

# MultiSensor-LAN-RF (network radio repeater) - MANUAL



## Legacy product

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

## ORDER-CODES:

KMS-LAN-RF

[DATA SHEET MULTISENSOR-LAN-RF](#), [Quick Start Guide](#)

## Overview

The MultiSensor-LAN-RF offers the same functionality as the MultiSensor-LAN. It also enables a remote radio network to be set up so that remote RF components (MultiSensor-RF / -Door / KeyPads) can communicate with the manager via LAN/WAN. The configuration of the repeater and the connected components is done via the web interface

of the manager.

If the sensor is added as a LAN RF repeater, additional RF components can be added to it.

## **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 may be made to Kentix GmbH products, with the exception of those described in the relevant instructions.

When installing Kentix devices, certain degrees of protection must be guaranteed.

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 devices or components caused by incorrect installation. Kentix accepts no liability for incorrectly programmed units.

Kentix accepts no liability for faults, material damage or other damage.

Use of the products, transport and storage

Protect the device from

moisture, dirt and damage during transportation, storage and operation.

Battery powered products

Do not use the 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 specialist personnel in accordance with the instructions.

Do not charge, short-circuit, open or heat batteries.

Observe the correct polarity when inserting the batteries.

The devices must always be operated with the batteries intended for the product.

When changing the batteries, always replace all batteries.

Dispose of old or used batteries properly.

Keep batteries out of the reach of children.

Maintenance

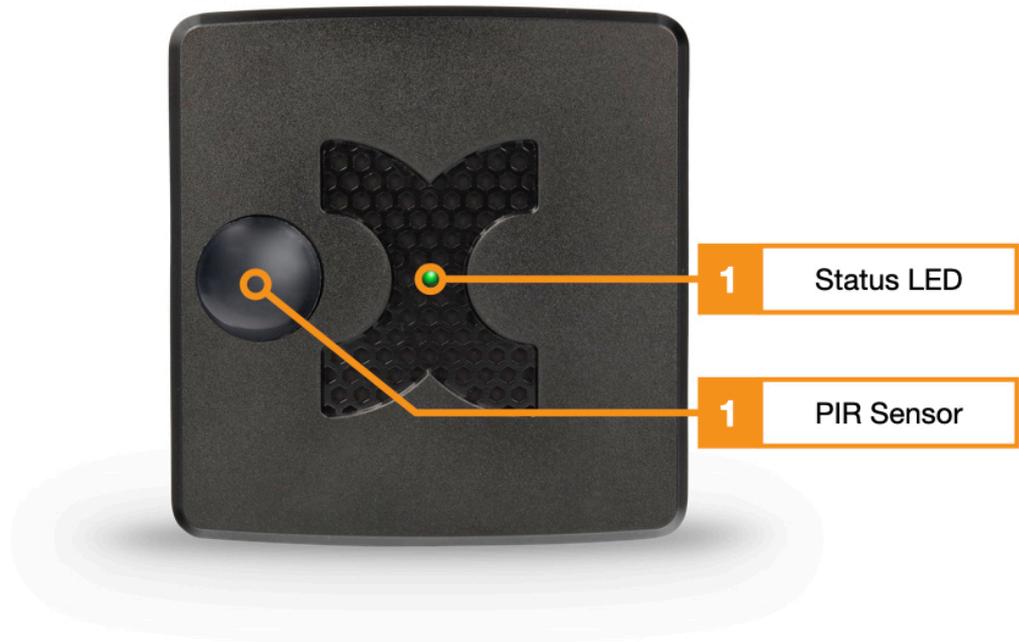
Kentix devices must be checked for functionality as part of annual maintenance.

Disposal

Electrical appliances and batteries must be disposed of separately from household waste.

## **Controls**

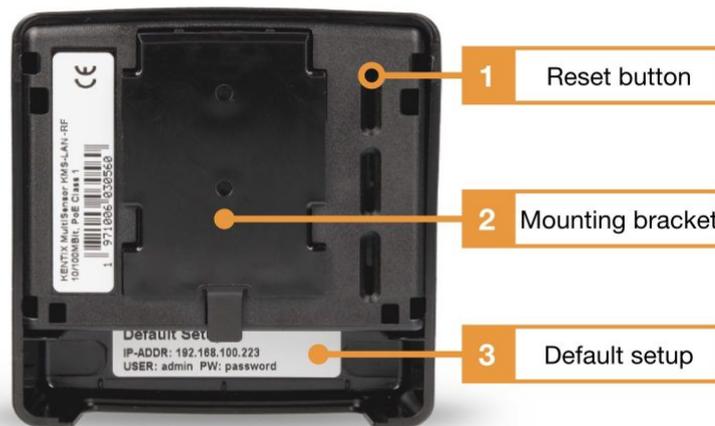
### **Front**



#### MultiSensor LAN-RF Front view

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

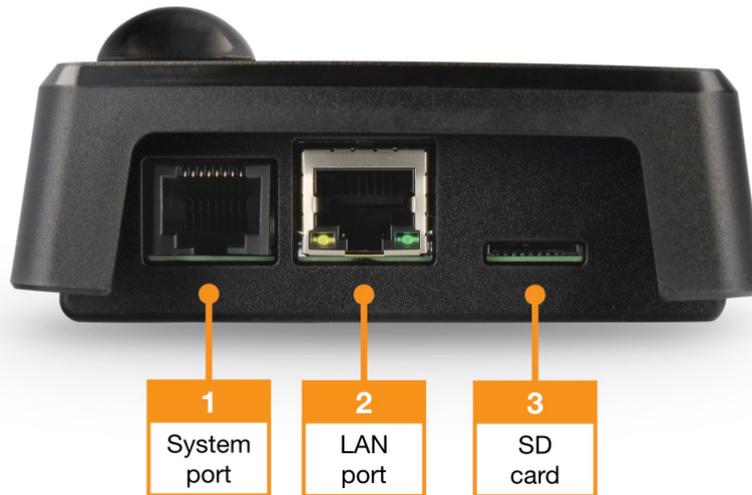
#### Back



#### MultiSensor LAN-RF Rear view

1. Reset button
2. Mounting bracket
3. Default settings information

## Connections



1. Kentix System port: Connection for expansion sensors
2. LAN port: network and power supply via PoE (Class 2)
3. SD card slot: Micro SD cards up to 128GB (not included)

## Connection of extensions at the system port

Additional system components such as leakage sensors, door contacts or external alarms from UPS or air conditioning units can be connected via the Kentix system port. The system port has 2 digital inputs and 2 digital outputs which are available via a RJ45 socket.

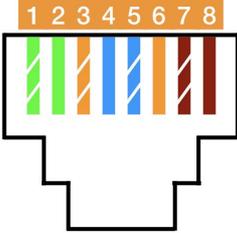
An extension module (ORDER CODE: KIO3) is required to connect external alarms. Above this, 2 potential-free contacts and 2 changeover relays can be wired.

A commercially available network patch cable (unshielded/shielded) with a length of up to 20 m can be used as the cable connection between the Kentix system port and the system component.

The Kentix system port is not a network port. Avoid connecting to network ports, especially PoE devices. The port is a Kentix specific expansion port and is only expandable with components designed for it.

Pins 4/5/8 are only enabled for internal use and must not be wired.

The assignment of the system port

System port (type: RJ45)	Assignment of the contacts
	<ol style="list-style-type: none"> <li>1. internal system voltage (GND) – Not for external <b>use*</b>.</li> <li>2. output 1 (open collector, max. 100mA)</li> <li>3. output 2 (open collector, max 100mA)</li> <li>4. external voltage / BUS (depending on device type)</li> <li>5. external voltage /BUS (depending on device type)</li> <li>6. input 1 (potential-free circuit)</li> <li>7. input 2 (potential-free circuit)</li> <li>8. internal system voltage (5/24VDC) – not for external <b>use*</b></li> </ol> <p><b>* These connections are for internal use only</b></p>

Kentix system port assignment

## Factory settings

For initial configuration, use the IP address printed on the device or the address assigned via DHCP in a web browser (HTTPS). Please note the network settings of your connected PC.

The factory IP addresses at a glance:

<b>SiteManager and AlarmManager</b>	192.168.100.222
<b>MultiSensor</b>	192.168.100.223
<b>AccessManager</b>	192.168.100.224
<b>PowerManager</b>	192.168.100.225
<b>SmartPDU</b>	192.168.100.226
<b>Leakage sensor</b>	192.168.100.227

Factory IP addresses, subnet mask: 255.255.255.0

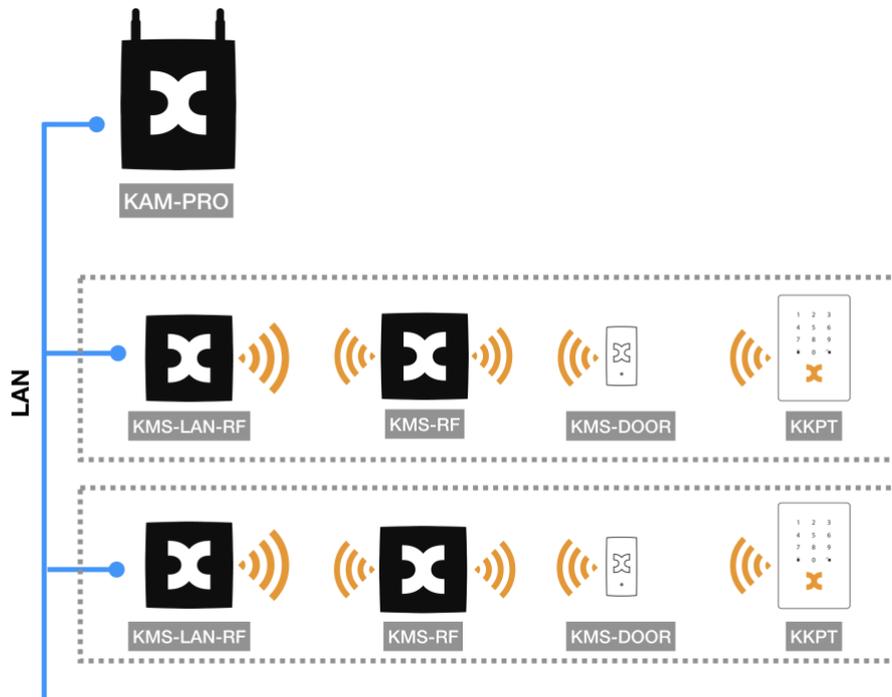
For devices with a firmware version lower than 8.x.x, the login data for the preset administrator account are: admin / password

## Reset to factory settings

1. Restart the device (disconnect and reconnect the power supply).
2. The status LED lights up briefly and then goes out.
3. As soon as the status LED lights up green continuously, press and hold the reset button for 15 seconds until the device emits an acoustic feedback.
4. The device loads the factory settings and performs a restart.
5. After approx. 2 minutes, the device can be reached with the factory settings.

**All existing settings and data will be irrevocably deleted!  
We recommend regular system backups.**

## Application example

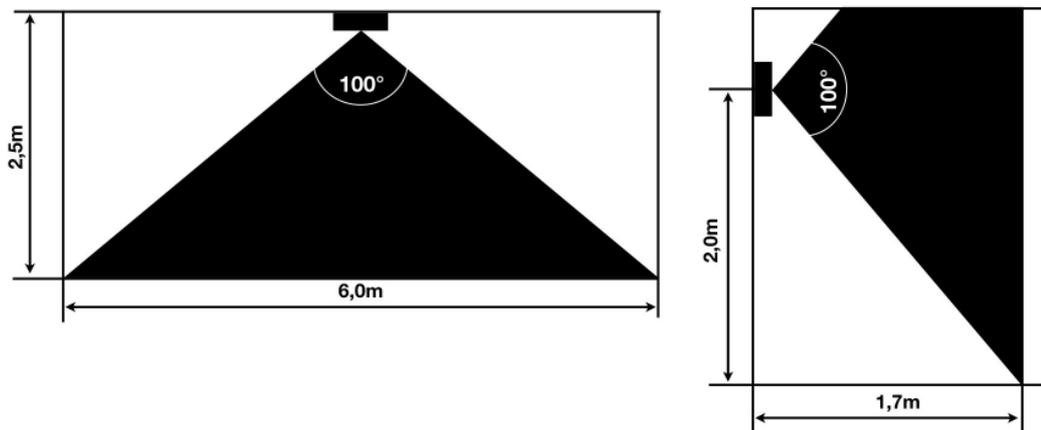


## Assembly instructions

Kentix MultiSensors are equipped with various individual sensors. To ensure optimum evaluation and functional cooperation of the sensors, please observe the following basic installation instructions:

- Do not mount over radiators or air outlets or direct sources of heat/cold.
- Avoid moving objects such as fans, plants, trees, flags or similar in the detection field.
- Do not cover the sensor. The PIR sensor always requires direct visual contact for detection
- Do not mount in the direct air flow of air conditioning outlets

## Detection range of the integrated PIR motion detector



Detection range of the PIR

[More information about mounting MultiSensors here.](#)

## 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.

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. Please note the following: - Mount with the X air opening facing downwards - Do not mount in the air flow - Ventilation vents of the sensor must be unobstructed
Perform configuration of the MultiSensor with Kentix ONE.	
At the earliest 30 minutes after commissioning, adjust the temperature of the MultiSensor to 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 can be found in the [KentixONE](#) section and the associated 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”.**