

# AlarmManager - MANUAL



ORDER-CODES:

KAM-PRO-B, KAM-PRO-W

[Datasheet AlarmManager](#)

## KentixONE Operating mode

SiteManager Operation	Stand-alone operation

[Further information on the operating mode](#)

## Overview

The Kentix AlarmManager is the central control unit of a Kentix installation with up to 30 Kentix

devices. All devices used for access control([SmartAccess](#)), building security([SmartMonitoring](#)) and IT protection([SmartPDU](#)) are controlled by the AlarmManager and their data evaluated.

It manages all master data such as users, access, alarm groups as well as devices and their sensors.

The AlarmManager reports dangers specifically by email and with the built-in GSM modem by SMS. If the power supply fails, it can still send an alarm via SMS thanks to an emergency buffer.

For operation, they require a POE-capable switch or [injector](#).

Various [mounting brackets](#) are available for installation.

### **Important information on the AlarmManager's measured environmental values**

The measured values for temperature, relative humidity and dew point are for the AlarmManager's self-protection and are for information purposes only. It should be noted that the AlarmManager does not replace a MultiSensor. The AlarmManager is not optimized for measuring environmental parameters and should therefore not be used for this purpose.

### **Important information for AlarmManager-BASIC users**

Since the introduction of KentixONE (01/2023), there is no longer a functional distinction between AlarmManager-PRO and -BASIC. Update your AlarmManager-BASIC to the current KentixONE version (> 8.x) to obtain the functions described here.

[Software download](#)

## **Buffer function in case of power failure**

The AlarmManager has maintenance-free backup capacitors to supply it with power for a certain period of time in the event of a power supply failure and to send an e-mail/SMS message about the power failure.

We recommend that you do not activate this function until you have completed commissioning at the final location. Charging the back-up capacitors takes approx. 20 minutes. During this time, the power supply must not be disconnected.

For continuous operation, we recommend operating the AlarmManager on a UPS-powered switch and additionally monitoring it.

The external power supply can be provided by using a MultiSensor-ROOM on a socket without a UPS supply.

After a power failure, the functionality of the AlarmManager should generally be checked, especially the alarming via e-mail and/or SMS.

## **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.

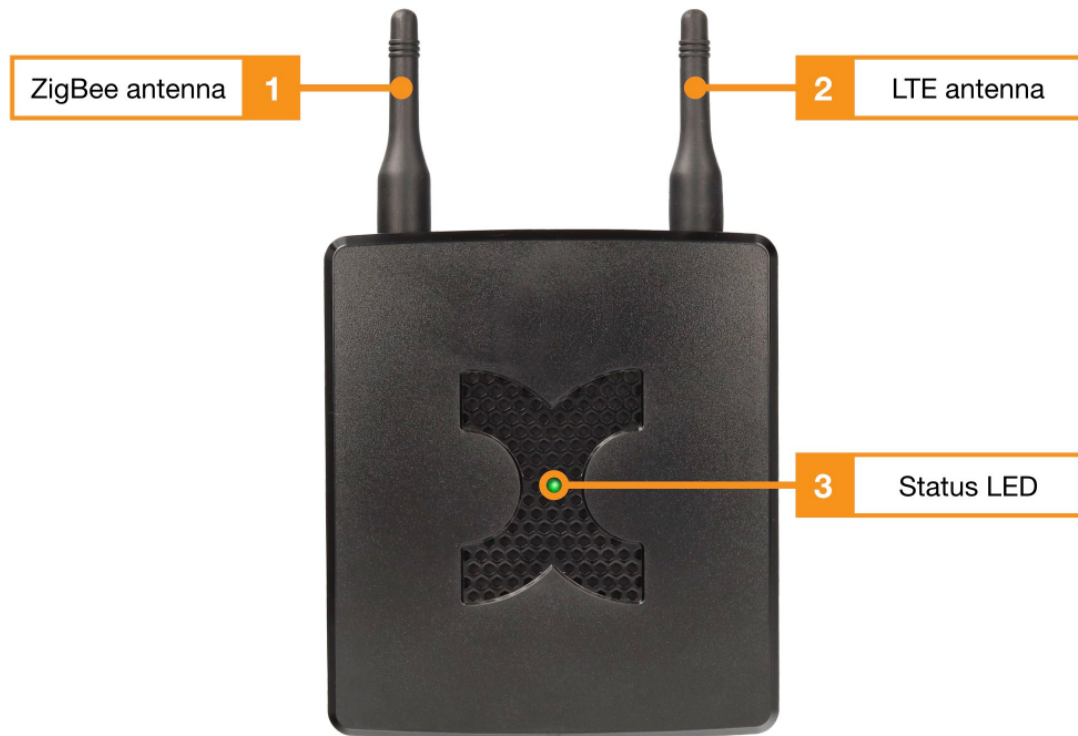
Maintenance

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.

## **Connection and operating elements**



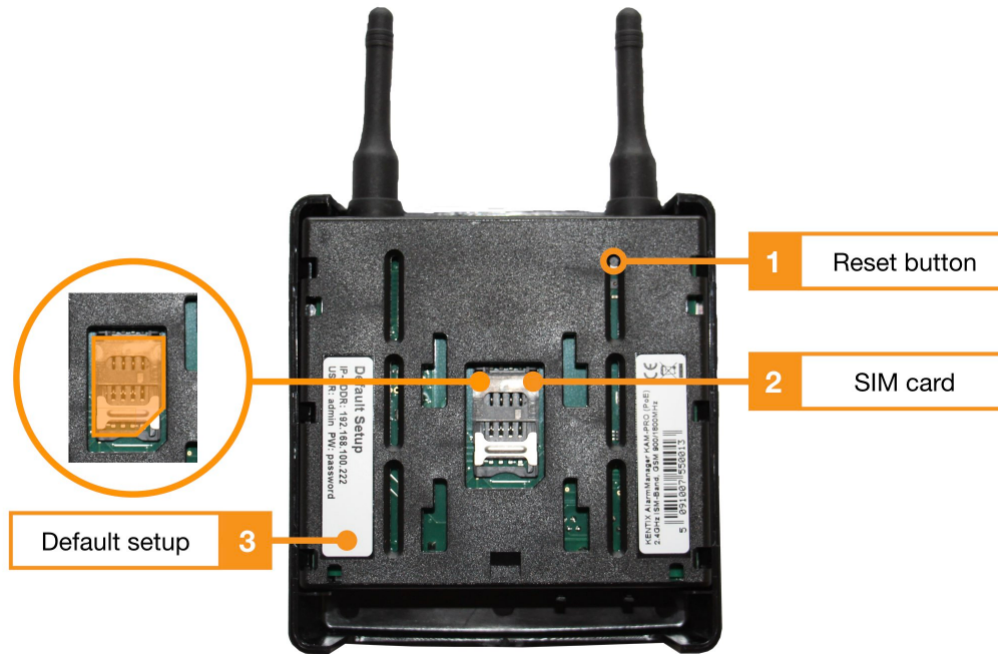
#### AlarmManager front view

1. ZigBee antenna (SMA screw antenna)
2. LTE antenna (SMA screw antenna)
3. Status LED

#### Meaning of the status LED:

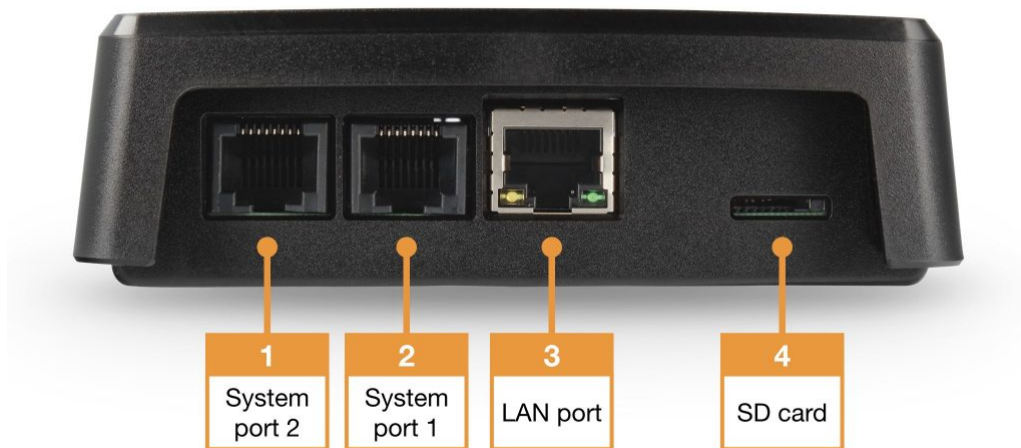
**GREEN:** Power OK, no alarms pending

**RED:** Power OK, alarms pending



#### AlarmManager View Backside

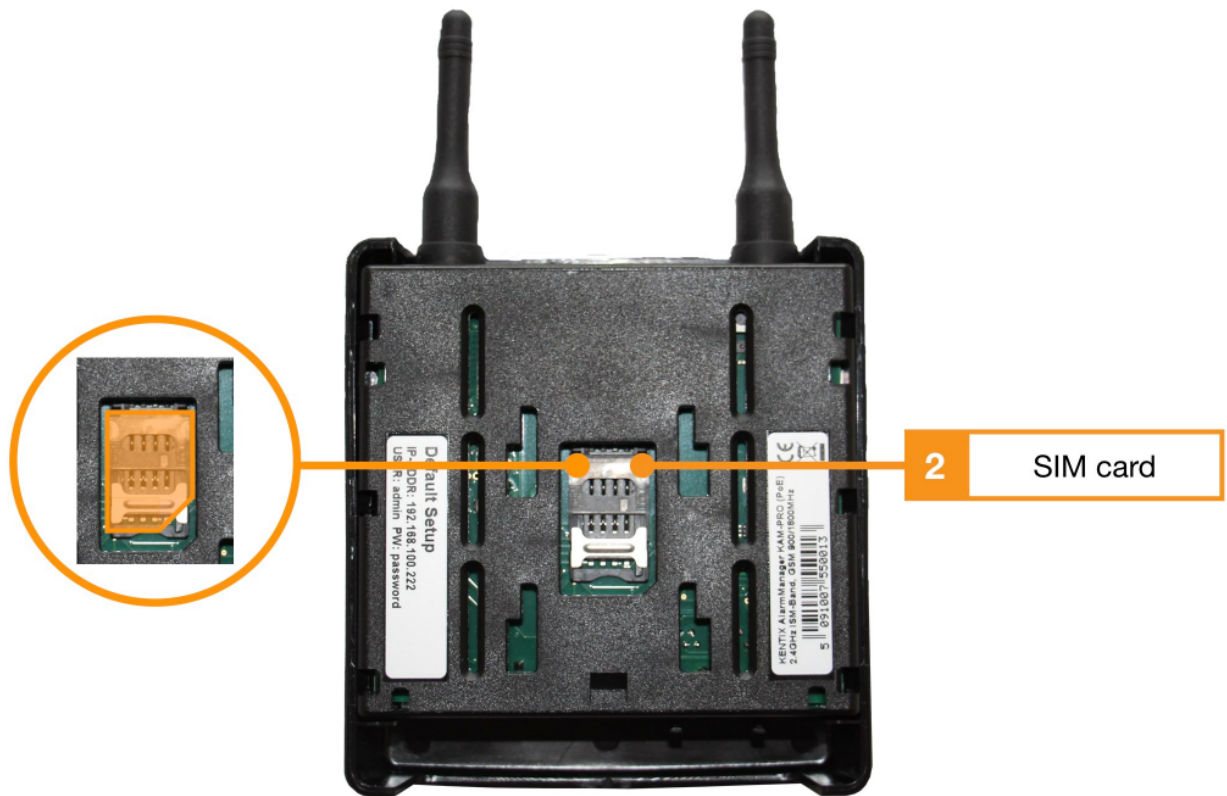
1. Reset button([reset to factory settings](#))
2. SIM card slot for standard or mini SIM
3. Sticker Default Setup



#### AlarmManager View Bottom

1. System port (2) for connecting expansion sensors
2. System port (1) for connecting expansion sensors
3. LAN port (connection to network and power supply via PoE Class 2)
4. Micro SD card (max. 128 GB, not included)

## Inserting a SIM card



#### AlarmManager: SIM card holder position

The SIM card holder is located on the bottom side of the board / rear side of the housing below the mounting holder. The mounting bracket can be removed without tools by slightly lifting the latch. To do this, press the holder slightly upwards and pull the holder downwards.

The card holder can then be unlocked and unfolded. The SIM card is then inserted into the opened part of the holder.

The SIM card must be inserted in such a way that when the holder is closed, the notch on the card faces downwards to the right.

The SIM card supplied with the device must be **activated** in the **KENTIX Shop** before it can be used.

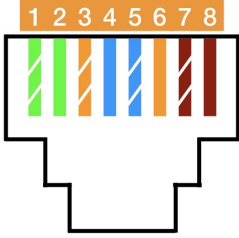
## Connection of extensions at the system port

The two Kentix system ports on the AlarmManager can be used to connect additional system components such as leak sensors, door contacts, sirens or external alarms from UPS or air conditioners. The external sensors-actuators are connected via a network cable. The cable length should not exceed 20m. Most products are supplied ready for connection with cable.

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.

A separately available connection adapter is available for connecting external alarms or devices with inputs or outputs: The **KIO-3** with 2 digital inputs for **floating contacts** and 2 relay outputs.

## 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</li> <li>5. External voltage</li> <li>6. Input 1 (potential-free wiring)</li> <li>7. Input 2 (potential-free wiring)</li> <li>8. Internal system voltage (5VDC) - Not for external <b>use*</b></li> </ol> <p><b>* These connections are for internal use only</b></p>

Kentix system port assignment

## Start the device and find it in the network

- Establish the power supply to the device.
- Connect your PC and the Kentix device to the same network and adjust the PC's network settings if necessary.
- The device receives an IP address via DHCP from your network. At the same time the fallback address **192.168.100.22x** (see sticker on the product) is active in factory settings.
- Find the device in the network: You can determine the address assigned by DHCP on your switch or by means of software such as "LanScan" for MacOS or "Advanced IP Scanner" for Windows. Search for a MAC address with "**70:82:0e:xx:xx:xx**". Typically, the associated device name will also be "**Kentix-72820e.....**", with the last 6 digits in MAC and name assigned individually for their device.

IP address	MAC address	Hostname	Ping	Vendor	mDNS Name
10.15.7.60	70:82:0e:12:b6:3f	kentix-70820e12b63f	●	as electronics GmbH	kentix-70820e12b63f

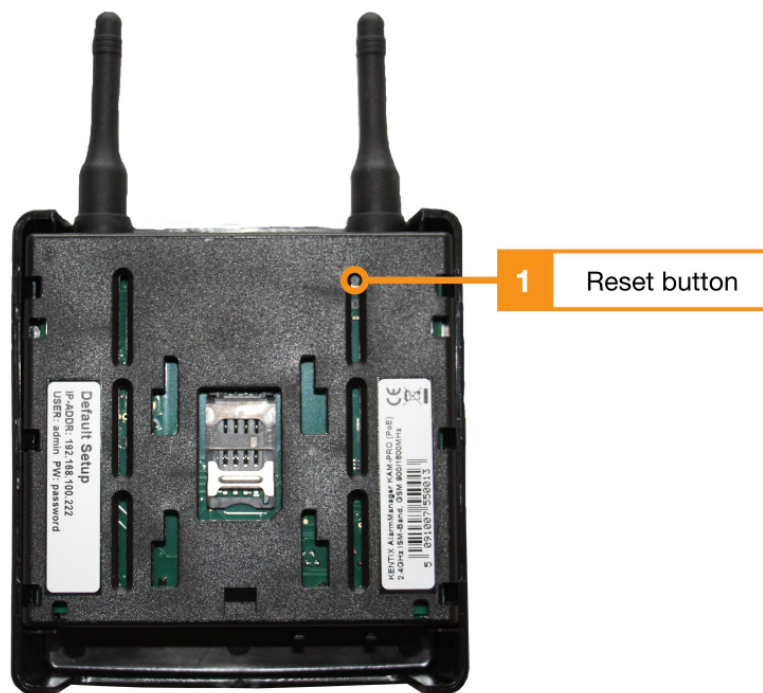
Search results using the example "LanScan" (MacOS)

- Call the determined IP address with a browser of your choice ("*http://IpAdresse-des-Gerätes*").

## Load factory settings

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

1. Restart the device (disconnect power and reconnect)
2. The device will start and the status LED will light up for about 20 seconds and then turn off.
3. After up to 60 seconds, the green status LED is permanently switched on again
4. As soon as the internal status LED is permanently active green, press and hold the "RESET" key (1) with a suitable tool.
5. Press and hold the button for 15 seconds until an acoustic feedback ("BEEP") is given. During this time the status LED flashes green
6. The device now loads the factory settings and restarts
7. After approx. 60 seconds, the device can be reached with the factory settings. The status LED is permanently green again



AlarmManager Position Reset button

## 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”.**

## Examples of extending a project with KentixONE

For larger installations with more than 30 devices in total, the Kentix [SiteManager](#) is available as hardware. From 250 devices, we recommend the [SiteManager Docker](#) variant as a virtual machine.

### The basis: A StarterSet SmartMonitoring (radio)

To secure a room, a starter set is installed. A [StarterSet SmartMonitoring radio](#) contains an AlarmManager, a [MultiSensor-LAN](#) and a [Multisensor-Door](#).

The MultiSensor-Door is connected to the system by radio and can be installed flexibly wherever it is needed.

The following are monitored: temperature, humidity, dew point (condensation), fire development, burglary and unauthorized access, glass breakage and attempted sabotage, line loss and cable defects, failure of active system components, failure of network devices and services.

### Expansion modules

With the Kentix system port, [I/O expansion modules](#) such as the [AlarmSirene](#) or the [leakage sensor](#) (door contacts, switching contacts of other devices...) can be connected and the field of application of the sensors can be expanded, for example to include temperature monitoring of machines in production.

This secures other access points such as windows or doors. The system is extended with the alarm siren for alerting and deterrence. When arming the alarms, the system checks whether doors and windows are closed (forced arming) and informs the user about the status. The switching is done by means of a time table or by the user in KentixONE.

### SmartAccess

The project will be extended with an access control system.

For this purpose, the StarterSet [DoorLock-DC \(radio\)](#) or a [wall reader with Ethernet](#) is simply integrated into the AlarmManager with the AccessManager.

Access to this room is now controlled and logged with wireless door knobs or cylinders (DoorLocks). The alarms can be armed and disarmed with RFID media. Wall readers (WallReader) provide additional functions such as access and arming of the alarm system by PIN. The existing electric door openers will continue to be used and their opening monitored. The control of alarms is also possible by means of time control or a combination of time control and the first access booking of the day.

Up to 16 DoorLocks Radio can be used with one AccessManger Radio.

With each additional AccessManager, they secure another 16 doors or cabinets.

One AccessManager LAN can control two WallReaders, two door contacts and two door openers.

Users can be imported from existing databases in the form of tables or directly from an LDAP instance (Active Directory).

With [DoorLock-RA wireless cabinet lock](#) you can also secure cabinets and other storage. For example : sub-distribution of power supply or IT infrastructure, medical, chemical and file cabinets or storage for equipment.

## SmartPDU

[SmartPDUs](#) are available in various designs. KentixONE is also installed here ex works. Installed in a server rack, depending on the model, they provide monitoring of the environment, the function of the computers, a measurement of power consumption with calibrated meters and control over the individual consumers. SmartPDUs work independently or are added to the AlarmManager.

The system alarms in case of vibration (sabotage), critical temperatures, rapid temperature rises, failure of the fuses or individual consumers. The following are also monitored: differential current, active power, apparent power and consumption. The [PUE](#) (Power Usage Effectiveness) is documented in combination with external consumption meters.

## Rack lock RA4 and AccessManager LAN

A rack lock RA4 is mounted in the rack.

Access to the rack is controlled with RFID media and/or PIN.

An AccessManager LAN is installed.

Alarm in case of unauthorized opening of the rack doors.

One AccessManager LAN can secure up to 16 racks with distribution boxes, each with one RA4 and two door contacts.

## MultiSensor-TI

A multisensor TI is installed.

The [4 factor early fire detection](#) with thermal image, carbon monoxide, temperature rise and air quality. Provides early warning of component heating and the associated increased levels of carbon

monoxide and volatile organic elements in the air.

## SmartVideo

Kentix [network cameras](#) are installed. The cameras are assigned to the sensors that, when triggered, will cause images from the camera to be saved in KentixONE.

Camera images for all events and alarms are available in KentixONE.

Almost every network camera has an API. With the help of these, cameras are easily integrated into KentixOne.

To record access events, you need an SD card in the AccessManger to which the door lock is connected.

## Network interfaces

With SNMP, ReST-API and Webhooks, KentixOne provides interfaces for integration with other systems.

The documentation of these interfaces can be found [here](#).

## KentixONE-Go

[KentixONE-GO](#) extends the system with additional functions.

Email server for notifications by mail. Remote operation of all doors, cabinet and rack locks. [NFC based access control](#).

Solutions to frequently asked questions about Kentix products can be found in the [general FAQ](#) section.