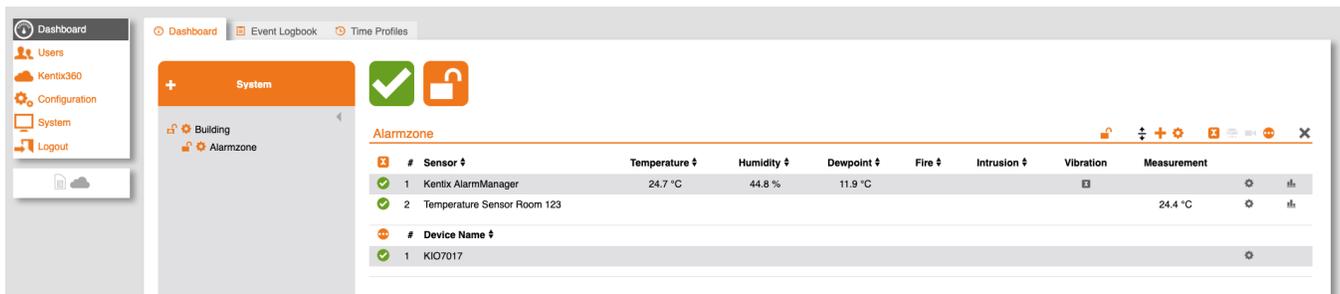
Configuration of the external sensor

- Sensor: A name for the sensor can be given here
- Alarmzone: Specifies to which alarm zone the sensor should be assigned
- Alarm Delay: Specifies with how much delay the alarm is to be triggered if the set limit values are exceeded
- Decimals: Determines how many decimal places are displayed for the measured value
- Alarm assignment: Specifies the profile according to which the sensor is to be switched
 - Off: The sensor is switched off and shows no values
 - Armed Active: The sensor provides measured values. Alarms are only triggered when the alarm zone is armed
 - Always-Active: The sensor provides measured values. Alarms are always triggered
 - Fire: The sensor provided measured values. Alarms are treated like fire alarms
 - Tampering: The sensor provides measured values. Alarms are treated like sabotage alarms
- Min(x), Max(x): Specifies the range in which the measured value must stay. Exceeding or falling below the specified values triggers an alarm
- Offset(x): Here you can enter the offset. This value is then offset against the incoming measured value. The calculated value is then used to determine whether the limit value is exceeded or not

The following values must be taken from the sensor/transducer! If these do not match, erroneous values will occur in the AlarmManager!

- Phys. Min(x), Phys.Max(x): Specifies the lowest and the highest value of the selected sensor measuring range
- Unit: Defines the unit for Min(x), Max(x) and Phys. Min(x), Phys.Max(x). The x set in brackets is the unit defined here (standard °C)
- Electric Min, Electric Max: Indicates the minimum and maximum value of the input signal (depending on the measuring method voltage or current, standard 0-10V or 4-20mA)
- Measurement: Determines whether voltage or current is used as the output signal of the transducer

After completing the configuration, all components should be visible in the dashboard as follows and all values should be shown correctly:



#	Sensor	Temperature	Humidity	Dewpoint	Fire	Intrusion	Vibration	Measurement
1	Kentix AlarmManager	24.7 °C	44.8 %	11.9 °C			E3	
2	Temperature Sensor Room 123							24.4 °C

#	Device Name
1	KIO7017



If an unexpected deviation of the temperatures between the devices/sensors is occurring, please read the following FAQ entry: [MultiSensor or AlarmManager shows different Values for Temperature and Humidity](#)