MultiSensor-RF (radio) - MANUAL

Legacy product
This product is no longer available. The documentation is still available as an archive.

ORDER-CODES:
KMS-RF-B, KMS-RF-W

Quick Start Manual

The MultiSensor-RF is operated in conjunction with an AlarmManager. The recorded sensor data is sent via radio (ZigBee®) to the AlarmManager and evaluated. In addition, the MultiSensor-RF has a built-in and maintenance-free voltage buffer for approx. 3 minutes. Thus, it also enables the detection of power failures and sabotage.

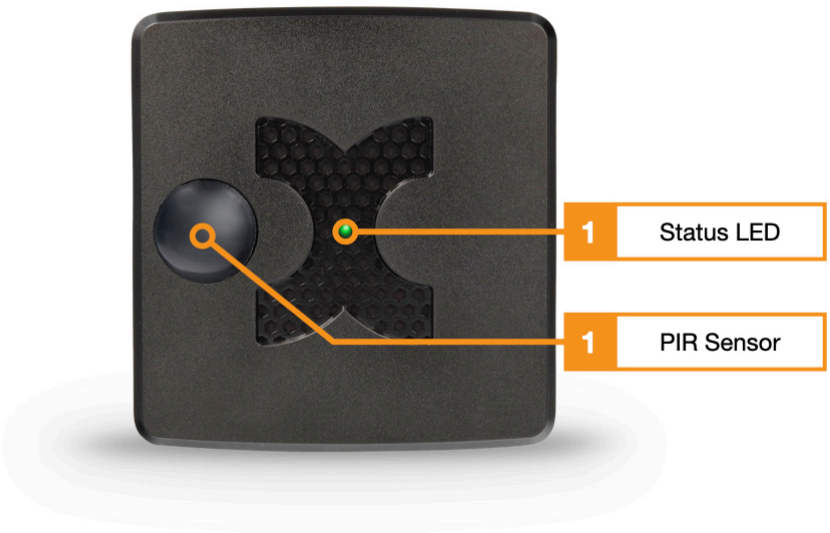
Safety instructions

Installation

Installation and commissioning may only be carried out by trained specialist personnel in accordance with the instructions.
No modifications of any kind, other than those described in an appropriate manual, are permitted to Kentix GmbH products.
Certain levels of protection must be provided when installing Kentix equipment.
Observe the relevant regulations for installations in the respective environment.
Only operate the products within the defined temperature range.
The instructions should be passed on to the user by the person carrying out the installation.
Kentix accepts no liability for damage to the equipment or components resulting from incorrect installation. No liability is accepted for incorrectly programmed units.
Kentix shall not be liable in the event of malfunctions, damage to property or other damage.
Use of the products, transport and storage
Protect the device during transport, storage and operation from
Protect moisture, dirt and damage.
Battery powered products
Do not use products in potentially explosive atmospheres.
Only operate the products within the defined temperature range.
Installation and battery replacement may only be carried out by trained personnel in accordance with the instructions.
Do not charge, short circuit, open or heat batteries.
When inserting the batteries, pay attention to the correct polarity.
The devices must always be operated with the batteries intended for the product.
When changing batteries, always replace all batteries.
Dispose of old or used batteries properly.
Keep batteries out of the reach of children.
Maintenance
Kentix devices must be checked for functionality as part of annual maintenance.
Disposal
Electrical appliances and batteries must be disposed of separately from household waste.

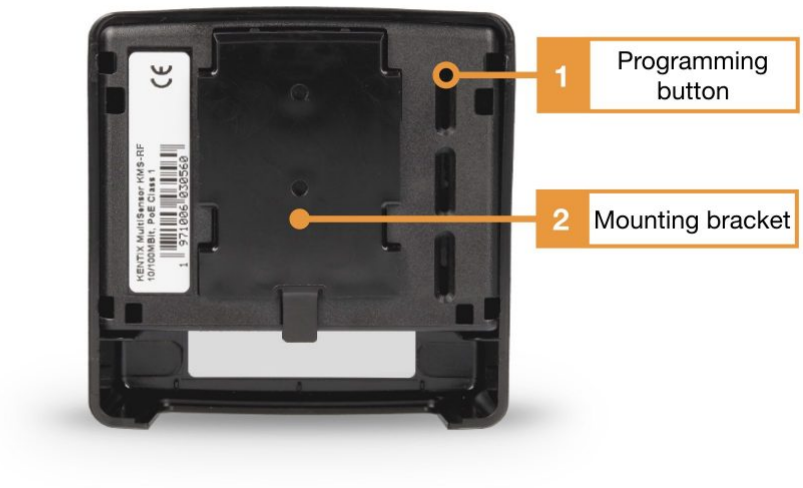
Controls

Front



1. Status LED :
   GREEN: POWER OK, no alarms pending
   RED: POWER OK, alarms pending
2. PIR sensor

Back



MultiSensor-RF Rear view

1. Teach-in key: This key is used to teach the device into the wireless network. To teach-in the sensor, start the teach-in process in the web interface of the manager and then press the teach-in button for 3sec. Press until a signal tone is heard
2. Mounting bracket: To remove, lift the tab and pull the bracket in the direction of the tab

Connections

MultiSensor-RF View Connections

1. Kentix system port: For connection to power supply, only possible with enclosed KIO2 adapter and power supply unit

The multi-sensor RF is **NOT** powered via **POE**. The enclosed KIO2 adapter and a power supply unit are absolutely necessary for the connection

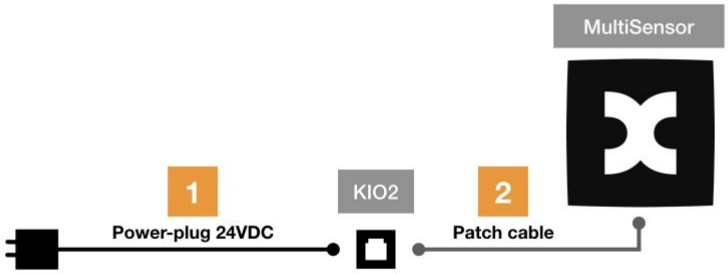
Connect with manager

To add a MultiSensor-RF-BAT to the AlarmManager configuration, select “+” in the alarm zone heading area of the dashboard and then “MultiSensor (wireless)”

Press the teach-in button for 3 seconds, which you reach via the recess on the back of the housing (1), until an acoustic signal sounds

The sensor should be detected within 15-20 seconds. The configuration mask for the sensor is then opened directly. The teach-in process is now complete

Application example



Calibration of the room temperature measurement

Kentix MultiSensors record all important environmental values of a room, including the room temperature. In order to achieve the most accurate temperature possible and to trigger an alarm if the room temperature exceeds the limit value, we recommend calibrating the temperature measurement at the final installation location. This is especially necessary for sensors with Ethernet (PoE) connection, since a certain intrinsic heat falsifies the measurement. For MultiSensors with radio and battery supply, the influence of the intrinsic heat is not present.

Kentix MultiSensors are not calibrated measuring devices, but alarm devices whose measuring accuracy is completely sufficient for reliable reporting and documentation of limit value violations. The accuracy of the sensors is ±1% for temperature measurement and ±5% for humidity.

However, in order to obtain a good measurement result with reproducible measured values in the event of an alarm, the MultiSensor should be calibrated to the respective installation location after installation. To do this, the temperature in the immediate vicinity (approx. 5-10 cm away) of the MultiSensor must be measured comparatively with a room thermometer that is as accurate as possible. If there is a deviation in temperature between the MultiSensor and the thermometer, the temperature value can be corrected. This is done by entering the determined temperature difference between the MultiSensor and the room thermometer as a correction offset in the KentixONE software. The correction also has a direct influence on the measurement of the relative humidity and on the dew point calculation of the MultiSensor.

Step	Note
Install MultiSensor at the destination.	The position and orientation of the sensor should not be changed afterwards. Keep the following in mind: – Mounting with X air opening downwards – Do not mount in air stream – Ventilation vent openings of the sensor must be free
Perform configuration of the MultiSensor with Kentix ONE.	
Earliest 30 minutes after startup match the temperature of the MultiSensor with the room temperature.	To do this, measure the temperature with an external reference thermometer in the immediate vicinity, approx. 5-10 cm from the MultiSensor. It should be noted that this thermometer also acclimatizes to the room and displays the correct room temperature only after a few minutes.
If a difference between the MultiSensor and the thermometer is detected, this can be entered in the “Offset” field in the KentixONE configuration of the MultiSensor. After saving, the sensor then provides the corrected measured value.	The offset can only be specified by whole degrees, i.e. without decimal places. This results in an accuracy for the temperature of +/- 0.5 degrees.

Configuration with KentixONE

The device is configured via the web browser in KentixONE. The device must be accessible to the central KentixONE instance on the network side. Depending on the device type, a communication key and the IP address or DHCP name of the central KentixONE instance must also be set on the device (MultiSensors, AccessManager, SmartPDU). IP cameras or IO modules, on the other hand, can be integrated directly into KentixONE.

All information about the software is available in the KentixONE section and the related documentation.

Before starting the configuration, make sure that the software on all network-compatible Kentix devices is up-to-date. The version status must match on all devices.
You can perform a software update for your KentixONE main instance and all connected satellites at any time via “System – Update”.