INTEGRATED ACCESS

KENTIX
Innovative Security
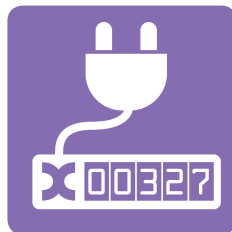
# 360° Smart Building Security for Pros

SMART MONITORING

SMART ACCESS

SMART METERING

SMART VIDEO

KENTIX360 CLOUD

# Kentix – 360° security made in Germany

Kentix with headquarters in Idar-Oberstein, Germany, is a manufacturer of professional Smart Building Security products for the physical security of mission-critical IT infrastructures. Our integrated security solutions include environmental monitoring, access control, power monitoring and IP video surveillance, completely remote controllable via Kentix360 Cloud and everything coming from a single source. In comparison to several single systems this saves a great amount of cost and effort. The use of wireless mesh networks and modern web technology enables fast and easy system integration. We put great emphasis on the easy usability of all our products which are exclusively manufactured in Germany according to highest quality standards.

Kentix systems offer network based solutions for any demand and can be applied in all sectors of the economy. With Kentix, you can easily optimize your IT availability and avoid system outages before they occur.

## As important as the firewall

50% of IT outages have physical causes! In contrast to outages that are caused by software errors, downtime due to physical defects usually lasts a lot longer and is more expensive.

Close a gap in your IT security with Kentix and fulfill regulatory requirements such as BSI baseline protection and the ISO 27001.

**Innovative Security**
Made in Germany

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**IP Cam**
Event-driven
HD video recording

**MultiSensor**
Covers all major threats with one device. Can easily be interconnected via radio or LAN

**MultiSensor-DOOR**
Detects vibration, dislocation and temperature; ideal for the protection of doors and windows

**AlarmManager-PRO**
The alarm central; alarms via e-mail, SNMP or integrated GSM modem per SMS

**KeyPad**
Operating panel for access control and arming of the intrusion detectors

**Wireless Cabinet Lock**
Online access control for IT racks with remote control

**Smart PDU**
Monitors power supply in rack, enables calibrated Current measurement.

**Wireless Door Knob**
Online access system, integrates LDAP for easy access management and secures doors in interior and exterior areas against unauthorized access

**LeakageSensor**
Alarms reliably in case of water ingress and can be interconnected arbitrarily

# Securing the entire mission-critical
# IT infrastructure with just one system

## Effective protection against physical risks in server and utility rooms

The Kentix MultiSensor® merges all important physical sensors in one device and monitors the entire IT infrastructure for up to 20 threats such as critical climate factors, fire or burglary. Thereby you lay the foundation for fulfilling regulatory IT security requirements such as the ISO 27001.

The MultiSensor can be connected to a Kentix AlarmManager via radio (ZigBee) or alternatively directly via a network. The installation and commissioning are very easily done with standard patch cables; wiring is not necessary. This way, it is possible to securely remote control the AlarmManager using a smartphone, for example to arm/disarm the system.

## The advantages at a glance:

■ Early detection of threats –
short reaction times, low subsequent costs

■ Low personnel costs due to automatic monitoring

■ Relief for the system administrator –
low liability risk

■ Low operating costs due to remote monitoring

■ Low investment costs –
easy installation and launch

■ ROI within one year – immediately if only one outage is prevented

## Easy installation and low system costs due to innovative all-in-one solution

All data of the MultiSensors merge in the AlarmManager and are evaluated there. Moreover, the AlarmManager perdiodically monitors the sensor network and reports error states or manipulation. A GSM modem is integrated in the AlarmManager by default which transmits the alarm messages independently. Therefore, the responsible persons are informed about possible error states in real time. Messages can be transmitted via e-mail or SNMP trap as well. This way, it is possible to securely remote control the AlarmManager by means of any SMS-enabled mobile phone and, for example, arm/disarm the system.

Available on the App Store

Google play

# 360° monitoring of the entire IT infrastructure – at one glance

**KENTIX**
Innovative Security

Technology container

External sites

Data Center

Office and meeting rooms

Technical operating rooms

Infrastructure and supply rooms

Generator rooms

Control rooms

### Environmental monitoring

It hardly makes sense to only secure single parameters of mission-critical infrastructures. The Kentix MultiSensor® technologoy monitors all major environmental parameters and reports any critical system states immediately.

▶ See page 10

### Early fire detection

Detecting fires or smouldering fires at an early stage is vital in order to prevent great damage.
Kentix MultiSensors measure combustion gases at a very low concentration and alarm at an early stage.

▶ See page 10

### Access control

Comprehensive and networked access control systems often fail due to high costs. Kentix access systems consist of few components, are easily retrofitted and integrate into any IT environment.

▶ See page 34

### Burglary and sabotage protection

Burglary or sabotage by external or internal intruders lead to outages and high costs again and again. With Kentix system solutions, even the smallest functional units can be monitored independently.

▶ See page 10

### Alarm-synchronic video recording

For a quick assessment of critical states in remote sites, video recording is essential. Kentix systems record video data synchronically to alarm events and transmit them in one message together with other system information.

▶ See page 82

### Power Monitoring

Electric supply systems are the lifeline of any mission-critical infrastructure. We offer simple solutions in order to monitor these completely, to alarm quickly and ultimately to prevent outages.

▶ See page 72

# Easy Setup · Easy Operation · Easy Deployment

**Kentix systems are IT solutions and are characterized by an easy-to-use software interface as a web GUI. The structure is the same for all system modules.**

The software for configuration and operation is already integrated in all our systems. Only a current web browser is required to access the Web GUI - communication is secured via HTTPS. After selecting the language you can immediately start the configuration.

Due to the high standardization of the software modules, the use is the same on all our devices, only differences in function use different control elements.

As an IT manufacturer, we regularly deliver free software updates. In order to manage these updates effectively, our devices offer a central distribution of the software.

In addition to the flexible Web GUI, there are also corresponding apps for operation via smartphone. These offer secure and fast remote access via the Kentix360 Cloud, without complex configuration.

# IP environmental monitoring ingeniously easy – with the Kentix MultiSensor® technology

In contrast to outages that are caused by software errors, downtime due to physical defects is usually more expensive and lasts longer. The Kentix Multi-Sensor® technology offers the ideal solution for the physical protection of your IT infrastructure. With few components, it detects all major threats at an early stage and alarms before expensive outages occur. Real time information and redundant reporting channels such as SMS or PUSH messages are an integral part of our AlarmManagers. This way, you always re-receive alarms reliably and even if the company network is down.

Kentix devices are completely IT based and easy to integrate even in distributed IT infrastructures. The entire software is already included; therefore, no additional costs apply. The configuration and administration of the entire system happens centrally and comfortably per web interface. Close a gap in your IT security with Kentix and fulfill regulatory requirements such as BSI baseline protection and the ISO 27001. Avoid liability risks!

Kentix systems replace several single systems such as temperature sensors, burglar alarms or fire detection systems and therefore save about two thirds of the otherwise usual costs.

**The following systems are already integrated:**
- Climate monitoring
- Intrusion detection system
- Early fire detection
- Current/network monitoring
- Access system
- Server live check

**Application possibilities:**
- Server room, utility side rooms, IT cabinet
- Data center and container data center
- Mission-critical infrastructure
- Industry and distributed sites
- Warehouse, logistics, barrier systems
- Hospital, medical practice, medicine cabinets
- Office and administration buildings, branch offices

**Prevent system outages before they occur – network-based environmental monitoring for professional users**

Our MultiSensor® technology protects your IT with just one system against up to 37 physical threats such as over temperature, burglary or fire – that is what makes Kentix so ingeniously easy.

CLIMATE  MONITORING  FIRE  E-MAIL/SMS/SNMP  BURGLARY  APP

KENTIX360

Monitors up to 37 threats!

## STARTERSET – SECURES YOUR IT ROOMS ACCORDING TO THE ISO 27001

**AlarmManager, MultiSensor KMS-RF and MultiSensor-DOOR**

▸ **For more info on the StarterSets see page 28**

The ingeniously easy Kentix MultiSensor® technology detects the most important physical threats in rooms and racks with just one system.

Available on the App Store  ANDROID APP ON Google play

| Entire software already included, apps available | Secure remote opening and control via Kentix360 Cloud | AlarmManager: Central monitoring unit with radio, LAN and GSM | MultiSensor: Monitors up to 20 physical threats |

# One device that detects all major physical risks – the Kentix MultiSensor®

### Temperature
- Monitoring of room temperature
- Monitoring of cooling or heating

### Humidity
- Monitoring of humidity
- Monitoring of room air-conditioning

### Dew point
- Monitoring of the dew point
- Prevention of condensation

### Supply voltage
- Monitoring of the external voltage
- Bridging and reporting of power failure

### Carbon monoxide (CO)
- Early fire detection via highly sensitive CO sensor
- Detection of emerging fires

### PIR motion detection
- Fast motion detection
- Secure detection of unauthorized persons

### Sabotage monitoring
- Continuous monitoring of possible manipulation and sabotage of MultiSensor and AlarmManager

### External signal inputs
- Enables the connection of external devices such as LeakageSensors
- Door contacts, fault messages of external devices

### Ext. alarm and switch outputs
- Control of external alarm devices such as sirens, flashing lights
- Remote control of devices

### Acoustic signal transmitter
- Integrated signal transmitter for acoustic alarming

### ZigBee radio transmission
- Encrypted transmission of sensor data to the central unit
- High range and security due to automatic networking

All system components at a glance –
easy networkability for 360° Smart Monitoring

LAN (PoE)

LTE

LAN (PoE)

Radio

LAN (PoE)

LAN (PoE)

LAN (PoE)

**AlarmManager-PRO**
KAM-PRO

**KeyPad-Touch**
KKPT

**MultiSensor-DOOR**
KMS-DOOR

**MultiSensor-RF**
KMS-RF

**MultiSensor-LAN**
KMS-LAN

**MultiSensor-LAN-RF**
KMS-LAN-RF

**Digital I/O
Expansion Module**
KIO7053/52/17

System socket

System socket

**Sounder**
KFLASH1

**LeakageSensor-Rope**
KLS03-ROPE

**MultiSensor-DOOR**
KMS-DOOR
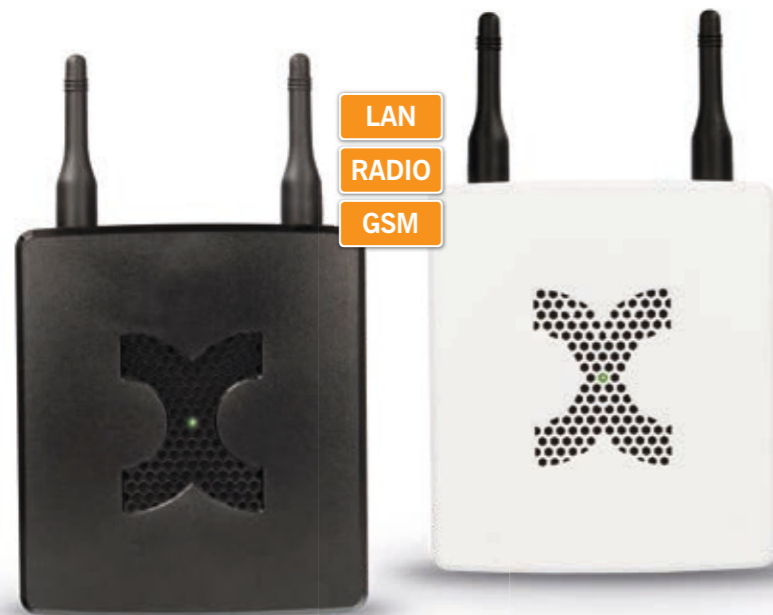
**MultiSensor-RF**
KMS-RF

# AlarmManager

The AlarmManager is the intelligent alarm central of the system; all the information of the MultiSensors merge here. The AlarmManager is mounted in the server room or rack and forwards all alarm or fault messages to the responsible persons. The configuration happens via a comfortable web interface. All system messages are filed in an internal database.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SMS - E-MAIL | SNMP | ZIGBEE | APP+CLOUD | VDS 2465 TCP | HTTPS | BUZZER | CLIMATE | VIBRATION |

## Products

| Type | Housing color | Item number |
|---|---|---|
| AlarmManager-BASIC | Black | KAM-BASIC-B |
| AlarmManager-BASIC | White | KAM-BASIC-W |
| AlarmManager-PRO | Black | KAM-PRO-B |
| AlarmManager-PRO | White | KAM-PRO-W |

## Accessories

| Type | Item number |
|---|---|
| PoE Injector | KPOE150S |
| I/O Module with relays | KIO3 |
| Gain magnet antenna | KMA3 |
| Antenna extension (5m) | KMA3-5 |

## Technical Details

| | |
|---|---|
| Number of MultiSensors | Up to 500 MultiSensors and devices total |
| Integrated sensors | Temperature -99 up to +99°C, humidity 0-100%, dew point °C |
| Sabotage sensor | Internal vibration sensor (adjustable) |
| Signal transmitter | 85dB, 2.3kHz |
| LED | GREEN/RED |
| Radio | ZigBee® 2,4GHz ISM Band +3dBm output IEEE802.15.4, encryption AES 128 Bit |
| SD card | Micro SD card slot for cards up to 128GB |
| SNMP | SNMP V2/3, SNMP Traps (MIB) |
| LAN | 10/100Mbit |
| Integrated LTE modem | Quad-Band (GSM/LTE) 850/900/1800/1900MHz; integrated SIM card holder |
| Power supply | PoE Class 3 or via external I/O Module KIO3 (accessories) |
| | 12-32VDC, power consumption approx. 5W |
| Integrated emergency power supply | Autonomy time via internal super capacitor approx. 4 min., internal power monitoring |
| Kentix system port | 2x RJ45, for the connection of external Kentix Plug'n'Play modules (accessories) |
| Alarm inputs (system port) | 4x alarm input for potential-free wiring |
| Switch outputs (system port) | 4x Open Collector 0.1A/24V |
| | Optional: I/O Module with relay (KIO3) for the connection of external systems |
| Housing | Protection class IP20, size 110 x 120 x 45 mm, weight approx. 300g, colors: white, black |
| Environmental conditions | Temperature 0 – 50°C, humidity 5-95%, non-condensing |
| Delivery contents | AlarmManager, antennas (ZigBee®, GSM), mounting bracket, |
| | SlimLine cable 3m, mounting material |
| Audits | CE |

## Function Overview - Device Variants

| Variant | KAM-PRO | KAM-BASIC |
|---|---|---|
| Function | GSM alarm and control central for MultiSensor, KeyPad, accessories | GSM alarm and control central for MultiSensor, KeyPad, accessories |
| Room/site size | up to approx. 10.000 m² | up to approx. 4.000 m² |
| Number of connectable MultiSensors | 500 | 200 |
| MultiSensors with radio | ✔ | ✔ |
| MultiSensors with LAN | ✔ | ✘ |
| Configuration | Web server | Web server |
| Smartphone app | ✔ | ✔ |
| Integrated web server (HTTPS) | ✔ | ✔ |
| Server monitoring (live check) | ✔ | ✔ |
| IP video camera control | ✔ | ✔ |
| SMS alarms | ✔ | ✔ |
| E-mail alarms | ✔ | ✔ |
| VDS 2465-S2 alarming (TCP) | ✔ | ✘ |
| SNMP Trap (V2, V3) | ✔ | ✔ |
| SNMP MIB (V2, V3) | ✔ | ✔ |
| Data logger with long-term memory | ✔ | ✔ |
| External I/O modules (ethernet) | ✔ | ✘ |
| Switch outputs (Open Collector) | 4 | 4 |
| Alarm inputs (isolated) | 4 | 4 |
| Port LeakageSensor | ✔ | ✔ |
| PoE (Power over Ethernet, Class3) | ✔ | ✔ |
| External power supply | ✔ | ✔ |
| Integrated UPS (super capacitor) | ✔ | ✔ |
| LAN port (10/100Mbit, IP-V4) | ✔ | ✔ |
| ZigBee (radio) | ✔ | ✔ |
| Kentix system socket | ✔ | ✔ |
| Sabotage monitoring | ✔ | ✔ |
| Sensor - Temperature (0-99°C) | ✔ | ✔ |
| Sensor - Relative humidity (0-100%) | ✔ | ✔ |
| Sensor - Dew point (°C) | ✔ | ✔ |
| Sensor - Vibration (shock) | ✔ | ✔ |
| Voltage monitoring (PoE) | ✔ | ✔ |
| Size (L x W x H in mm) | 110 x 120 x 45 | 110 x 120 x 45 |

2x Kentix system port | Ethernet (LAN) | SD card slot
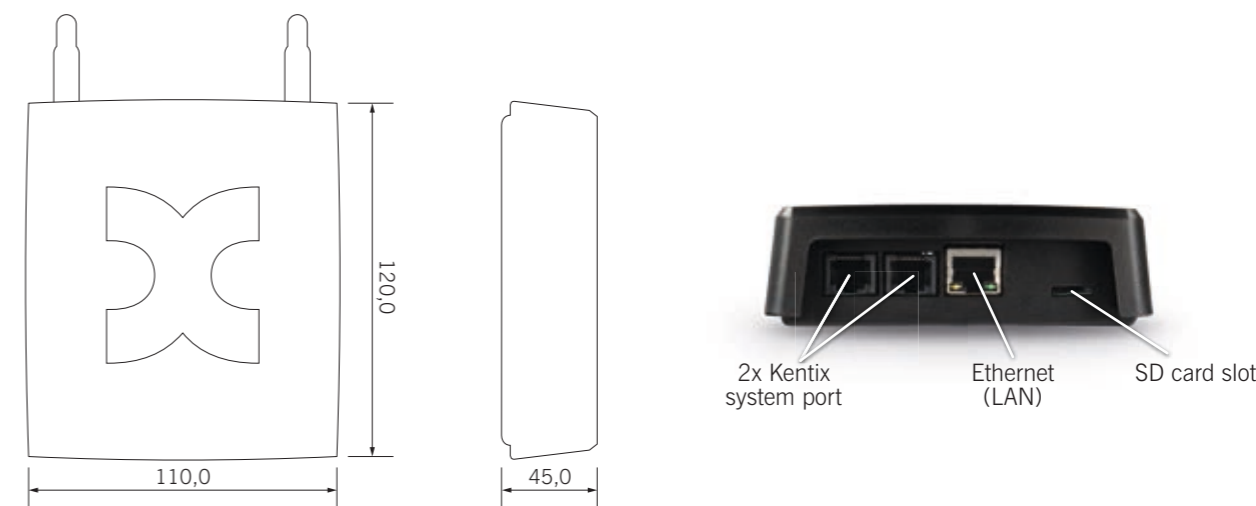
## MultiSensor

The MultiSensor is the ingeniously easy solution for sever room monitoring. With just one device you monitor your IT infrastructure for up to 20 physical threats such as critical climate factors, fire or burglary and lay the foundation for fulfilling regulatory requirements according to BSI baseline protection and the ISO 27001.

| HTTPS | LAN-PoE | MONITORING | APP | BUZZER | VIBRATION | EXT-IN-OUT | CLIMATE | FIRE | MOTION |

### Products

| Type | Housing color | Item number |
| --- | --- | --- |
| MultiSensor-LAN | Black | KMS-LAN-B |
| MultiSensor-LAN | White | KMS-LAN-W |
| MultiSensor-LAN-RF | Black | KMS-LAN-RF-B |
| MultiSensor-LAN-RF | White | KMS-LAN-RF-W |
| MultiSensor-RF | Black | KMS-RF-B |
| MultiSensor-RF | White | KMS-RF-W |

### Accessories

| Type | Item number |
| --- | --- |
| PoE Injector | KPOE150S |
| I/O Module with relays | KIO3 |
| Test gas | CO-TEST-3 |

### Technical Details

| | |
| --- | --- |
| Connectivity | Stand-alone operation (integrated web server) or AlarmManager-BASIC/PRO |
| Sensor – Temperature | Measuring range -20°C/-4°F up to +99°C/210°F (accuracy ±0,5°C) |
| Sensor – Relative humidity | Measuring range 0 up to 100% (accuracy ±3%) |
| Sensor – Dew point | Measured in °C/°F |
| Sensor – Motion detector | PIR sensor, sensitivity adjustable, detection coverage approx. 110°, range approx. 8m |
| Sensor – Vibration | 3 axis vibration sensor, sensitivity adjustable |
| Sensor – Carbon monoxide (CO) | 0-10.000ppm measurement ± 10%, internal trigger 20-200ppm (0-100%), life time 10 years |
| LEDs | RUN/ALARM (Green/Red), LINK/ACT on LAN port |
| LAN | 10/100 Mbit LAN port, integrated web server, Ports: Communication / Web interface: 80 / 443 (HTTPS) |
| SNMP | SNMP V2/3, SNMP Traps (MIB) |
| Power supply via | PoE (only KMS-LAN/KMS-LAN-RF) 12-72VAC/DC power consumption approx. 1.5W, PoE class 1 |
| Power supply via | Adaptor 12-32VAC/DC power consumption approx. 1.5W per system port |
| Kentix system port | RJ45, for connecting external Kentix plug'n'play modules |
| Alarm inputs (system port) | 2x alarm input for potential-free wiring |
| Switch outputs (system ports) | 2x Open Collector 0.1A/24V, optional: I/O Module with relay (KIO3) |
| SD card | Micro SD card slot (only KMS-LAN and KMS-LAN-RF) |
| Signal transmitter | 85dB, 2.3kHz |
| Housing | Protection class IP20, 90 x 90 x 45 mm, weight approx. 100g, colors: white, black |
| Environmental conditions | Temperature 0 – 50°C, humidity 5-95%, non-condensing |
| Delivery content | MultiSensor, mounting brackets, mounting material, SlimLine cable 3m, adaptor (only KMS-RF) |
| Audits | CE |

### Function Overview - Device Variants

| Variant | KMS-LAN-RF | KMS-LAN | KMS-RF |
| --- | --- | --- | --- |
| Function | Multifunctional sensor with ethernet and ZigBee radio as repeater | Multifunctional sensor with ethernet | Multifunctional sensor with ZigBee radio |
| Room/site size | 20m², IT rack | 20m², IT rack | 20m², IT rack |
| Expandable radio MultiSensors | 25 (radio) | - | - |
| Configuration | Web server AlarmManager | Web server AlarmManager | - AlarmManager |
| Smartphone app | ✔ | ✔ | ✘ |
| Integrated web server | ✔ | ✔ | ✘ |
| Stand-alone-capable without AlarmManager | ✘ | ✔ | ✘ |
| IP video camera control | ✔ | ✔ | ✘ |
| E-mail alarms | ✔ | ✔ | ✘ |
| Data logger with long-term memory | ✔ | ✔ | ✘ |
| SNMP Trap (V2/3) | ✔ | ✔ | ✔ (AlarmManager) |
| SNMP MIB (V2/3) | ✔ | ✔ | ✔ (AlarmManager) |
| SD card | ✔ | ✔ | ✘ |
| Signal contact (Open Collector) | 2 | 2 | 2 |
| External alarm inputs | 2 | 2 | 2 |
| Connection of LeakageSensor | ✔ | ✔ | ✔ |
| PoE (Power over Ethernet) | ✔ | ✔ | ✘ |
| External power supply | ✔ | ✔ | ✔ |
| Integrated UPS (super capacitor) | ✘ | ✘ | ✔ |
| LAN port (10/100Mbit, IP-V4) | ✔ | ✔ | ✘ |
| ZigBee (radio) | ✔ | ✘ | ✔ |
| Kentix system socket | ✔ | ✔ | ✔ |
| Sabotage monitoring | ✔ | ✔ | ✔ |
| Sensor - Temperature (0-99°C) | ✔ | ✔ | ✔ |
| Sensor - Relative humidity (0-100%) | ✔ | ✔ | ✔ |
| Sensor - Dew point (°C) | ✔ | ✔ | ✔ |
| Sensor - Carbon monoxide (CO >20ppm) | ✔ | ✔ | ✔ |
| Sensor - Motion | ✔ | ✔ | ✔ |
| Sensor - Vibration (shock) | ✔ | ✔ | ✔ |
| Voltage monitoring | ✘ | ✘ | ✔ |
| Size (L x W x H in mm) | 90 x 90 x 45 | 90 x 90 x 45 | 90 x 90 x 45 |

90,0

90,0

45,0

KMS-LAN / KMS-LAN-RF

1x Kentix system port   Ethernet (LAN)   SD card slot

KMS-RF

1x Kentix system port
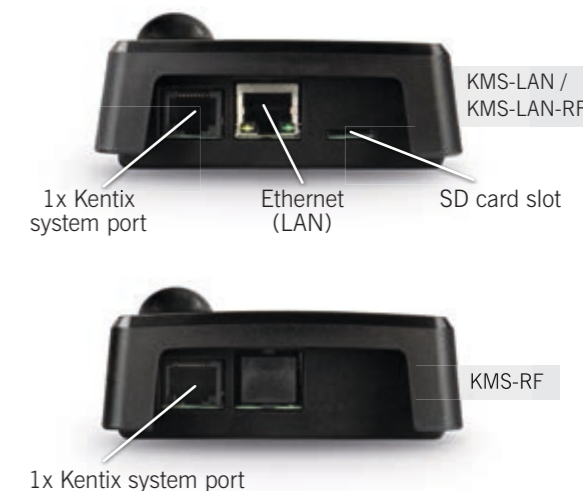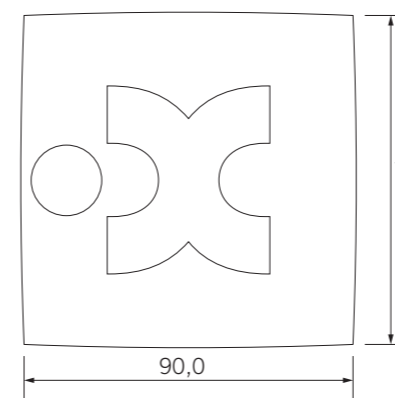
# MultiSensor-DOOR

Ultra-compact MultiSensor for the detection of burglary attempts on doors, windows and moveable objects, including climate monitoring. It replaces classic door contacts and can very easily be mounted due to its magnetic contact that adapts to the conditions of the door or window respectively. The MultiSensor-DOOR is battery operated and has a very long battery life (up to 4 years).
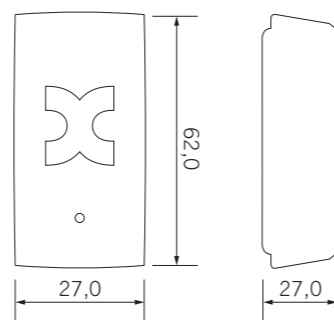
VIBRATION · DOOR · SABOTAGE · ZIGBEE · BUZZER · CLIMATE
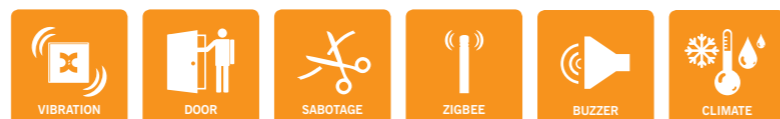
## Products

| Type | Housing color | Item number |
|---|---|---|
| MultiSensor-DOOR | Black | KMS-DOOR-B |
| MultiSensor-DOOR | White | KMS-DOOR-W |

## Accessories

| Type | Item number |
|---|---|
| Spare battery | KER14250 |

62,0 · 27,0 · 27,0

## Technical Details

| | |
|---|---|
| Connectivity | AlarmManager-BASIC (KAM-BASIC); AlarmManager-PRO (KAM-PRO) |
| Sensor – Temperature | Measurement range -20°C/-4°F up to +99°C/210°F (accuracy +/- 0,5°C) |
| Sensor – Relative humidity | Measurement range 0 up to 100% (accuracy +/- 3%) |
| Sensor – Dew point | Measured in °C/°F |
| Sensor – Vibration | 3 axis, sensitivity adjustable |
| Sensor – Reed contact | Magnetic sensor for door position (spacing up to approx. 1 cm) |
| Sensor – Sabotage | Sabotage message when disassembled |
| Signal transmitter | 65dB, 2.3kHz |
| LED | Multicolor LED (Red/Green); ALARM (Red); Teaching-in (Green) |
| Radio | ZigBee® 2,4GHz; ISM Band +3dBm; output IEEE8 02.15.4; encryption AES 128 Bit |
| Power supply | Lithium-ion battery, 1/2 AA 3,6V (1.200 mAh); battery life up to 4 years (approx. 200.000 transactions) |
| Housing | Material: PS 62 x 27 x 27 mm; weight approx. 50g; colors: black, white |
| Environmental conditions | Temperature 0 – 45°C; humidity 5-95%, non-condensing |
| Delivery content | 1x Li-battery 3,6V/1.200mAh, mounting material, magnet for REED contact |
| Audits | CE |

# Digital I/O Expansion Module

The I/O Expansion Module is connected to the AlarmManager-PRO and serves the connection of external alarm messages. It communicates via ethernet. This way, the module can be mounted in any arbitrary place. The configuration happens on the web interface of the AlarmManager-PRO. Via the integrated web server, the module offers an easy IP configuration and testing of the in/outputs without additional software. Up to 32 modules (500 alarm inputs max.) can be operated on one AlarmManager-PRO.

## Products

MONITORING · SNMP · SABOTAGE
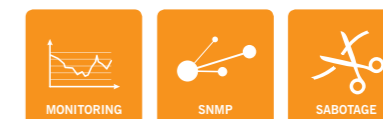
| Type | Inputs | Outputs | Configuration alarm outputs | Item number |
|---|---|---|---|---|
| I/O Module | Digital inputs for voltage wiring; ON: +10-50VDC, OFF: +4DC; input impedance: 10kOHM, overvoltage protection 70VDC | Open-Collector outputs 10-40VDC, capacity 650mA (up to 1.1A overcurrent protection), overvoltage protection 47VDC | Openly assignable and switchable | KIO7052 |
| I/O Module | Digital inputs for potential-free wiring, ON: open, OFF: input switched to GND | — | — | KIO7053 |
| I/O Module | 8 analog inputs for measured values 0-10V, 4-20mA | — | — | KIO7017 |

## Accessories

| Type | Item number |
|---|---|
| PoE Injector | KPOE150S |
| External Temperature Sensor (IP66) -50°C to 100°C | KESAN1 |
| External cable Temperature Sensor (IP66) -50°C to 100°C | KESAN2 |

## Technical Details

128,0 · 76,0 · 38,0

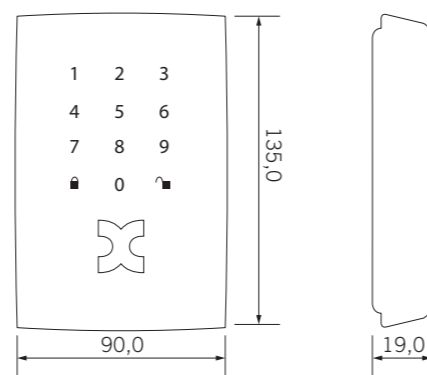| | |
|---|---|
| Connectivity | External alarms of existing system components (air conditioners, UPS systems, generators, alarm systems) |
| AlarmManager | Connection to Kentix AlarmManager-PRO |
| Configuration | Integrated web server (HTTP) |
| Protocols | KAM-IO-Communication per IP-Port: 502 (Default) |
| Security | ID, passwort and IP filter |
| Terminal clamps | Pluggable screw terminals for cables up to 1 mm² |
| Isolation | Ethernet 1,5kVDC, I/O 3,7kVrms |
| Environment | Operating temperature -20°C up to +60°C, relative humidity 10-90% non-condensing |
| Network | LAN 10/100 Base-TX (PoE) |
| Power supply | PoE (Class 1) or external adaptor 12-32VDC, 3Watt |
| Housing | 76 x 128 x 38 mm (DIN rail assembly) |
| Delivery content | KIO7052/KIO7053/KIO7017, 3m patch cable, terminal block, manual |
| Audits | CE |

RFID
RADIO
BATT
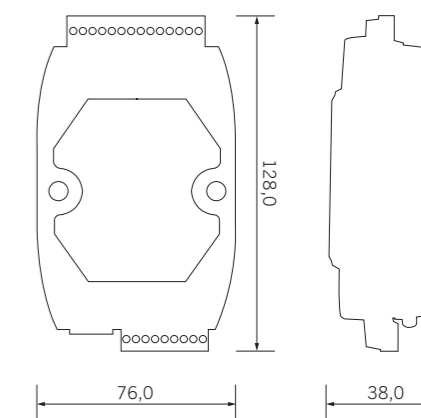
# KeyPad-Touch

The KeyPad with glass-touch-pad is used to arm/disarm the AlarmManager and to control access. Each event is documented and saved in the log book of the AlarmManager. The KeyPad is easy to mount on the wall and is battery operated with two standard AAA batteries. By default, the KeyPad-Touch is equipped with an RFID card reader (MIFARE® DESFire®, LEGIC® advant).

| PIN-CODE | ARM/DISARM | DOCUMENTATION | ACCESS | MOTION |

Kentix System Socket

# LeakageSensor

The LeakageSensor is connected to an AlarmManager or a MultiSensor-LAN/-RF per plug'n'play and continuously measures conductivity via several electrodes. It is connected with a standard patch cable and therefore can easily be „patched in" to existing wiring. The LeakageSensor-ROPE additionally has a sensor cable. The integrated sensors in the cable detect water ingress all along the rope at an early stage. The LeakageSensor is cascadable up to five times and therefore also suitable for large rooms.

| MONITORING | LEAKAGE |

## Products

| Type | Reader | Item number |
|------|--------|-------------|
| KeyPad-Touch | RFID reader 13.56MHz for MIFARE® and LEGIC® advant RFID mediums | KKPT |

## Accessories

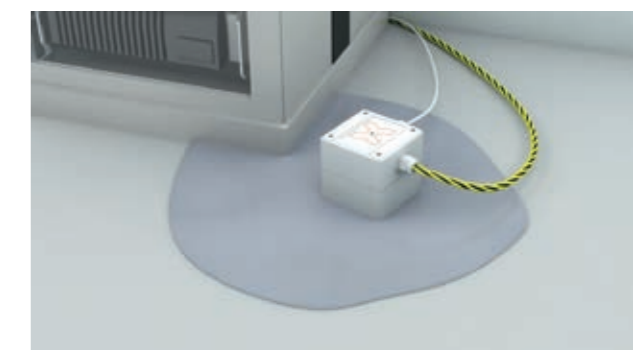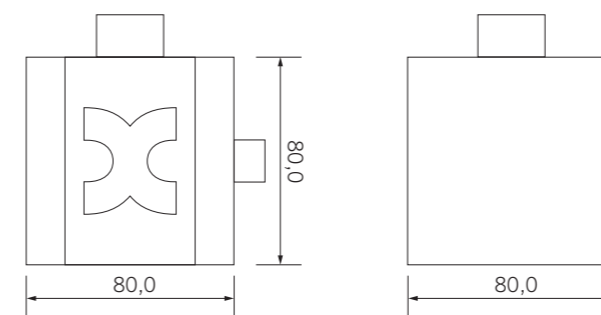| Type | Delivery content | Item number |
|------|------------------|-------------|
| RFID token | 1 piece | KKT-M |
| RFID token | 25 pieces | KKT-M25 |
| Transponder card | 1 piece | KKT-MC |
| Transponder card | 25 pieces | KKT-MC25 |

135,0
90,0
19,0

## Products

| Type | Sensor cable length | Item number |
|------|---------------------|-------------|
| LeakageSensor | — | KLS03 |
| LeakageSensor-ROPE | 10 meters | KLS03-ROPE-10 |
| LeakageSensor-ROPE | 20 meters | KLS03-ROPE-20 |

80,0
80,0
80,0

The LeakageSensor detects water ingress quickly and reliably

## Technical Details

| | |
|---|---|
| Connectivity | AlarmManager-BASIC/PRO, MultiSensor-LAN-RF |
| Signal transmitter | 70dB, 2.3kHz |
| LED | Zone (RED/GREEN), armed (RED/GREEN), disarmed (RED/GREEN) |
| Radio | ZigBee® 2,4GHz ISM Band +3dBm output; IEEE8 02.15.4; encryption AES 128 Bit |
| RFID-NFC | Integrated RFID reader (13.56MHz); ISO14443A/B, ISO15693, ISO18092/NFC (MIFARE® DESFire®, LEGIC® advant) |
| Power supply | Battery operation 2 x 1.5V/AAA; battery life approx. 2 years, depending on the number of read cycles |
| Housing | Material: PS 90 x 135 x 19 mm; weight approx. 100g; color: white; protection class IP40 |
| Environmental conditions | Temperature 0 – 45℃; humidity 5-95%, non-condensing |
| Delivery content | KeyPadTouch, 2x MIFARE® DESFire® RFID token, 2x AAA batteries |
| Accessories | Spare battery KeyPad 1.5V/AAA, 1000mAh |
| Audits | CE |

## Technical Details

| | |
|---|---|
| Connectivity | Kentix system socket (RJ45) |
| Power supply | Via Kentix system socket |
| Status LED | RED/GREEN |
| Temperature range | -25℃ up to 70℃ / max. 85%rF, non-condensing |
| Connection cable | 10m, RJ45 plug for Kentix system socket |
| Housing sensor | Ni/Au, sensitivity: 1ml water |
| Rope sensor | Conductive polymer cable, sensitivity: 10ml water on approx. 20cm length |
| Housing | Color white, protection class IP65 according to EN60529 |
| Cable fittings | M20 |
| Weight | Approx. 200g (KLS03), 0,75kg (KLS03-ROPE-10), 1kg (KLS03-ROPE-20) |
| Size | 80 x 80 x 80 mm |
| Delivery content | LeakageSensor, 10m connection/patch cable, 1x case fitting for cascading |

# Sounder

The sounder can be mounted inside or outside of the building. It is a combination signaling device and a significant component of a fully functioning alarm chain. In case of an alarm, the sounder creates a very loud acoustic signal of up to 110 dB sound pressure. In addition to the acoustic signal, a visual alarm is generated by a colored flashing light (flash frequency: 1 Hz) that can be seen far into the distance. Due to its robust ABS housing, the compact alarm module can also be used in outdoor areas. It is connected directly to the Kentix system socket via a RJ45 patch cable (10m included in delivery).
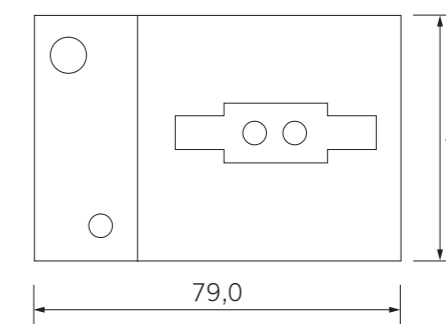
**Kentix System Socket**

BUZZER        FLASH-LED

## Products

| Type | Item number |
|------|-------------|
| Sounder | KFLASH1 |

123,0

Ø93,0
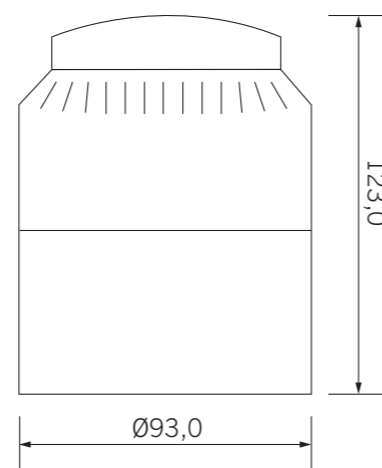
## Technical Details

| Connectivity | Kentix system socket via included patch cable 10 m (RJ45) |
|--------------|-----------------------------------------------------------|
| Power supply | Via Kentix system socket or included power injector |
| Sound pressure | 110 dB |
| Alarm flash LED | Red, flash frequency 1Hz |
| Monitoring | Sabotage monitoring |
| Temperature range | -10°C up to +55°C / max. 95%rF, non-condensing |
| Connecting cable | max. 50 m |
| Internal RJ45 plug | For Kentix system socket |
| Housing | ABS, IP43 |
| Weight | approx. 1kg |
| Size | Ø93 mm, H123 mm |
| Delivery content | Sounder, 10m connection/patch cable, 1x power adapter 24/1A, RJ45 adapter 3-fold |

# Dust-/Dirtsensor

The optical dust/dirt sensor is used to detect the degree of contamination in data centers, IT racks and distributors. It is connected directly to the Kentix system socket via an RJ45 patch cable (5 m scope of delivery). The sensitivity is adjustable.

## Products

| Type | Item number |
|------|-------------|
| Dust-/Dirtsensor | KDS01 |

44,0

79,0

## Technical Details

| Connectivity | At Kentix system socket via included patch cable 5 m (RJ45) |
|--------------|------------------------------------------------------------|
| Power supply | Via Kentix system socket |
| Monitoring | pollution |
| Temperature range | 0°C to +60°C |
| Weight | approx. 0,1 kg |
| Size | 79 x 44 mm |
| Delivery content | Dust-/Dirtsensor, 5 m connection cable |

# Rack mounting bracket

1-U Mounting bracket made of sheet metal for mounting Kentix MultiSensors in 19" IT rack. Suitable for mounting KMS-LAN, KMS-LAN-RF, KMS-RF, KMS-RFB, KAM, KPM-100 The sensor is mounted in the optimum downward orientation. The devices are protected against unauthorised access by being housed in a rack. Additional cabling in the server room is also not required.

## Products

| Type | Item number |
|------|-------------|
| Rack mounting bracket | KRA-03 |

## Technical Details

| Mounting | Directly in the 19" rack |
|----------|--------------------------|
| Weight | approx. 0,15 kg |
| Height | 44 mm |
| Delivery content | Rack mounting bracket, screw set 3 mm |
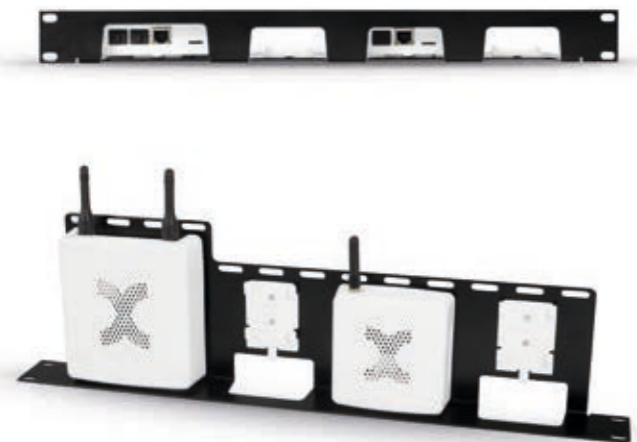
# Rack mounting frame

1-U mounting frame made of sheet metal for mounting up to four Kentix devices in a 19" IT rack. The following devices can be mounted KAM-BASIC/PRO (1-piece), KXP-16, KMS-LAN, KMS-LAN-RF, KMS-RF, KMS-RFB (4-pieces). By placing them in the rack, the devices are protected against unauthorized access and additional cabling in the server room is also not required.

## Products

| Typ | Artikelnummer |
| --- | --- |
| Mounting frame | KRA-01 |

## Accessories

| Typ | Artikelnummer |
| --- | --- |
| Gain magnet antenna | KMA3 |

## Technical Details

| | |
| --- | --- |
| Mounting | Directly in the 19" rack |
| Weight | approx. 0,4 kg |
| Heght | 44 mm |
| Delivery content | Rack mounting frame, screw set 3 mm |

### IMPORTANT!
When using radio components in the IT rack, order external antennas if necessary!

# Threat-Matrix – Which device monitors which functions?

| | MultiSensor-RF | MultiSensor-LAN | MultiSensor-DOOR | StarterSet-BASIC | StarterSet-PRO |
| --- | --- | --- | --- | --- | --- |
| **Number of monitored threats** | **20** | **19** | **10** | **30** | **37** |
| **TEMPERATURE - CLIMATE - ENVIRONMENTAL ISSUES** | | | | | |
| Overtemperature | ✔ | ✔ | ✔ | ✔ | ✔ |
| Undertemperature - frost | ✔ | ✔ | ✔ | ✔ | ✔ |
| Defective air-conditioning | ✔ | ✔ | ✔ | ✔ | ✔ |
| Defective dehumidification | ✔ | ✔ | ✔ | ✔ | ✔ |
| Defective climate control | ✔ | ✔ | ✔ | ✔ | ✔ |
| Clogged filters | ✔ | ✔ | | ✔ | ✔ |
| General malfunction of air-conditioning | ✔ | ✔ | | ✔ | ✔ |
| **SMOULDERING FIRE - FIRE** | | | | | |
| Smouldering fire on cables, devices | ✔ | ✔ | | ✔ | ✔ |
| Smouldering fire in electricity distributors | ✔ | ✔ | | ✔ | ✔ |
| Charred, defective electronic components | ✔ | ✔ | | ✔ | ✔ |
| Fire - Combustion gases | ✔ | ✔ | | ✔ | ✔ |
| Battery degassing (H-hydrogen) | ✔ | ✔ | | ✔ | ✔ |
| **BURGLARY - THEFT - SABOTAGE** | | | | | |
| Unauthorized access | ✔ | ✔ | ✔ | ✔ | ✔ |
| Intrusion | ✔ | ✔ | ✔ | ✔ | ✔ |
| Attempted intrusion - securing perimeters | | | ✔ | | |
| Access to unauthorized sections (racks, cabinets) | ✔ | ✔ | ✔ | ✔ | ✔ |
| **HARDWARE FAILURE** | | | | | |
| Power loss - defective cables | | | | ✔ | ✔ |
| Loss of active system components | | | | ✔ | ✔ |
| Loss of services (HTTPS, SMTP, VPN, DB, etc.) | | | | ✔ | ✔ |
| Performance loss | | | | ✔ | ✔ |
| Sabotage/theft of active components | | | ✔ | ✔ | ✔ |
| Defective fans | | | | ✔ | ✔ |
| General malfunction of active components | | | | ✔ | ✔ |
| **WATER INGRESS - MOISTURE** (optional LeakageSenor required) | | | | | |
| Open windows | ✔* | ✔* | | ✔* | ✔* |
| Defective plumbing in the room | ✔* | ✔* | | ✔* | ✔* |
| Defective plumbing in adjoined rooms and floors | ✔* | ✔* | | ✔* | ✔* |
| Leakage - climate or heating systems | ✔* | ✔* | | ✔* | ✔* |
| **POWER - VOLTAGE - NETWORK QUALITY** | | | | | |
| Power failure | ✔ | | | ✔ | ✔ |
| Overvoltage - peak | | | | | ✔* |
| Flickering - short term power loss | | | | | ✔* |
| Undervoltage | | | | | ✔* |
| Deviation of power/UPS frequency | | | | | ✔* |
| Overcurrent - overload | | | | | ✔* |
| UPS operation | | | | ✔ | ✔ |
| UPS defect/malfunction | | | | ✔ | ✔ |
| UPS battery failure | | | | ✔ | ✔ |
| UPS residual maturity and capacity | | | | ✔ | ✔ |

* Additional sensors required

# StarterSets

With the Kentix StarterSets, you get a complete package for quick and easy access to the innovative Kentix monitoring technology. This way, you can monitor all critical physical threats with just one system. Kentix devices offer the administration of up to 1.000 user accounts for the alarming.

The StarterSet-BASIC contains everything you need in order to monitor racks and IT rooms of up to 20m²: an AlarmManager-BASIC and wireless MultiSensor-RF. The set can be expanded with additional Multi-

Sensor-RF (up to 200). Updating to the PRO-version is also possible later on, in case network-enabled sensors (MultiSensor-LAN) should be required for the expansion.

The StarterSet-PRO contains all the components you need for the monitoring of rooms and racks from 20m² up to 10.000m² in size as well as for distributed sites. Due to the included AlarmManager-PRO, the system can be expanded with additional Multi-Sensors immediately.

## Products

| Type | Housing color | Item number |
|---|---|---|
| StarterSet-BASIC | Black | KSS-BASIC-B |
| StarterSet-BASIC | White | KSS-BASIC-W |
| StarterSet-PRO | Black | KSS-PRO-B |
| StarterSet-PRO | White | KSS-PRO-W |

## Accessories

| Type | Item number |
|---|---|
| PoE Injector | KPOE150S |

## Technical Details

See integrated products of the StarterSets

| | |
|---|---|
| AlarmManager-Basic | Page 16 |
| AlarmManager-PRO | Page 16 |
| MultiSensor-RF | Page 18 |
| MultiSensor-DOOR | Page 20 |

# StarterSet-BASIC

Security for small IT rooms according to the ISO 27001 with GSM alarm center



**LAN**
**RADIO**
**GSM**

**Monitored threats: up to 30**

Delivery content
**StarterSet-BASIC:**
· 1 AlarmManager-BASIC (LAN-PoE)
· 1 MultiSensor-RF with adapter
· 1 SlimLine patch cable 5m
· 1 Kentix360 SIM-Karte

**Upgrade to AlarmManager-PRO possible any time!**

· Rack and room monitoring up to 4.000m²
· Up to 200 wireless sensors
· SMS / E-mail / SNMP
· Up to 10 alarm recipients

ZIGBEE  LAN-PoE  GSM-INSIDE  SMS - E-MAIL  CLOUD  BUZZER  RACK  MONITORING  SERVER-PING

# StarterSet-PRO

Security for distributed IT rooms according to ISO 27001 with GSM alarm center



**LAN**
**RADIO**
**GSM**

**Monitored threats: up to 37**

Delivery content
**StarterSet-PRO:**
· 1 AlarmManager-PRO (LAN-PoE)
· 1 MultiSensor-RF with adapter
· 1 MultiSensor-DOOR
· 1 SlimLine patch cable 5m
· 1 Kentix360 SIM-Karte

· Rack and room monitoring up to 10.000m², expandable for distributed sites
· Up to 500 sensors (wireless and LAN)
· SMS / E-mail / SNMP / Push
· Up to 1.000 alarm recipients

ZIGBEE  LAN-PoE  GSM-INSIDE  SMS - E-MAIL  CLOUD  HTTP REQUEST  BUZZER  RACK  MONITORING  SERVER-PING  SNMP  VDS 3465 TCP

# System components



| Device | AlarmManager-PRO | AlarmManager-BASIC | MultiSensor-LAN-RF | MultiSensor-LAN |
|---|---|---|---|---|
| Type | KAM-PRO | KAM-BASIC | KMS-LAN-RF | KMS-LAN |
| Function | GSM alarm and control center for MultiSensor, KeyPad, accessories | GSM alarm and control center for MultiSensor, KeyPad, accessories | Multifunctional sensor with ethernet and ZigBee radio as repeater | Multifunctional sensor with ethernet |
| Room/site size | Up to approx. 10.000m² | Up to approx. 4.000m² | 20m², IT rack | 20m², IT rack |
| Number of connectable MultiSensors | 500 | 200 (wireless) | 25 (wireless) | - |
| Configuration | Web server (HTTPS) | Web server (HTTPS) | Web server (HTTPS) | Web server (HTTPS) |
| Smartphone app | ✔ | ✔ | ✔ | ✔ |
| Integrated web server (HTTPS) | ✔ | ✔ | ✔ | ✔ |
| Integrated LTE modem (4G) | ✔ | ✔ | ✘ | ✘ |
| Server monitoring (live check) | ✔ | ✔ | ✘ | ✘ |
| Stand-alone-capable without AlarmManager | ✘ | ✘ | ✘ | ✔ |
| Video recording IP camera (HTTP/S) | ✔ | ✔ | ✔ | ✔ |
| SMS alarms | ✔ | ✔ | ✘ | ✘ |
| E-mail alarms | ✔ | ✔ | ✔ | ✔ |
| VDS 2465-S2 alarming (TCP) | ✔ | ✘ | ✘ | ✘ |
| SNMP Trap (V2/3) | ✔ | ✔ | ✔ | ✔ |
| SNMP MIB (V2/3) | ✔ | ✔ | ✔ | ✔ |
| Data logging with long time memory | ✔ | ✔ | ✔ | ✔ |
| Alarm outputs (Open Collector) | 4 | 4 | 2 | 2 |
| Alarm input (potential-free) | 4 | 4 | 2 | 2 |
| Connection for LeakageSensor | ✔ | ✔ | ✔ | ✔ |
| PoE (Power over Ethernet) | ✔ | ✔ | ✔ | ✔ |
| External power supply | ✔ | ✔ | ✔ | ✔ |
| Integrated UPS | ✔ | ✔ | ✘ | ✘ |
| LAN connection (10/100Mbit) | ✔ | ✔ | ✔ | ✔ |
| ZigBee (radio) | ✔ | ✔ | ✔ | ✘ |
| Kentix system socket | ✔ | ✔ | ✔ | ✔ |
| Connection to Kentix system socket | ✘ | ✘ | ✘ | ✘ |
| Sabotage monitoring | ✔ | ✔ | ✔ | ✔ |
| Sensor - Temperature (0-99°C) | ✔ | ✔ | ✔ | ✔ |
| Sensor - Relative humidity (0-100%) | ✔ | ✔ | ✔ | ✔ |
| Sensor - Dew point (°C) | ✔ | ✔ | ✔ | ✔ |
| Sensor - Carbon monoxide (CO >20ppm) | ✘ | ✘ | ✔ | ✔ |
| Sensor - Motion | ✘ | ✘ | ✔ | ✔ |
| Sensor - Vibration (shock) | ✔ | ✔ | ✔ | ✔ |
| Voltage control | ✔ | ✔ | ✘ | ✘ |
| SD card slot (Micro SD) | ✔ | ✔ | ✔ | ✔ |
| RFID (MIFARE®, Legic®, Hitag) | ✘ | ✘ | ✘ | ✘ |
| Size (L x W x H in mm) | 110 x 120 x 45 | 110 x 120 x 45 | 90 x 90 x 45 | 90 x 90 x 45 |

| Device | MultiSensor-RF | MultiSensor-DOOR | KeyPad-Touch | I/O Module | LeakageSensor | Sounder |
|---|---|---|---|---|---|---|
| Type | KMS-RF | KMS-DOOR | KKPT | KIO7052/53 | KLS03 | KFLASH |
| Function | Multifunctional sensor with ZigBee radio | Multifunctional sensor for the detection of unauthorized access | Touch keypad for access control via PIN or RFID | Extension module for the connection of external alarms | Sensor for the detection of water ingress | Flash alarm siren for visual and acoustic signaling of alarms |
| Room/site size | 20m², IT rack | Door, window, rack | Door, room | External alarms | Up to 100m², floor | Room |
| Number of connectable MultiSensors | - | - | - | - | - | - |
| Configuration | - AlarmManager | - AlarmManager | - AlarmManager | Web server AlarmManager | AlarmManager, MultiSensor-LAN | AlarmManager, MultiSensor-LAN |
| Smartphone app | ✘ | ✘ | ✘ | ✘ | ✘ | ✘ |
| Integrated web server (HTTPS) | ✘ | ✘ | ✘ | ✔ | ✘ | ✘ |
| Integrated LTE modem (4G) | ✘ | ✘ | ✘ | ✘ | ✘ | ✘ |
| Server monitoring (live check) | ✘ | ✘ | ✘ | ✘ | ✘ | ✘ |
| Stand-alone-capable without AlarmManager | ✘ | ✘ | ✘ | ✘ | ✘ | ✘ |
| Video recording IP camera (HTTP/S) | ✘ | ✘ | ✘ | ✘ | ✘ | ✘ |
| SMS alarms | ✘ | ✘ | ✘ | ✘ | ✘ | ✘ |
| E-mail alarms | ✘ | ✘ | ✘ | ✘ | ✘ | ✘ |
| VDS 2465-S2 alarming (TCP) | ✘ | ✘ | ✘ | ✘ | ✘ | ✘ |
| SNMP Trap (V2/3) | ✘ | ✘ | ✘ | ✘ | ✘ | ✘ |
| SNMP MIB (V2/3) | ✘ | ✘ | ✘ | ✘ | ✘ | ✘ |
| Data logging with long time memory | ✔ (KAM) | ✔ (KAM) | ✘ | ✔ (KAM-PRO) | ✘ | ✘ |
| Alarm outputs (Open Collector) | 2 | ✘ | ✘ | 8 / 0 | ✘ | ✘ |
| Alarm input (potential-free) | 2 | ✘ | ✘ | 8 / 16 | ✘ | ✘ |
| Connection for LeakageSensor | ✔ | ✘ | ✘ | ✔ | ✘ | ✘ |
| PoE (Power over Ethernet) | ✘ | ✘ | ✘ | ✔ | ✘ | ✘ |
| External power supply | ✔ | Battery (Li) | Battery (AAA) | ✔ | ✔ | ✔ |
| Integrated UPS | ✔ | ✘ | ✘ | ✘ | ✘ | ✘ |
| LAN connection (10/100Mbit) | ✘ | ✘ | ✘ | ✔ | ✘ | ✘ |
| ZigBee (radio) | ✔ | ✔ | ✔ | ✘ | ✔ | ✘ |
| Kentix system socket | ✔ | ✘ | ✘ | ✘ | ✘ | ✘ |
| Connection to Kentix system socket | ✔ | ✘ | ✘ | ✘ | ✔ | ✔ |
| Sabotage monitoring | ✔ | ✔ | ✔ | ✔ | ✔ | ✘ |
| Sensor - Temperature (0-99°C) | ✔ | ✔ | ✘ | ✘ | ✘ | ✘ |
| Sensor - Relative humidity (0-100%) | ✔ | ✔ | ✘ | ✘ | ✘ | ✘ |
| Sensor - Dew point (°C) | ✔ | ✔ | ✘ | ✘ | ✘ | ✘ |
| Sensor - Carbon monoxide (CO >20ppm) | ✔ | ✘ | ✘ | ✘ | ✘ | ✘ |
| Sensor - Motion | ✔ | ✘ | ✘ | ✘ | ✘ | ✘ |
| Sensor - Vibration (shock) | ✔ | ✔ | ✔ | ✘ | ✘ | ✘ |
| Voltage control | ✔ | ✔ | ✔ | ✘ | ✔ | ✘ |
| SD card slot (Micro SD) | ✘ | ✘ | ✘ | ✘ | ✘ | ✘ |
| RFID (MIFARE®, Legic®, Hitag) | ✘ | ✘ | ✔ | ✘ | ✘ | ✘ |
| Size (L x W x H in mm) | 90 x 90 x 45 | 27 x 62 x 27 | 90 x 135 x 19 | 72 x 123 x 35 | 80 x 80 x 80 | Ø93, H123 |

## Application example:
## Data center with adjoined utility rooms

Central monitoring of a data center with 300 sqm and several server racks as well as UPS and climate systems that are to be integrated via existing signal contacts

For the data center, a Kentix AlarmManager-PRO and several MultiSensor-LAN are required. The MultiSensors are connected to a PoE switch via the existing infrastructure and are mounted on the server room ceiling with mounting brackets. All measured values are sent to the AlarmManager via the network. One MultiSensor-LAN covers an area of up to 20sqm. In each utility room, one MultiSensor-LAN is used. In order to monitor potential water ingress,

a LeakageSensor is connected to the MultiSensor. External sites such as climate or UPS systems are integrated via an I/O Module.

The monitoring can also happen via external network monitoring if desired. In this case, the Alarm-Manager provides all measured values and system states via the SNMP interface.

### Parts list/Order assistance
### Data Center

| Type | Item number | Quantity |
|------|-------------|----------|
| AlarmManager-PRO | KAM-PRO | 1 |
| MultiSensor-LAN | KMS-LAN | 15 |

### Parts list/Order assistance
### Utility rooms

| Type | Item number | Quantity |
|------|-------------|----------|
| MultiSensor-LAN | KMS-LAN | 1 each |
| LeakageSensor | KLS03-ROPE | 1 each |
| I/O Module | KIO7053/52/17 | 1 each |



Data center

Utility rooms
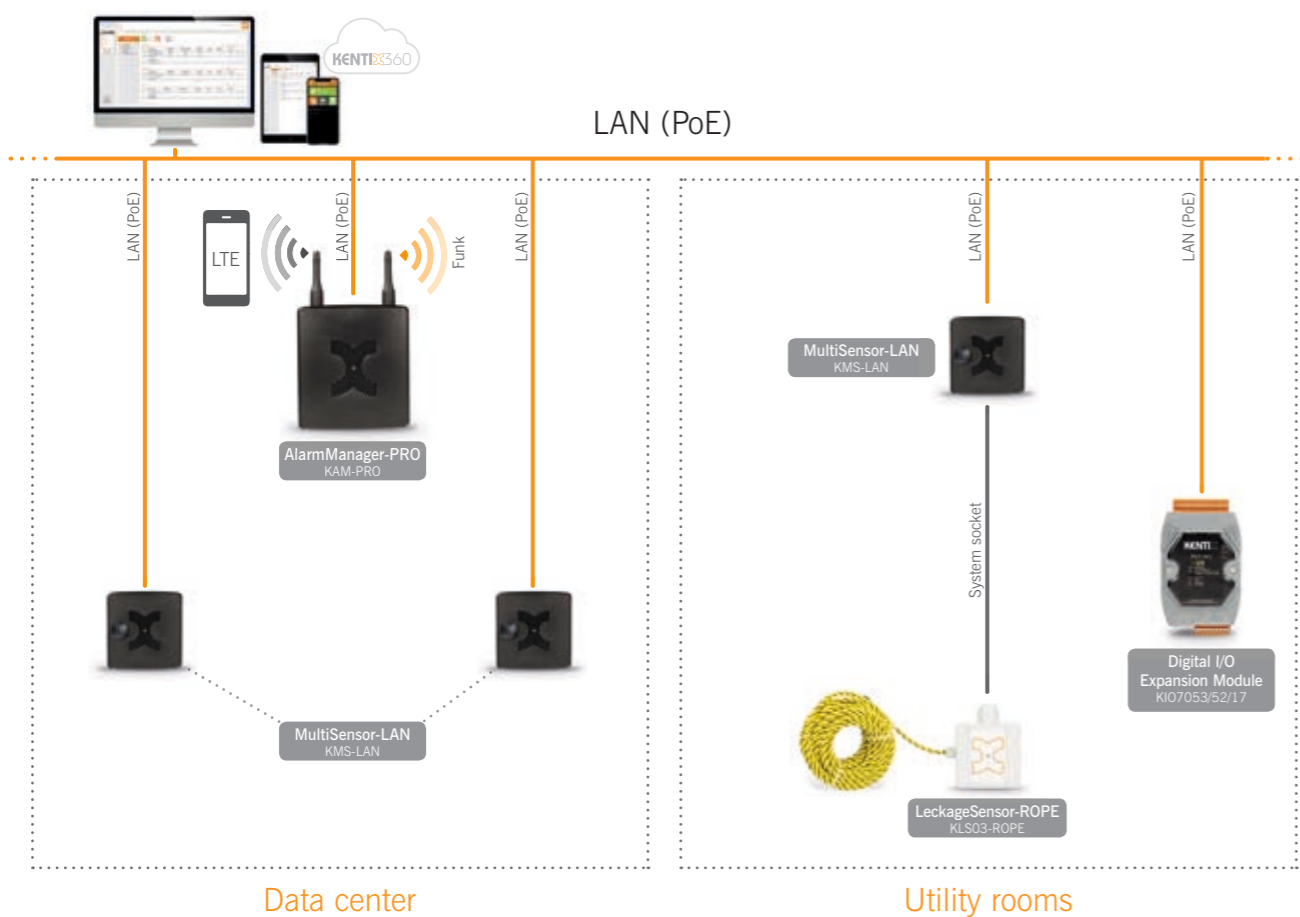
## Application example:
## Container data center

Scalable monitoring solution for container or outdoor data centers in which systems with high availability requirements are operated

For the first container, an AlarmManager-PRO plus a MultiSensor-RF are required. The MultiSensor is supplied with power via a separate power adapter and mounted on the container ceiling with mounting brackets. It is connected to the AlarmManager with a patch cable. All measured data are transmitted via radio to the AlarmManager. A LeakageSensor monitors potential water ingress and a KeyPad on the interior logs all access to the container. Additional con-

tainers that are connected via the infrastructure can easily be integrated into the system. In each one of them, a MultiSensor-LAN-RF plus LeakageSensor and KeyPad is used. The MultiSensor is connected via the network to a PoE-enabled switch.
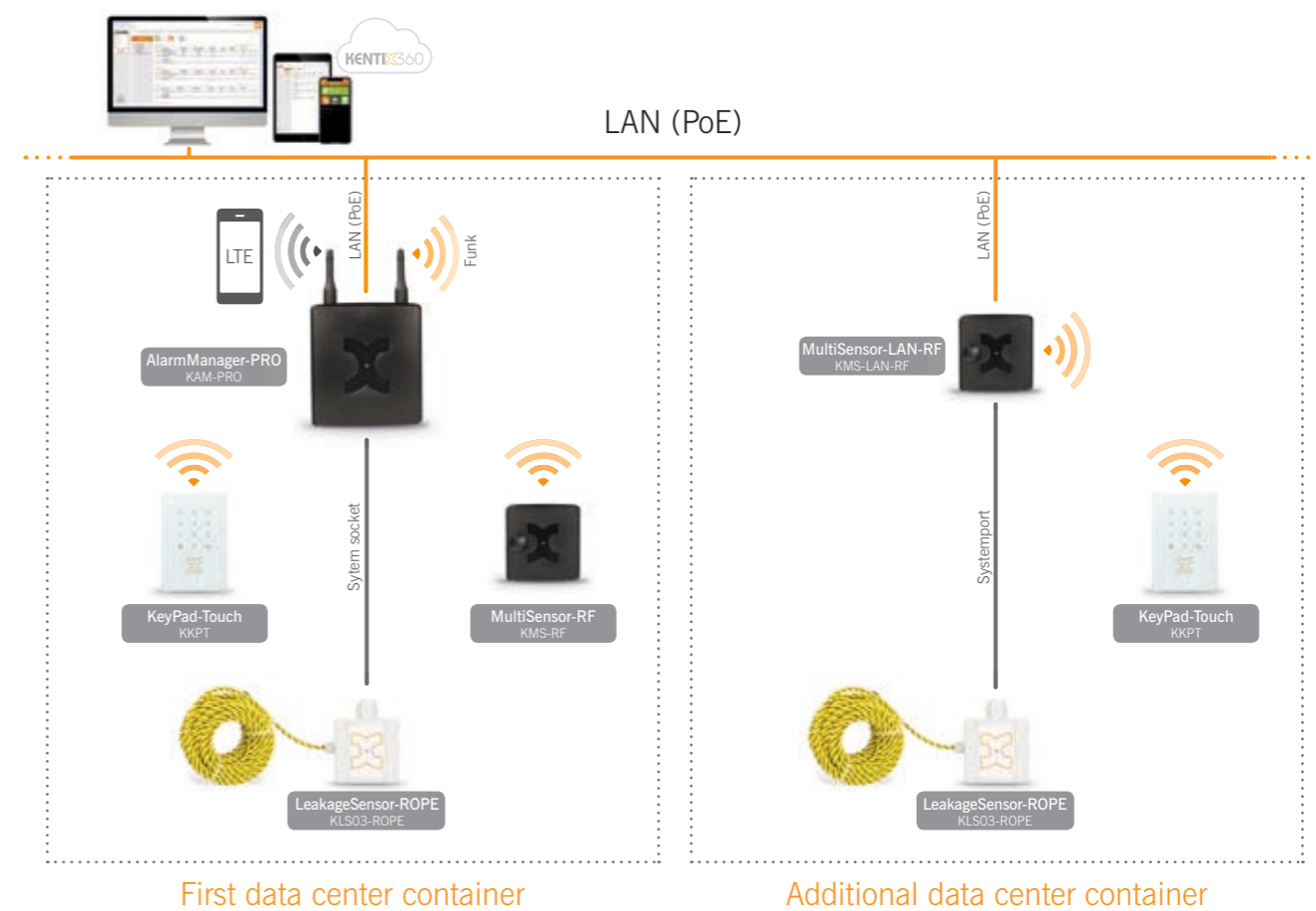
The monitoring of the entire system happens centrally via the AlarmManager. Integrating it into a central monitoring tool is also possible.

### Parts list/Order assistance
### First Container

| Type | Item number | Quantity |
|------|-------------|----------|
| AlarmManager-PRO | KAM-PRO | 1 |
| MultiSensor-RF | KMS-RF | 1 |
| LeakageSensor | KLS03-ROPE | 1 |
| KeyPad-Touch | KKPT | 1 |

### Parts list/Order assistance
### Additional containers

| Type | Item numer | Quantity |
|------|------------|----------|
| MultiSensor-LAN-RF | KMS-LAN-RF | 1 each |
| LeakageSensor | KLS03-ROPE | 1 each |
| KeyPad-Touch | KKPT | 1 each |



First data center container

Additional data center container

# Kentix DoorLock®
# – Access securely networked

Who has access to which rooms and at what time? With the Kentix DoorLock® you have full (access) control: With several variants of locking components and individual time-user-profiles, you establish an access solution according to your needs in no time. Due to the connection to the Kentix360 Cloud, you have all of your rooms at a glance at all times – even on the go via app for smartphone or tablet. And if a problem does occur after all, Kentix informs you immediately and reliably so that you can act as quickly as possible.

The advantage of the Kentix access control system is the easy networking and integration into IT networks. Retrofitting doors is simple and can be done without special tools or additional constructional measures. The Kentix DoorLock® includes wireless as well as wired components that can be put together to one centrally managed system. This way, you can implement small as well as large access systems with little mounting efforts for any application.

**Access control with video recording**

If desired, any door in the system can be connected to an IP camera that will be triggered any time the door is unlocked or tampered with. The recorded image series is saved together with the according user data. Non-authorized access attempts are immediately e-mailed to the responsible persons with the picture series attached.

**Application possibilities:**
- Office and administrative rooms
- Industry, production and warehouse facilities
- Container sites and distributed properties
- Server rooms, data centers and IT cabinets
- Hospital, laboratories and medicine cabinets
- Mission-critical Infrastructure

**Access simply IP-networked – with the ingeniously easy online access control system for professionals**

Who has access when and where? Manage access easily at all times – including video recording. With the Kentix DoorLock®, it only takes few components and little mounting efforts in order to implement small as well as large access solutions cost-efficiently.

| RADIO | VIDEO | SNMP | E-MAIL | NFC | APP |

## STARTERSET-DOORLOCK – THE EASIEST STARTER SOLUTION FOR YOUR INTRODUCTION TO ONLINE ACCESS CONTROL

**AccessManager, Wireless Door Knob and Master Card Set**

With the AccessManager ① and a wireless locking component ② , a complete remote controllable access solution can be set up without great mounting efforts.

① ②
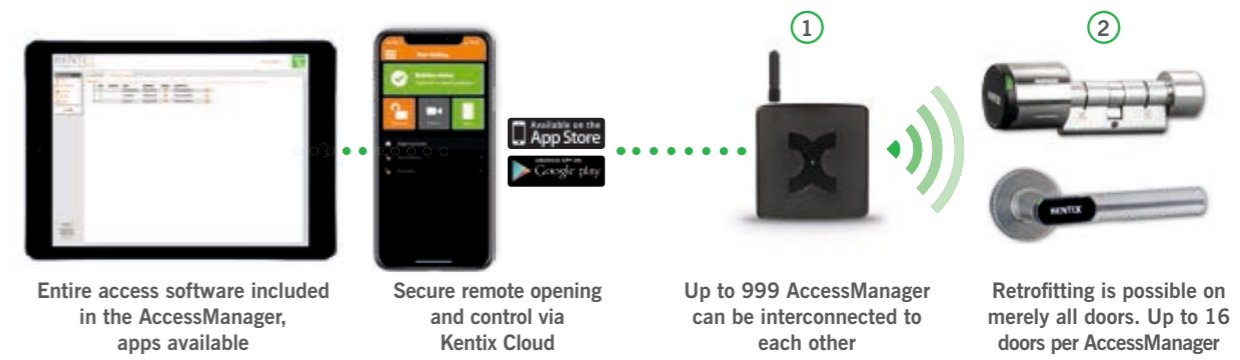
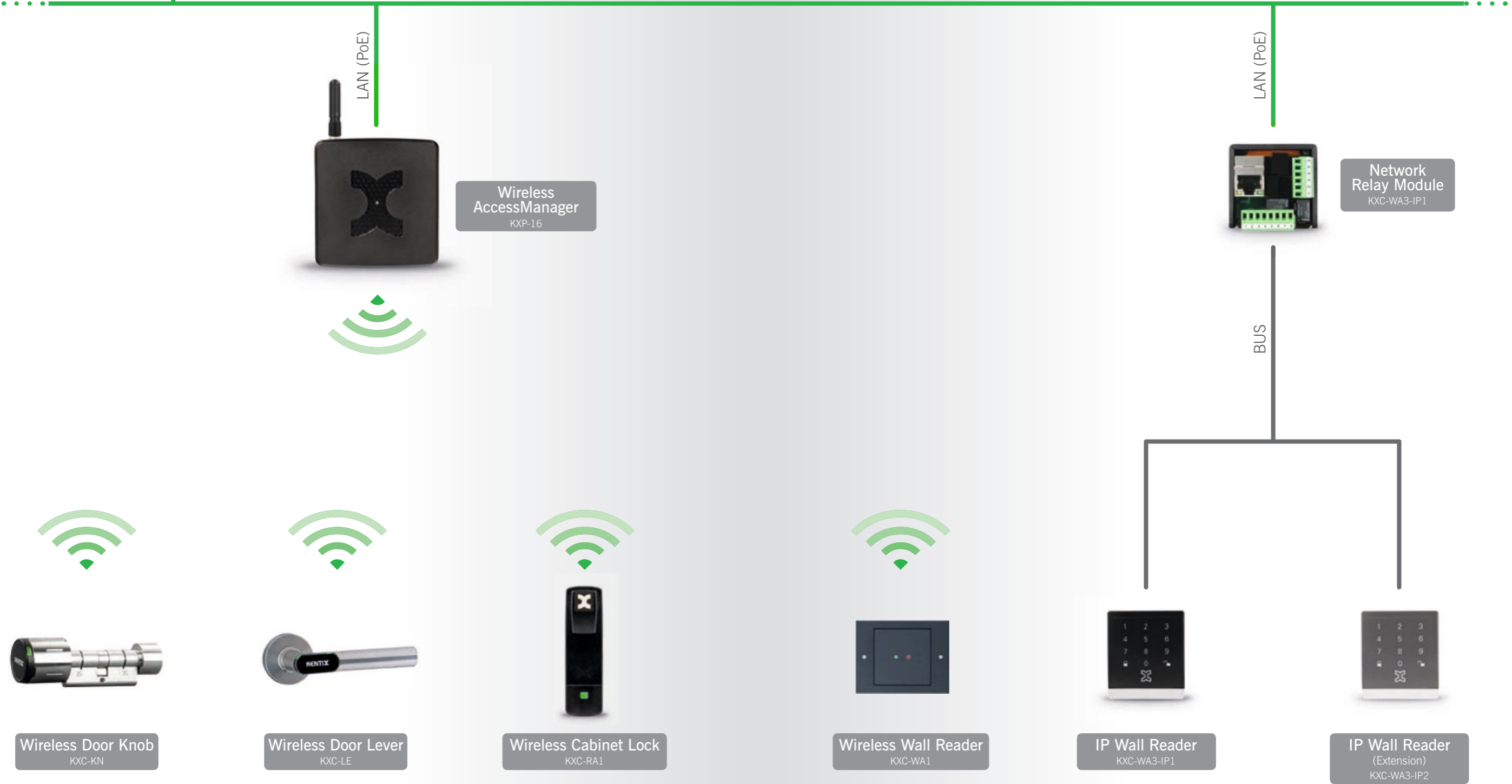| Entire access software included in the AccessManager, apps available | Secure remote opening and control via Kentix Cloud | Up to 999 AccessManager can be interconnected to each other | Retrofitting is possible on merely all doors. Up to 16 doors per AccessManager |

All system components at a glance –
easy networkability for 360° Smart Access

LAN (PoE)

LAN (PoE)

LAN (PoE)

Wireless
AccessManager
KXP-16

Network
Relay Module
KXC-WA3-IP1

BUS

Wireless Door Knob
KXC-KN

Wireless Door Lever
KXC-LE

Wireless Cabinet Lock
KXC-RA1

Wireless Wall Reader
KXC-WA1

IP Wall Reader
KXC-WA3-IP1

IP Wall Reader
(Extension)
KXC-WA3-IP2

# Everything at a glance
# – anytime and from anywhere

With the AccessManager, you set up a complete IT networkable access solution in no time. Due to the interconnection of several AccessManager, basically any arbitrary number of doors can be connected to one system, even across different locations. Via your web browser, you set up time and user profiles, unlock doors remotely and have the entire access log at a glance always. No additional software is required for the configuration.

The access log book offers an overview of all access including failed attempts to unlock a door (for example due to a lack of sufficient authorization). This way, you can always see who has entered a room. With easy filter functions you can limit the selection to specific days, doors and users.

With the help of access and time profiles you can determine in detail which user is authorized to open which doors and at what times. An access profile is always connected to a selected time profile and to one or several doors. Each user can be assigned any desired number of access profiles. This creates maximum flexibility even in larger systems without making it complicated or confusing.



With the integrated Cloud solution Kentix360 you have your system at a glance even on the go - no matter when or where. Your service provider is by the door but nobody is there to open it for them? An employee forgot their RFID token at home? Simply unlock the door via remote control. Moreover, with the app for smartphone and tablet you can arm or disarm alarm zones via the Kentix AlarmManager. Potential attempts of sabotage can also be seen in the system with the Kentix360 Cloud so that you can act as quickly as possible in case of a threat.



*Access log book*



*Time profile*

# Making access management even easier:
# Integration of Microsoft Active Directory (AD) and LDAP

The Kentix DoorLock offers the integration of the directory services Microsoft Active Directory (AD) and LDAP. The authorization accounts in the Kentix DoorLock are simply imported and synchronized which saves time and costs with the access management. Authorizations are therefore managed centrally and are granted or denied by means of user profiles.

The web-based login to the Kentix access system always happens via the authentication with the directory service; thereby multiple passwords become a thing of the past. Aside from the mere authorization, you can also determine centrally via Active Directory who has access where and when. If an employee's role in the company changes, the access control system receives this information automatically from the central server. This makes access management a lot easier even for companies that have ever-changing users and authorizations. Due to a simple regular comparison and short updates via Active Directory, the system administrator can manage even ever-changing authorizations with little effort.
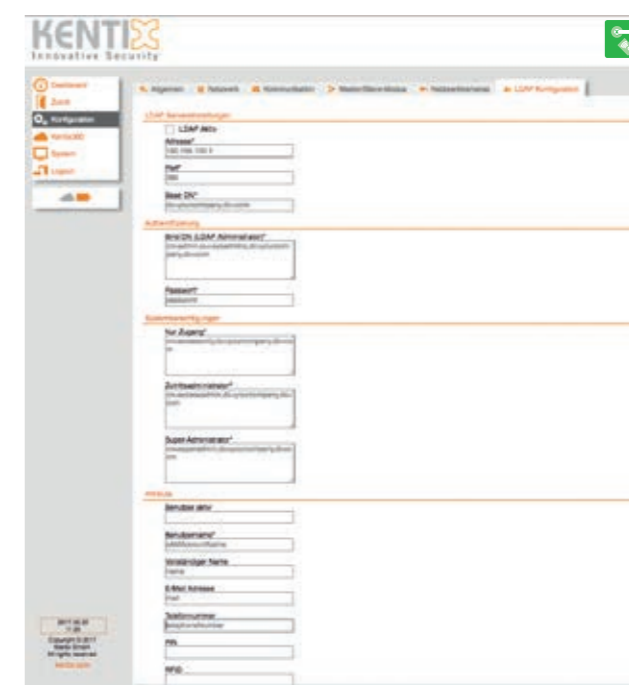


Importing CSV files with user data is also possible. Therefore, large amounts of users can be imported into the Kentix DoorLock system easily and quickly, even with new systems that have no connection to directory services.



### Control is good, video is better

If desired, the Kentix DoorLock integrates IP cameras. When someone unlocks a door with an RFID medium or tampers with the locking component, an IP camera is triggered that records a series of pictures. These pictures are saved in the log book and can be accessed any time via the according entry. Thereby, any door in the system can be connected to an IP camera so that beside the usual user data, any access is combined with a video sequence.

# Wireless AccessManager

LAN
RADIO
PoE
LDAP

With the wireless DoorLock AccessManager you can easily manage time-user-profiles even for large projects. One AccessManager manages up to 16 doors and 5.000 users with time authorization profiles via web browser (HTTPS). Altogether, up to 999 AccessManager can be connected to one system of more than 15.000 doors. Power is supplied via Power over Ethernet (PoE). The integration of Microsoft Active Directory (AD) and LDAP makes access management particularly comfortable and the connection to the Kentix360 Cloud enables the control of the entire system from anywhere and at any time via app.

| CLOUD | REMOTE | ACCESS APP | RFID - MIFARE® | DOCUMENTATION | ACCESS | VIDEO |

## Products

| Type | Housing color | Item number |
|---|---|---|
| Wireless AccessManager | Black | KXP-16-B |
| Wireless AccessManager | White | KXP-16-W |

## Accessories

| Type | Item number |
|---|---|
| PoE Injector | KPOE150S |
| I/O Module with relay | KIO3 |
| Gain Magnet Antenna | KXP-ANT-EXT1 |
| USB Dektop Reader | KXC-DR1-MIFARE |

## Technical Details

| | |
|---|---|
| Connectivity | LAN (PoE) – Integrated web server, a total of 999 Kentix AccessManager interconnectable |
| LAN | 10/100 Mbit, integrated web server, communication ports: 80/443 |
| Radio | 868 MHz, encryption AES 128 Bit |
| Number of doors | Up to 16 wireless DoorLocks (doors) programmable |
| SD card | Micro SD card slot for cards up to 128GB |
| Kentix system socket | RJ45, for connecting external Kentix plug'n'play modules |
| Switch output (system socket) | 2x Open Collector 0.1A/24V, optional: I/O Module (KIO3) 2x switch relay 1A/24V |
| Alarm input (system socket) | 2x alarm input (potential-free), optional: I/O Module (KIO3) |
| SNMP | SNMP (V2/3), SNMP Traps (V2/3) |
| Power supply | PoE 12-72VAC/DC power consumption approx. 1.5W, PoE Class 1 |
| Housing | Protection class IP20, 90 x 90 x 45 mm; weight approx. 100g; colors: black, white |
| Environmental conditions | Temperature 0 – 50℃, humidity 5-95%, non-condensing |
| Delivery content | AccessManager, antenna, mounting bracket, mounting material, 3m SlimLine cable |
| Audits | CE |

90,0

90,0

45,0
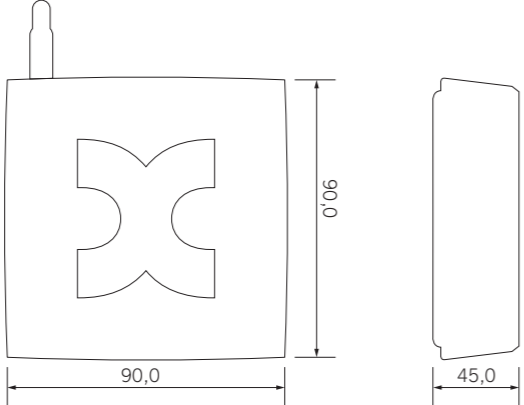
Wireless Door Fitting
see page 50

# Wireless Door Knob DoorLock -DC



**DoorLock-DC BASIC**

**DoorLock-DC PRO**
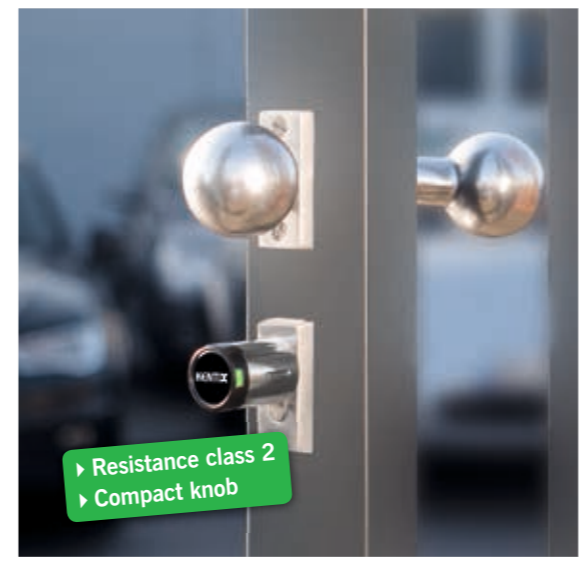
Thanks to the installation of the wireless Door Knob with a Euro profile cylinder, conventional DIN Euro profile locks can be used and practically no constructional measures are required. The Wireless Door Knob is suitable for all standard locks with DIN Euro profiles. Thereby, it is a cost-efficient solution for new as well as existing buildings. Different RFID mediums in MIFARE® DESFire® technology are available as keys. The Door Knob runs on two batteries (CR2) that can only be changed or removed with a special authorization in order to prevent tampering.

| REMOTE | LDAP | ACCESS APP | RFID - MIFARE® | ACCESS | VIDEO | ARM/DISARM |

## Products

| Type | Protection class | Item number |
| --- | --- | --- |
| DoorLock-DC BASIC for interior doors | IP65 | KXC-KN1 |
| DoorLock-DC BASIC for exterior doors | IP66 | KXC-KN2 |
| DoorLock-DC PRO for interior doors | IP55 | KXC-KN4-IP55 |
| DoorLock-DC PRO for exterior doors | IP66 | KXC-KN4-IP66 |

## Accessories

| Type | Delivery content | Item number |
| --- | --- | --- |
| Low Power Adapter | 1 piece | KXC-BAT2 |
| Spare batteries | 2 pieces | KXC-CR2-2 |

## Technical Details

| | |
| --- | --- |
| Function | Electronic door knob with RFID and wireless networking |
| Room/site size | One door for interiors or exteriors or both respectively |
| Radio frequency | 868 MHz, encryption AES 128 Bit |
| Battery life (transactions/years) | Up to 45.000 transactions or 4 years |
| RFID reader | MIFARE® DESFire® 13,56MHz |
| Temperature range | -20°C up to +65°C |
| Configuration | Via Kentix AccessManager (KXP-16-B/W) |
| Radio range | Approx. 25m |
| Batteries | KXC-KN1/2 2x CR2 (3V), KXC-KN4 1x CR2 (3V)) |
| Profile cylinder | DIN18252, different lengths available starting at 30 mm in 5 mm increments |
| Size | See dimension drawing on the right |
| Protection class | KXC-KN1 (IP55), KXC-KN2 (IP66), KXC-KN4-IP55 (IP55), KXC-KN4-IP66 (IP66) |
| Delivery content | Wireless Door Knob, Batteries |
| Audits | CE, DIN15684 |

## DoorLock-DC PRO - compact radio knob for interior and exterior doors



▸ Resistance class 2
▸ Compact knob

The DoorLock-DC PRO (KXC-KN4) is equipped with an electrically free-standing knob (approx. 31mm) on one side and one mechanicalfixed knob on the other side. The electronics is completely internal and the knob is nickel-plated in brass. The KN4 is available in two versions, one for indoor and one for outdoor use. Both variants have resistance class 2 according to DIN 18252 and couple somewhat faster. The KN4 is therefore suitable for end doors or doors with increased access frequency or increased safety are particularly well suited. The variant for external doors (IP66) also has an additional Weather protection. The DoorLock-PRO is very easy to install due to the small electronic knob is particularly suitable for metal frame doors, since Even with small backset dimensions, there is sufficient clearance to open the Door is.
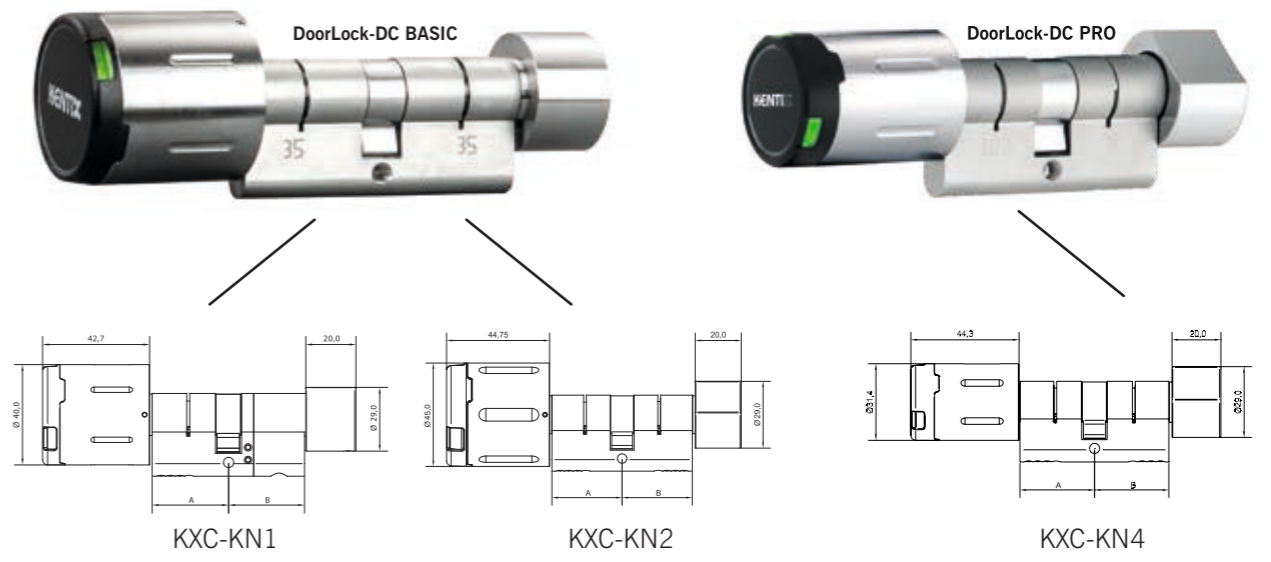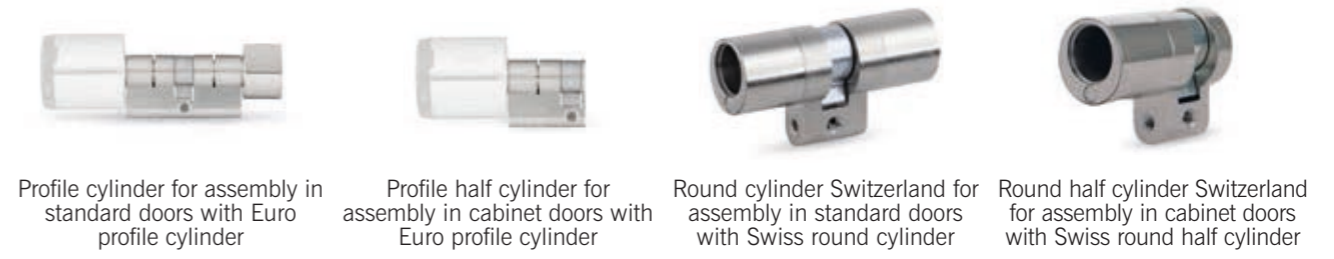


**DoorLock-DC BASIC**



**DoorLock-DC PRO**



KXC-KN1



KXC-KN2



KXC-KN4

**+**

### Hint: Always include the matching profile cylinder in your order.



Profile cylinder for assembly in standard doors with Euro profile cylinder



Profile half cylinder for assembly in cabinet doors with Euro profile cylinder



Round cylinder Switzerland for assembly in standard doors with Swiss round cylinder



Round half cylinder Switzerland for assembly in cabinet doors with Swiss round half cylinder

**You will find an ordering assistance on how to measure your cylinder on the following pages.**

# Ordering assistance for Kentix DoorLock-DC
(Door Knob + Profile cylinder)

## Easy selection of the Wireless Door Knob with matching profile cylinder in two steps



**1** Select required Wireless Door Knob
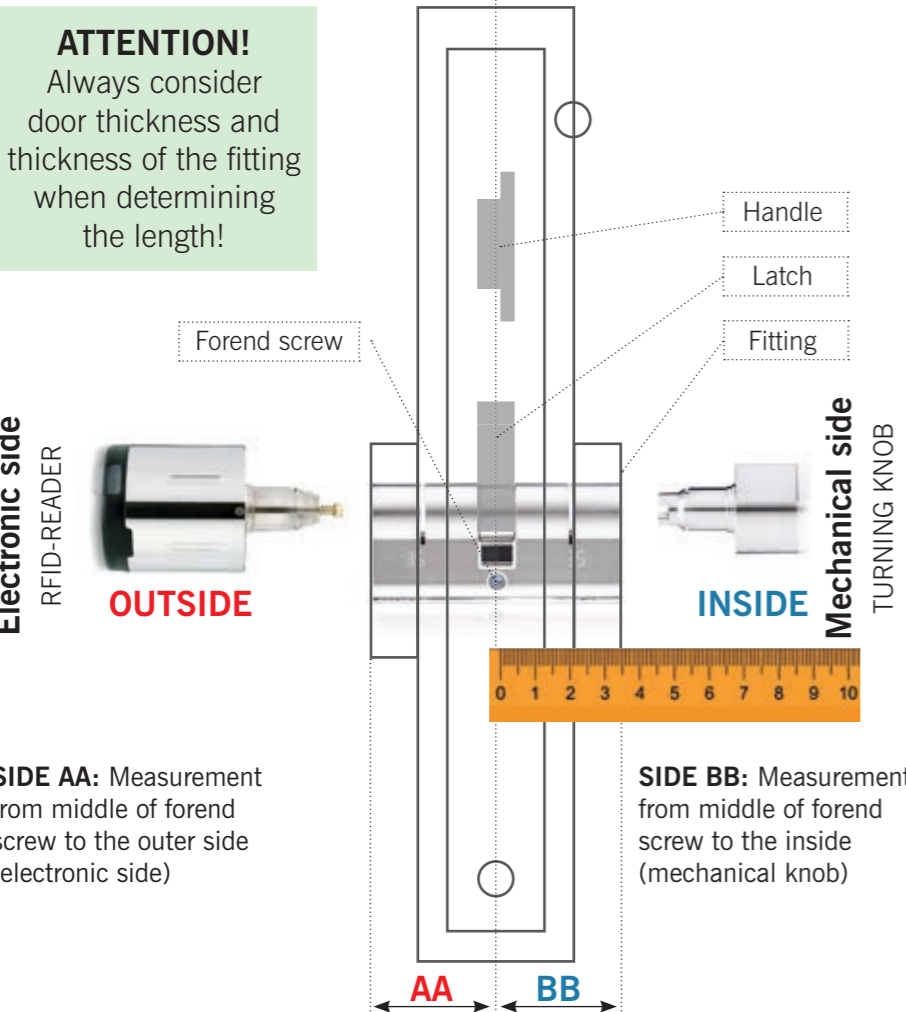
**2** Select profile cylinder matching the door

Only one Master Card Set required per site

## Measuring the door panel for the profile cylinder

**ATTENTION!**
Always consider door thickness and thickness of the fitting when determining the length!

Handle
Latch
Fitting
Forend screw

**Electronic side** RFID-READER
**OUTSIDE**

**Mechanical side** TURNING KNOB
**INSIDE**

When determining the required cylinder length, the thickness of the fitting in use always has to be added to the door thickness. Always select the **next higher measurement** to what you measured in **5 mm** increments. Beginning at the **basic dimension of 30 mm** for profile cylinders or **32 mm** for Swiss round cylinders respectively per side (**AA**/**BB**), up until the maximum length of 70 mm or 72 mm respectively per side (**AA**/**BB**).

**SIDE AA:** Measurement from middle of forend screw to the outer side (electronic side)

**SIDE BB:** Measurement from middle of forend screw to the inside (mechanical knob)

AA BB

**EXAMPLE 1**

| Measured: | AA = 30.5 mm | BB = 38 mm | |
| Order length: | AA = 35 mm | BB = 40 mm | **Total length = 75 mm**, select version of up to 80 mm |
| Kentix item numbers: | KXC-80-**AABB** | (AA=Electronic side / BB=Mechanical side) | |
| | KXC-80-**3540** | Item number for profile cylinder of up to 80 mm total length | |
| | KXC-80CH-**3242** | Item number for round cylinder (Switzerland) of up to 84 mm total length | |

**EXAMPLE 2**

| Measured: | AA = 46.5 mm | BB = 65 mm | |
| Order length: | AA = 50 mm | BB = 65 mm | **Total length = 115 mm**, select version of up to 140 mm |
| Kentix item numbers: | KXC-140-**AABB** | (AA=Electronic side / BB=Mechanical side) | |
| | KXC-140-**5065** | Item number for profile cylinder of up to 140 mm total length | |
| | KXC-140CH-**4767** | Item number for round cylinder (Switzerland) of up to 144 mm total length | |

---

## 1 Select Wireless Door Knob – Interior door, exterior door or compact

**OUTSIDE** RFID-READER

**INSIDE** TURNING KNOB

| Select Wireless Door Knob | Item number |
|---|---|
| DoorLock-DC BASIC for interior doors (IP55) | KXC-KN1 |
| DoorLock-DC BASIC for exterior doors (IP66) | KXC-KN2 |
| DoorLock-DC PRO for interior doors (IP55) | KXC-KN4-IP55 |
| DoorLock-DC PRO for exterior doors (IP66) | KXC-KN4-IP66 |

## 2 Select profile cylinder – length and function

**OUTSIDE** Electronic side

80 / 140 mm

AA BB

**INSIDE** Turning knob

| | AA | BB | |
| Item number: KXC-80-**AABB** | 30-50 mm | 30-50 mm | possible total length 60 - 80 mm (AA+BB) |
| Item number: KXC-140-**AABB** | 30-70 mm | 30-70 mm | possible total length 85 - 140 mm (AA+BB) |

| Profile cylinder for standard doors with Euro profile cylinder: Select matching length | Item number |
|---|---|
| Profile cylinder standard up to 80 mm cylinder length with mechanical turning knob, incl. forend screw | KXC-80-AABB |
| Profile cylinder standard up to 140 mm cylinder length with mechanical turning knob, incl. forend screw | KXC-140-AABB |
| Profile cylinder with anti-panic-function up to 80 mm cylinder length and mech. turning knob, forend screw | KXC-80AP-AABB |
| Profile cylinder with anti-panic-function up to 140 mm cylinder length and mech. turning knob, forend screw | KXC-140AP-AABB |
| Profile half cylinder up to 50 mm, incl. forend screw | KXC-50-AA |
| Profile half cylinder up to 50 mm with spring reset LEFT, incl. forend screw | KXC-50-AA-SRL |
| Profile half cylinder up to 50 mm with spring reset RIGHT, incl. forend screw | KXC-50-AA-SRR |
| **Round cylinder (Switzerland) for standard doors with Swiss round cylinder: Select matching length** | **Item number** |
| Round cylinder (Switzerland) standard up to 84 mm cylinder length with mech. turning knob, forend screw | KXC-80CH-AABB |
| Round cylinder (Switzerland) standard up to 144 mm cylinder length with mech. turning knob, forend screw | KXC-140CH-AABB |
| Round half cylinder (Switzerland) up to 50 mm, incl. forend screw | KXC-50CH-AA |

**SPECIAL LENGTHS UPON REQUEST!**

| Possible lengths profile cylinder: | Possible length Swiss round cylinder: |
|---|---|
| AA BB | AA BB |
| 30 30 | 32 32 |
| 35 35 | 37 37 |
| 40 40 | 42 42 |
| 45 45 | 47 47 |
| 50 50 | 52 52 |
| 55 55 | 57 57 |
| 60 60 | 62 62 |
| 65 65 | 67 67 |
| 70 70 | 72 72 |

### 1

| Type Wireless Door Knob | Version |
|---|---|
| KXC-KN1 | DoorLock-DC BASIC for interior doors (IP55) |
| KXC-KN2 | DoorLock-DC BASIC for exterior doors (IP66) |
| KXC-KN4-IP55 | DoorLock-DC PRO for interior doors (IP55) |
| KXC-KN4-IP66 | DoorLock-DC PRO for exterior doors (IP66) |

### 2

| Type profile cylinder | Max. total length (AA + BB in mm) | Version | Length outside (mm) | Length inside (mm) |
|---|---|---|---|---|
| KXC- | 80 | - (Standard) | AA | BB |
| | 140 | AP- (Anti-Panic) | | |
| | 144 | CH- (Switzerland) | | |

| POS | Door name | WIRELESS KNOB Type Interior/Exterior/Compact | PROFILE CYLINDER Type max. total length | version | AA (mm) | BB (mm) |
|---|---|---|---|---|---|---|
| - | Sample door entrance | ☑ KXC-KN1 (IP55)<br>☐ KXC-KN2 (IP66)<br>☐ KXC-KN4 (IP55)<br>☐ KXC-KN4 (IP66) | ☐ KXC-50 (Half cylinder)<br>☑ KXC-80<br>☐ KXC-140 | ☑ -<br>☐ AP-<br>☐ CH- | 41<br>45 | 56<br>60 |
| 1 | | ☐ KXC-KN1 (IP55)<br>☐ KXC-KN2 (IP66)<br>☐ KXC-KN4 (IP55)<br>☐ KXC-KN4 (IP66) | ☐ KXC-50<br>☐ KXC-80<br>☐ KXC-140 | ☐ -<br>☐ AP-<br>☐ CH- | | |
| 2 | | ☐ KXC-KN1 (IP55)<br>☐ KXC-KN2 (IP66)<br>☐ KXC-KN4 (IP55)<br>☐ KXC-KN4 (IP66) | ☐ KXC-50<br>☐ KXC-80<br>☐ KXC-140 | ☐ -<br>☐ AP-<br>☐ CH- | | |
| 3 | | ☐ KXC-KN1 (IP55)<br>☐ KXC-KN2 (IP66)<br>☐ KXC-KN4 (IP55)<br>☐ KXC-KN4 (IP66) | ☐ KXC-50<br>☐ KXC-80<br>☐ KXC-140 | ☐ -<br>☐ AP-<br>☐ CH- | | |
| 4 | | ☐ KXC-KN1 (IP55)<br>☐ KXC-KN2 (IP66)<br>☐ KXC-KN4 (IP55)<br>☐ KXC-KN4 (IP66) | ☐ KXC-50<br>☐ KXC-80<br>☐ KXC-140 | ☐ -<br>☐ AP-<br>☐ CH- | | |
| 5 | | ☐ KXC-KN1 (IP55)<br>☐ KXC-KN2 (IP66)<br>☐ KXC-KN4 (IP55)<br>☐ KXC-KN4 (IP66) | ☐ KXC-50<br>☐ KXC-80<br>☐ KXC-140 | ☐ -<br>☐ AP-<br>☐ CH- | | |
| 6 | | ☐ KXC-KN1 (IP55)<br>☐ KXC-KN2 (IP66)<br>☐ KXC-KN4 (IP55)<br>☐ KXC-KN4 (IP66) | ☐ KXC-50<br>☐ KXC-80<br>☐ KXC-140 | ☐ -<br>☐ AP-<br>☐ CH- | | |

Wireless Door Lever

Wireless Door Knob

# Wireless Door Lever DoorLock-LE

The wireless Door Lever is compatible with merely all European lock standards. The different versions allow the use in all common doors, such as wood, steel and aluminum as well as narrow frame doors with a backset of more than 20 mm. It can be mounted easily and without special tools which makes retrofitting very simple. The handling is intuitive thanks to plain LED signaling. Moreover, the Door Lever offers a number of handy functions such as time switches/day access or permanent engagement (toggle function).

**RFID**
**RADIO**
**BATT**

REMOTE  ACCESS APP  RFID – MIFARE®  ACCESS  VIDEO

## Technical Details

| Function | Electronic door lever with RFID and wireless networking |
|---|---|
| Room/site size | One door |
| Radio frequency | 868 MHz, encryption AES 128 Bit |
| Battery life (transactions/years) | Up to 100.000 transactions or up to 6 years |
| RFID reader | MIFARE® DESFire® 13,56MHz |
| Temperature range | -20℃ up to +65℃ |
| Configuration | Via Kentix AccessManager (KXP-16-B/W) |
| Radio range | Approx. 25m |
| Batteries | 1x CR123 (3V) |
| Door thickness | 32-56 mm (standard), optional up to 110 mm, ATTENTION: For doors thicker than 56 mm, please order matching square pin (8/8.5/9 mm) |
| Material | Lever in stainless steel |
| Audits | CE, DIN15684 |
| Protection class | IP55/IP66 for interiors/exteriors available see ordering assistance |
| Delivery content | Radio door lever, mech. door lever, rosettes, batteries (1xCR123) |

## Accessories

| Type | Delivery content | Item number |
|---|---|---|
| Spare battery | 1 piece | KXC-CR123 |

**Select required product on page 54**
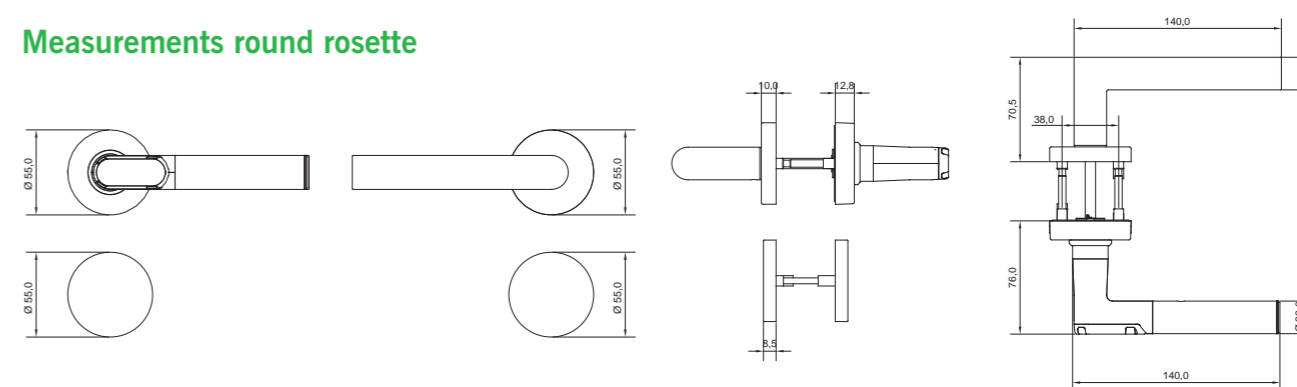
# Round rosette

**Electronic side**          **Mechanical side**
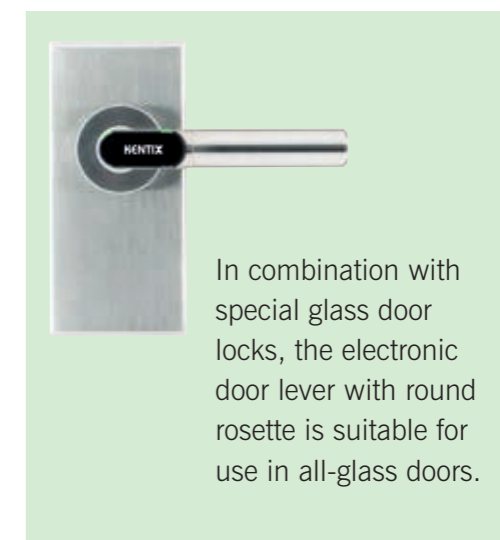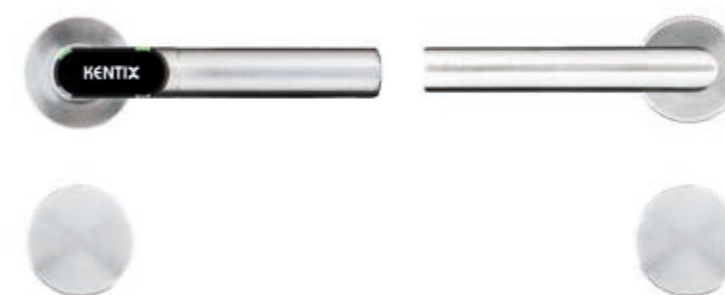
The electronic door lever is available in a version with a round rosette. Additionally, a key rosette is available, either blind or with profile cylinder punch.

In combination with special glass door locks, the electronic door lever with round rosette is suitable for use in all-glass doors.

## Measurements round rosette

# Oval rosette
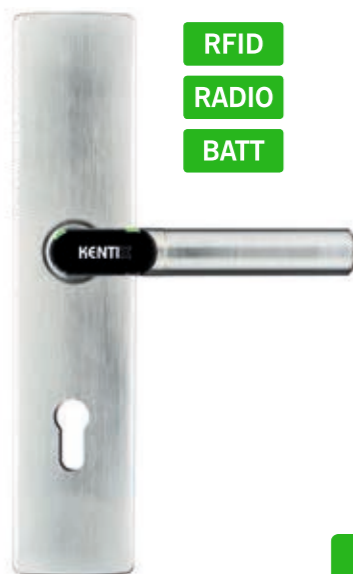
**Electronic side**          **Mechanical side**

The electronic door lever is available in a version with an oval rosette. Additionally, a key rosette is available, blind or with profile cylinder punch. The electronic door lever with oval rosette is particularly suitable for tubular frame doors.

## Measurements oval rosette
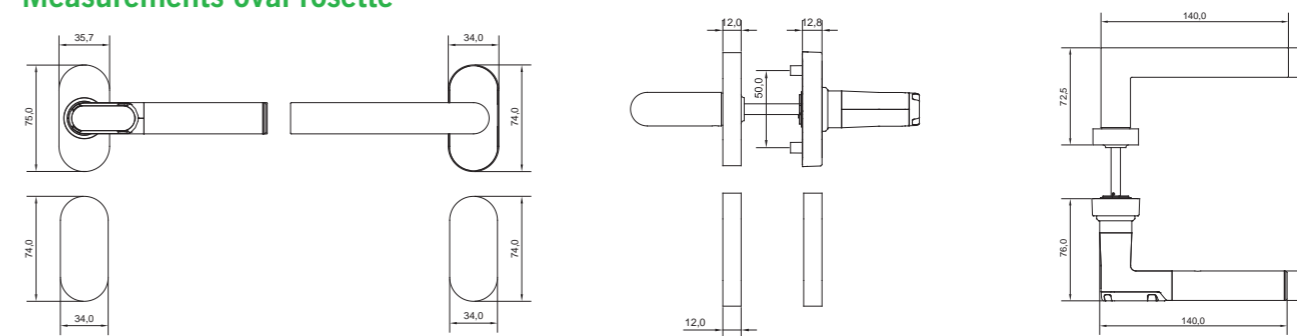
RFID
RADIO
BATT

# Wireless Door Fitting
# DoorLock-LE

The wireless Door Fitting can be mounted in merely all standard doors without cabling or special tools. Existing DIN holes can usually be used. The Door Fitting manages all access electronically and can be controlled offline or online via a radio network. It integrates smoothly into the Kentix DoorLock portfolio and is available in different versions, for example for fire doors.

| REMOTE | LDAP | ACCESS APP | RFID - MIFARE® | ACCESS | VIDEO | ARM/DISARM |
|---|---|---|---|---|---|---|

## Technical Details

| | |
|---|---|
| Function | Electronic door fitting with RFID and wireless networking |
| Room/site size | One door |
| Radio frequency | 868 MHz, encryption AES 128 Bit |
| Width door fitting | Wide: 64,4 mm; Slim: 42,4 mm |
| Protection class | IP55 for interiors |
| Material lever | Stainless steel |
| Door thickness | 32-56 mm; ATTENTION: For doors thicker than 56 mm, please order matching square pin (8/8,5/9 mm) |
| Battery life (transactions/years) | Up to 100.000 transactions or up to 6 years |
| RFID reader | MIFARE® DESFire® 13,56MHz |
| Temperature range | -20°C up to +65°C |
| Configuration | Via Kentix AccessManager (KXP-16-B/W) |
| Radio range | Approx. 25 m |
| Batteries | 1x CR123 (3V) |
| Audits | CE, DIN15684 |
| Delivery content | Wireless Door Fitting, mechanical door fitting, incl. batteries (1x CR123) |

## Accessories

| Type | Delivery content | Item number |
|---|---|---|
| Spare battery | 1 piece | KXC-CR123 |

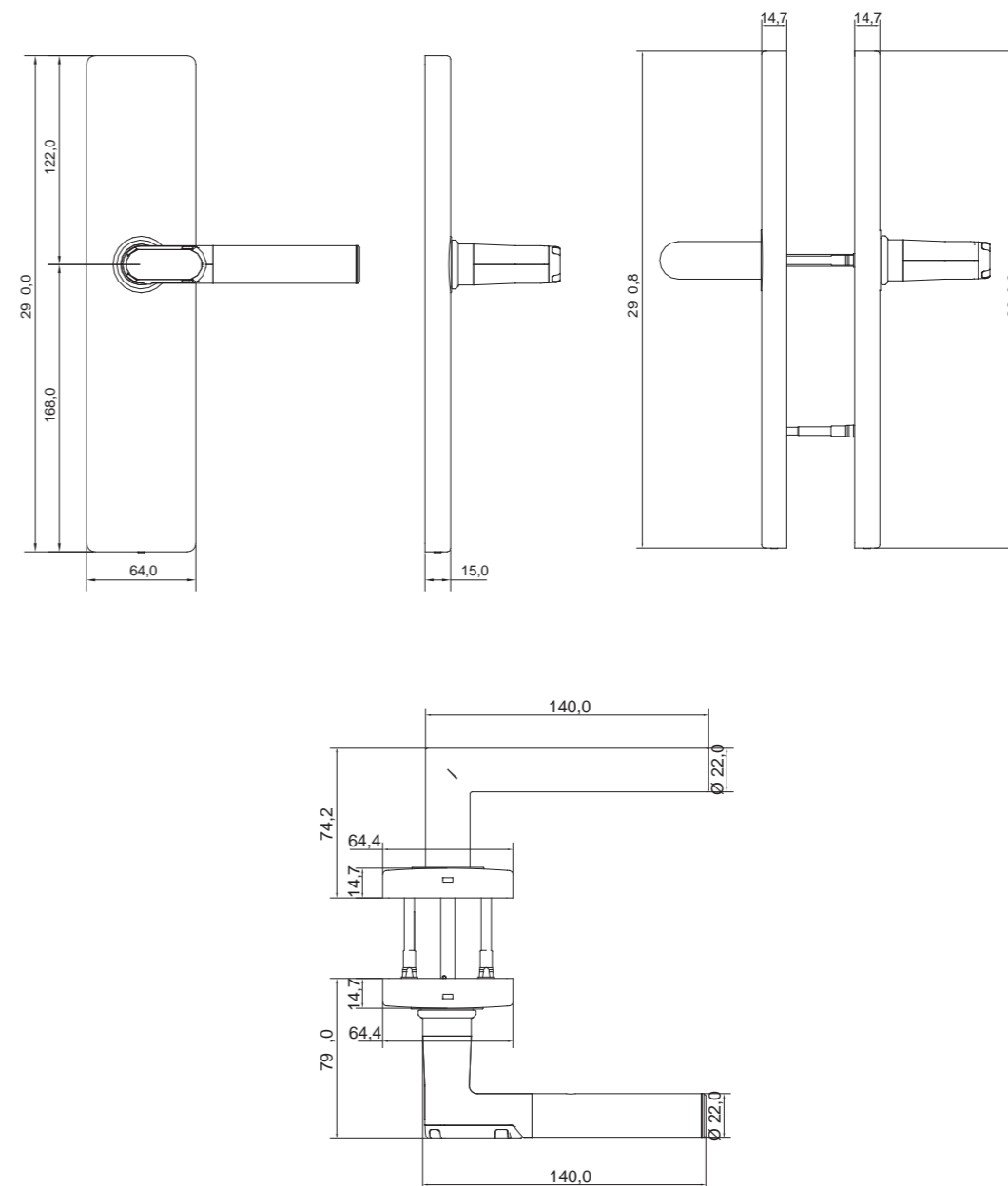# Door Fitting wide

**Electronic side**



**Mechanical side**



The electronic door fitting is available in a wide version, either in a blind version or with a profile cylinder punch. It is particularly suitable for present doors in case existing holes in the door are to be covered.

## Measurements Door Fitting wide

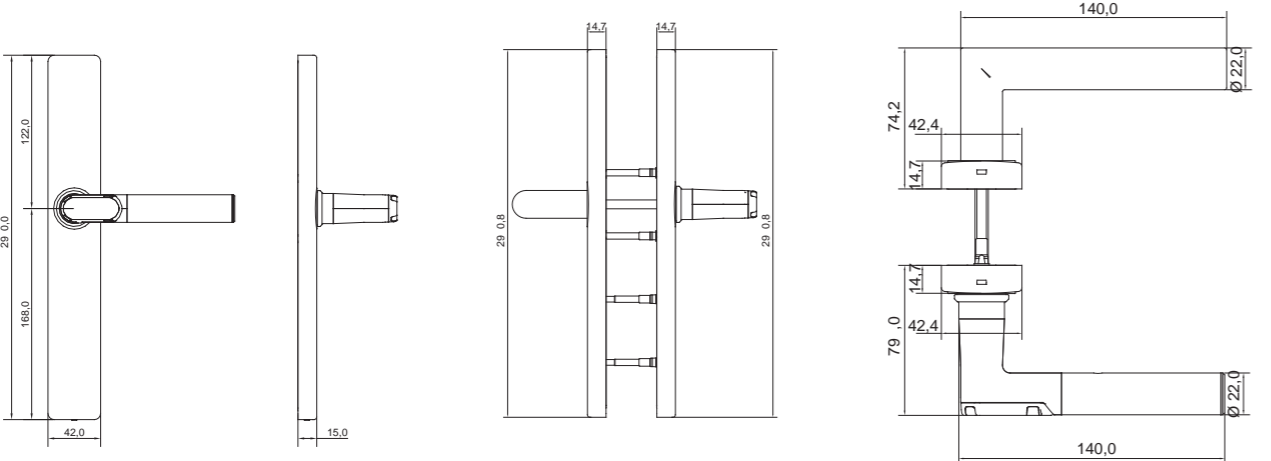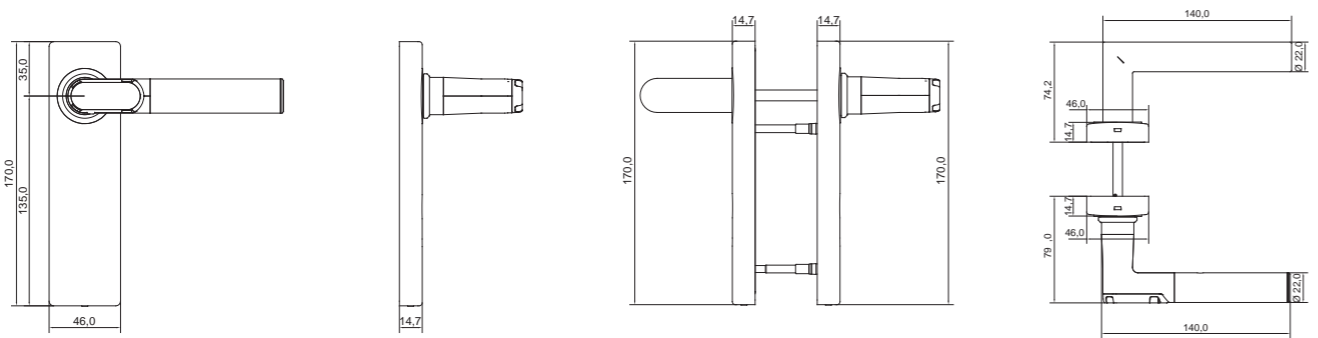# Door Fitting slim

**Electronic side**　　　**Mechanical side**

The electronic door fitting is available in a slim version, either in blind version or with profile cylinder punch. The electronic fitting in the slim version is particulary suitable for tubular frame doors.

## Measurements Door Fitting slim

# Door Fitting Short Plate

**Electronic side**　　　**Mechanical side**

The electronic door fitting is available in a short plate version, either in blind version or with profile cylinder punch. The electronic door fitting with short plate is particularly suitable for the use in fire and smoke protection doors and can be mounted in emergency exit locks together with the accordingly certified lock in compliance with DIN EN 179.

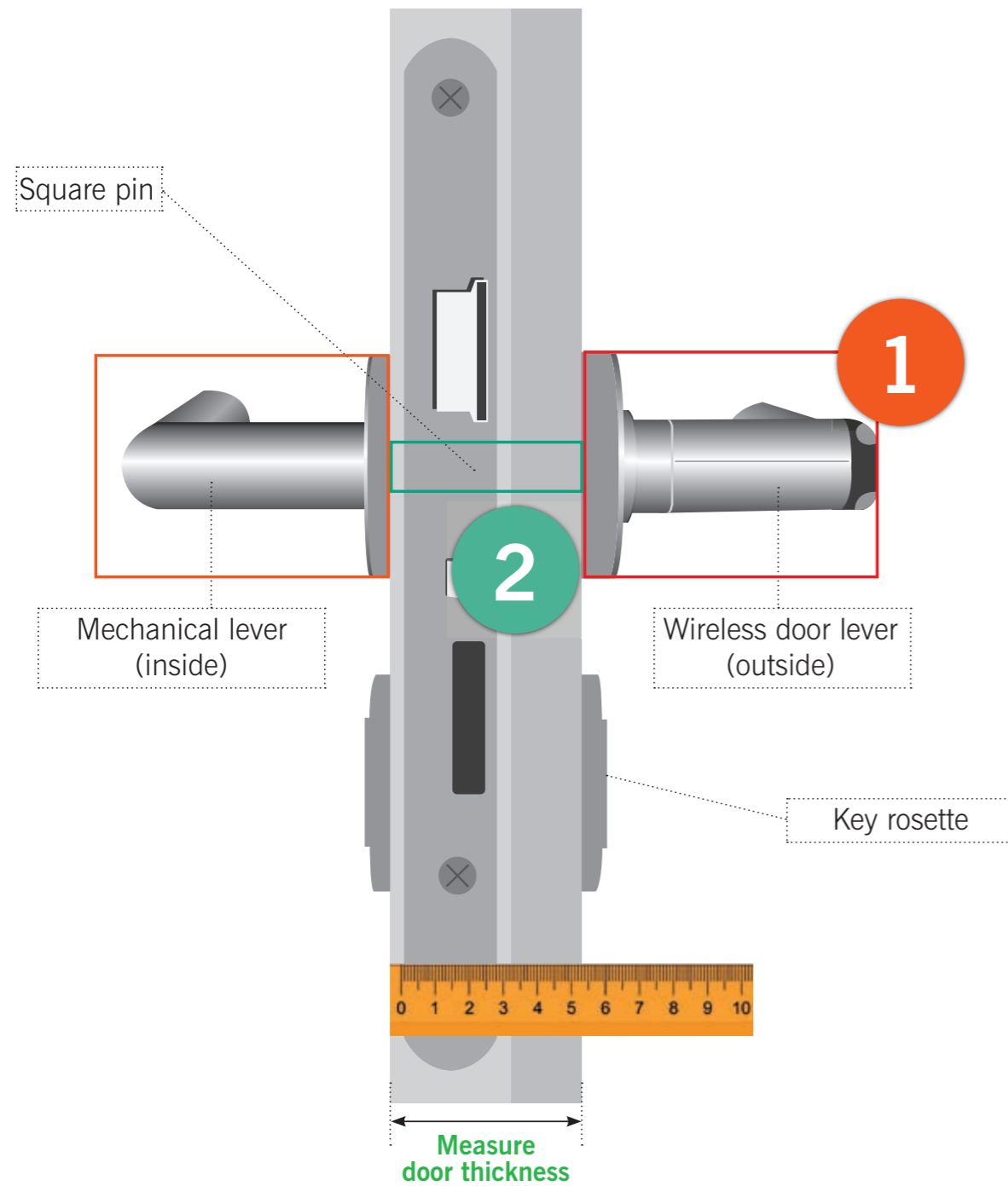## Measurements Door Fitting Short Plate

Wireless Door Fitting
see page 50

# Ordering assistance for Kentix DoorLock-LE
(Wireless Door Lever)

## Easy selection of the required Kentix DoorLock Door Lever in two steps

Square pin

**1**

**2**

Mechanical lever (inside)

Wireless door lever (outside)

Key rosette

**0 1 2 3 4 5 6 7 8 9 10**

**Measure door thickness**

### INFO

The item is always delivered as a set consisting of online door lever, mechanical interior lever and the required screws. The key rosettes are not included. You can either use the existing rosettes or order the matching key rosettes separately.
A square pin for standard doors with a door thickness of up to 56mm and 8mm square pins is already included in each Wireless Door Lever set. If another type of square pin is required, please order it extra.

---

**1** — Select door lever or door fitting

| Version | Lever shape | Protection | Lever direction | PC-distance |
|---|---|---|---|---|
| ☐ Round rosette (R) | ☐ L-shape (L) | ☐ Indoor IP55 (I) | ☐ Right (R) | |
| ☐ Oval rosette (O) | ☐ U-shape (U1) | ☐ Outdoor IP66 (O) | ☐ Left (L) | |
| ☐ Slim with punch (FS) | ☐ U-shape 2 round (UR) | ☐ Indoor-Fire (F) | | |
| ☐ Wide with punch (FW) | | ☐ Outdoor-Fire (OF) | Right | |
| ☐ Slim blind (FSB) | | For indoor or outdoor use or for fire protection doors | Left | |
| ☐ Wide blind (FWB) | | | | |
| ☐ Short (FL) | | | | |
| ☐ Short blind (FLB) | | | | ☐ **72 mm (Standard)** |
| | | | | ☐ 78 mm |
| | | | | ☐ 85 mm |
| | | | | ☐ 88 mm |
| Slim with punch / Slim blind | | | | ☐ 92 mm |
| | | | | ☐ 94 mm |
| Wide with punch / Wide blind | | | | |
| Short with punch / Short blind | | | | |
| **KXC-LE**   R | L | I | R | |

---

**2** — Select square pin, if required

| SELECT SQUARE PIN | | | HINT |
|---|---|---|---|
| Type | Square pin (mm) | Door thickness (mm) | For doors with a thickness of 36-56mm, a matching square pin is delivered by default. |
| **2** | ☐ **8.0** (Standard) | ☐ **30-38** ☐ **39-47** ☐ **48-56** | |
| | ☐ **8.5** (Anti-Panic) | ☐ **57-65** ☐ **66-74** ☐ **75-83** | For all other doors please select your according square pin here. |
| | ☐ **9.0** (Fire Door) | ☐ **84-92** ☐ **93-101** ☐ **102-110** | |
| **KXC-S** | **8.0** | **75-83** | |

**1**        **Select wireless door lever and door fitting**

| Version | Lever shape | Protection | Lever direction | PC-distance |
|---|---|---|---|---|
| ☑ Round rosette (R) | ☑ L-shape (L) | ☑ Indoor IP55 (I) | ☑ Right (R) | ☑ **72 mm (Standard)** |
| ☐ Oval rosette (O) | ☐ U-shape (U1) | ☐ Outdoor IP66 (O) | ☐ Left (L) | ☐ 78 mm |
| ☐ Slim with punch (FS) | ☐ U-shape 2 round (UR) | ☐ Indoor-Fire (F) | | ☐ 85 mm |
| ☐ Slim blind (FSB) | | ☐ Outdoor-Fire (OF) | | ☐ 88 mm |
| ☐ Wide with punch (FW) | | | For indoor or | ☐ 92 mm |
| ☐ Wide blind (FWB) | | | outdoor use or for | ☐ 94 mm |
| ☐ Short with punch (FL) | | | fire protection doors | |
| ☐ Short blind (FLB) | | | | |
| R | L | I | R | |

| Example | | | | | Quantity |
|---|---|---|---|---|---|
| Door „Office" | KXC-LE | R      L      I      R | | | 2 |
| | ☑ 8.0  ☐ 8.5  ☐ 9.0 | Door thickness: 75 mm  PC-distance: 72 mm | | | 2 |
| | KXC-LE | ____  ____  ____  ____ | | | |
| | ☐ 8.0  ☐ 8.5  ☐ 9.0 | Door thickness:_____  PC-distance:_____ | | | |
| | KXC-LE | ____  ____  ____  ____ | | | |
| | ☐ 8.0  ☐ 8.5  ☐ 9.0 | Door thickness:_____  PC-distance:_____ | | | |
| | KXC-LE | ____  ____  ____  ____ | | | |
| | ☐ 8.0  ☐ 8.5  ☐ 9.0 | Door thickness:_____  PC-distance:_____ | | | |
| | KXC-LE | ____  ____  ____  ____ | | | |
| | ☐ 8.0  ☐ 8.5  ☐ 9.0 | Door thickness:_____  PC-distance:_____ | | | |
| | KXC-LE | ____  ____  ____  ____ | | | |
| | ☐ 8.0  ☐ 8.5  ☐ 9.0 | Door thickness:_____  PC-distance:_____ | | | |
| | KXC-LE | ____  ____  ____  ____ | | | |
| | ☐ 8.0  ☐ 8.5  ☐ 9.0 | Door thickness:_____  PC-distance:_____ | | | |

Wireless Door Lever

# Configuration examples

## Electronic Door Lever versions

Electronic door lever in version with round rosette

Electronic door lever in version with oval rosette

Electronic door lever for glass-door lock (upon request)

## Electronic Door Fitting versions

Electronic door fitting slim in blind version

Electronic door fitting wide in blind version

Electronic door fitting with short panel in blind version

## Lever versions

L-shape

U-shape square

U-shape round

## Key rosette door lever

Round rosette profile cylinder

Round rosette blind

Oval rosette profile cylinder

Oval rosette blind

## Key punch door fitting

Profile cylinder

Blind

# Overview of possible combinations

| Electronics outside | Mechanical inside - standard - | | | | | Electronics outside - upon request - | | | |
|---|---|---|---|---|---|---|---|---|---|
|  | + | | | | | + | | | |
|  | | + | | | | | + | | |
|  | | | + | | | | | + | |
|  | | | | + | | | | | + |
|  | | | | | + | | | | |

## Mechanical door lever inside

## Mechanical door fitting

**Special orders upon request**

# Wireless Cabinet Lock DoorLock-RA

The wireless Cabinet Lock offers an easy access solution for IT racks and distribution cabinets. Due to the battery operation the installation efforts are reduced to a minimum. The lithium AA battery allows operating times of up to 8 years or 100,000 operations. The battery is mechanically secured against removal (special tool). The lock is delivered with various adapters and locking levers and can therefore be adapted to almost any IT cabinet.
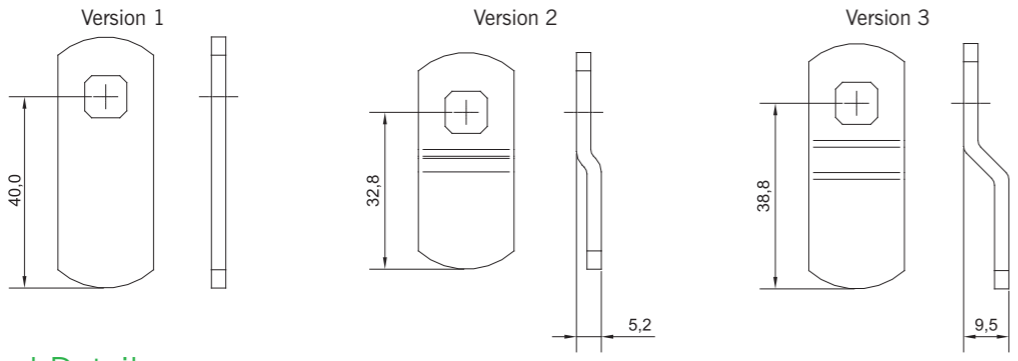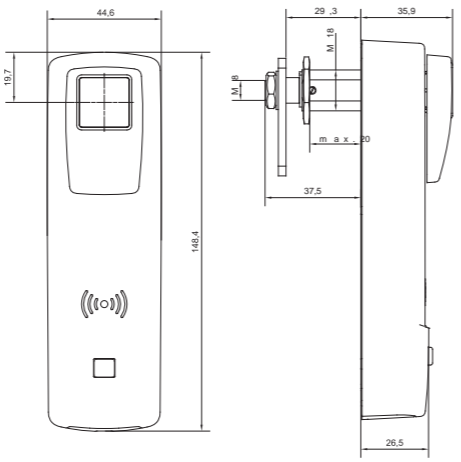
| REMOTE | ACCESS APP | RFID - MIFARE® | ACCESS | VIDEO |

## Products

| Type | Item number |
|------|-------------|
| Wireless Cabinet Lock | KXC-RA1 |

## Accessories

| Type | Delivery content | Item number |
|------|------------------|-------------|
| Spare battery | 1 piece | KER14505 |
| Battery Changing Tool | 1 piece | KXC-BAT3 |

Version 1    Version 2    Version 3

## Technical Details

| | |
|------|------|
| Function | Electronic cabinet lock with RFID and wireless networking |
| Room/site size | One rack or cabinet lock respectively |
| Radio frequency | 868 MHz, encryption AES 128 Bit |
| RFID reader | MIFARE® DESFire® 13,56MHz |
| Temperature range | -10°C up to +55°C |
| Configuration | Via Kentix AccessManager (KXP-16-B/W) |
| Battery | 1x AA lithium (3.6V) |
| Battery life (transactions/years) | Up to 100.000 transactions or 8 years |
| Audits | CE, DIN15684 |
| Delivery content | 1x Wireless Cabinet Lock, 3x locking lever (different types), 1x AA lithium battery, mounting material |

▸ **Adapters available for common cabinet manufacturers**

Wireless Cabinet Lock
see page 60
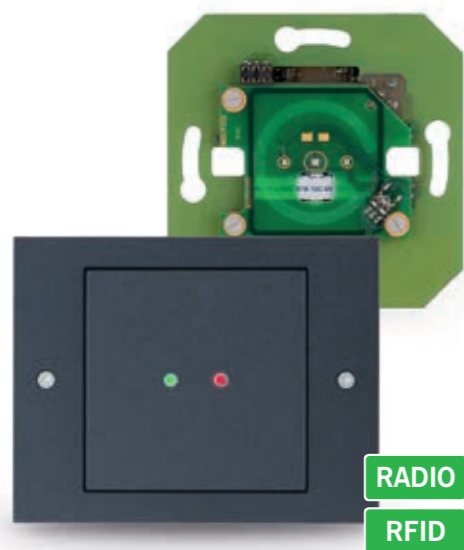
# Wireless Wall Reader

The wireless Wall Reader is suitable for electric door openers, electronic locks, electric door and gate drives or elevators for instance. The entire electronic system is located on a compact unit that can be mounted in a simple flush-mounted box. The wall mounted reader is available in flush-mounted and surface-mounted versions for interiors or exteriors. With different covers and housings (to be ordered extra), manifold installation possibilities can be realized. Unlocking authorizations can be assigned from one central position and can be reached even in exposed, distributed places.

**RADIO**

**RFID**

| REMOTE | ACCESS APP | RFID - MIFARE® | ACCESS | VIDEO | ARM/DISARM |

## Products

| Type | Item number |
|------|-------------|
| Wall Reader | KXC-WA1 |
| Wall Reader Outdoor IP66 | KXC-WA1-OUTDOOR |

## Accessories

| Housing | Color | Item number |
|---------|-------|-------------|
| GIRA S-Color | Grey | KXC-WA1-GIRA-S-GREY |
| GIRA S-Color | White | KXC-WA1-GIRA-S-WHITE |
| GIRA S-Color | Black | KXC-WA1-GIRA-S-BLACK |
| GIRA TX-44 | Aluminum | KXC-WA2-GIRA-TX44-ALU |
| GIRA TX-44 | White | KXC-WA2-GIRA-TX44-WHITE |
| GIRA TX-44 | Anthracite | KXC-WA2-GIRA-TX44-ANTH |



KXC-WA1 - Electronics



KXC-WA1 with GIRA TX-44 housing



KXC-WA1 with GIRA S-Color housing



KXC-WA1-OUTDOOR – Outdoor Wall Reader

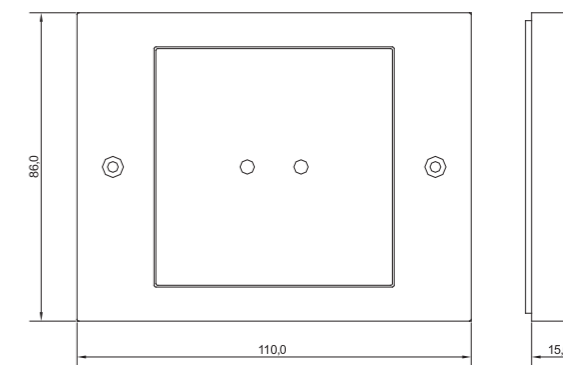## Technical Details

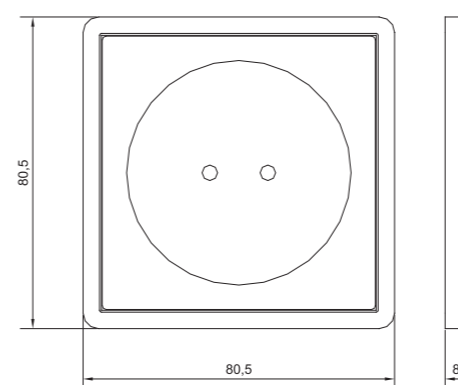| | |
|--|--|
| Function | Wireless Wall Reader for flush- or surface-mounting |
| Room/site size | One door or gate respectively |
| Radio frequency | 868 MHz, encryption AES 128 Bit |
| RFID reader | MIFARE® DESFire® 13,56MHz |
| Temperature range | -20°C up to +65°C |
| Configuration | Via Kentix AccessManager (KXP-16-B/W) |
| Radio range | Approx. 25m |
| Relay | 30VAC/DC, 1.5 A (PhotoMOS Relay) |
| Housing | KXC-WA1 for flush-mounting, select cover |
| | KXC-WA1-Outdoor for surface wall mounting, |
| | protection class IP66, size: 90 x 90 x 40 mm |
| Audits | CE |
| Delivery content | Wireless Wall Reader, Quick Start Guide |

### INFO

Wall reader in waterproof housing for outdoor use. Ideal for use in rough and moist environments in protection class IP66. Ideal for barrier and gate systems. The door is either controlled via the relay integrated in the Wireless Wall Reader or the external relay connected to the AccessManager (KIO3), depending on the requirements.
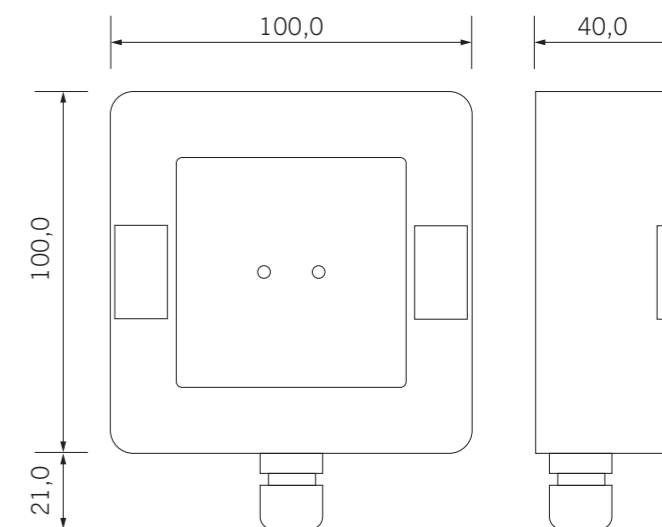




Outdoor Wall Reader
see page 62

# IP Wall Reader

The IP Wall Reader enables access control via RFID medium or alternatively via pin code. A two-factor-authentication is also possible. The Network Relay Module (PoE) forms the central unit with network connection. The administration is done centrally via the integrated web server. The Network Relay Module communicates per Bus connection with the IP Wall Reader. The reader can be mounted easily in the outlet socket or in a surface-mounted housing (optional) on the inside of the door. With the integrated PoE splitter, the door lock or opener is supplied with 24VDC directly via the reader module; additional cables are not required for power supply.

**LAN**
**PoE**
**RFID**

| REMOTE | PIN-CODE | ACCESS APP | RFID - MIFARE® | ACCESS | VIDEO | ARM/DISARM |

## Products

| Type | Item number |
| --- | --- |
| StarterSet Network Reader with IP Relay Module | KXC-WA3-IP1 |
| Network Extension Reader for StarterSet | KXC-WA3-IP2 |
| StarterSet Network Reader with IP Relay Modul | KXC-WA3-IP1-OUTDOOR |
| Network Extension Reader for StarterSet | KXC-WA3-IP2-OUTDOOR |

## Accessories

| Type | Delivery content | Item number |
| --- | --- | --- |
| RFID Token | 1 piece | KKT-M |
| RFID Tokens | 25 pieces | KKT-M25 |
| RFID Card | 1 piece | KKT-MC |
| RFID Cards | 25 pieces | KKT-MC25 |

## Housing

| Housing | Protection class | Color | Item number |
| --- | --- | --- | --- |
| Surface-mounted housing | IP44 | Painted in RAL 9006 | KXC-WA3-SMC |

## Technical Details

| | |
| --- | --- |
| Function | IP Wall Reader for flush or surface mounting, Relay Module |
| Room/site size | One door |
| RFID reader (multi-reader) | MIFARE® DESFire® 13,56MHz, MIFARE® Classic, LEGIC prime, LEGIC advant, ISO14443A (CSN / UID), ISO15693 (CSN / UID), Sony FeliCa (CSN / UID), Inside Secure (CSN / UID) |
| Signaling, LED | Acoustic signal transmitter, RGB light field |
| Connection Wall Reader | Via Relay Module 4-wire, length up to 500m |
| Connection electronic door opener/lock | 24VDC/500mA (briefly 1A) via integrated PoE splitter or externally, Relay: 125VAC/60VDC, 1A, change-over contact |
| Temperature range | Wall Reader -25°C up to +60°C Relay Module 0 - 60°C, non-condensing |
| Protection class | Wall Reader IP54, Relay Module IP20 |
| Configuration | Integrated web server (HTTP/HTTPS) |
| Extensibility | Extendable to two readers |
| Size Wall Reader | 88 x 99 x 27 mm (flush mounting) 88 x 99 x 40 mm (surface mounting) |
| Size Relay Module | 47 x 48 x 33 mm, mounting in outlet socket or on DIN rail |
| Audits | CE |
| Delivery content KXC-WA3-IP1 | Wall Reader with PIN, Network Relay Module, 1x RFID Token, 3m SlimLine cable |
| Delivery content KXC-WA3-IP2 | Wall Reader with PIN (requires KXC-WA3-IP1 as basis) |

## StarterSet DoorLock-IP

**Mounting example in 60 mm switch box and DIN rail**

The StarterSet consists of one IP Wall Reader, one Network Relay Module and one RFID Token. In addition, this set can be combined with one more reader (only IP Wall Reader without Network Relay Module) in order to integrate an extra door into the system. Power is supplied to the Extension Reader via the Network Relay Module as well.

Altogether, 999 IP Wall Readers with Network Relay Module can be interconnected so that up to 1.998 doors can be integrated into the system. If more doors or rooms are to be integrated, the Network Relay Modules can be connected to one system with central administration via a master-slave-mode.

### LAN (PoE)

BUS          BUS

# StarterSet DoorLock-KXC

With the wireless StarterSet-DoorLock you receive all components required in order to make your first door online-compatible and to lay the foundation for an entire access control system. One StarterSet enables the management of access authorizations for up to 16 doors. Expanding the system with additional doors is possible at any time. With up to 999 interconnectable AccessManager you set up small as well as large access systems in no time. With more than 15.000 interconnectable doors and 5.000 users there are barely any limits for the expansion.

The combination of AccessManager, wireless door knob (IP55) and master card set included in the StarterSet-DoorLock-BASIC contains everything you need to make a door online ready. In the Starter-Set-PRO, the radio door knob is replaced by a compact knob. Due to its smaller diameter (31.4 mm), this knob is particularly suitable for metal frame doors, as it leaves sufficient clearance for opening the door even with small backsets. Due to the compact and robust design of the knob, it is protected against drilling and has resistance class 2 (RC2).

## Products

| Type | Item number |
|---|---|
| StarterSet DoorLock BASIC | KXC-CS1 |
| StarterSet DoorLock PRO | KXC-KN4-CS1 |

## Accessories

| Type | Delivery content | Item number |
|---|---|---|
| PoE Injector | 1 piece | KPOE150S |
| Low Power Adapter | 1 piece | KXC-BAT2 |
| Spare batteries for Wireless Door Knob | 2 pieces | KXC-CR2-2 |

## Technical Details - Wireless Door Knob

| | |
|---|---|
| Function | Electronic Door Knob with RFID and wireless networking |
| Radio frequency | 868 MHz, encryption AES 128 Bit |
| Battery life (transactions/years) | Up to 45.000 transactions or 4 years |
| RFID reader | MIFARE® DESFire® 13,56MHz |
| Size | Diameter 44 mm, length 42,7 mm |
| Temperature range | -25°C up to +65°C |
| Configuration | Via Kentix AccessManager (KXP-16-B/W) |
| Radio range | Approx. 25 m |
| Batteries | 1/2x CR2 (3V) |
| Audits | CE, DIN15684 |
| Profile cylinder | DIN18252 |

## Technical Details - AccessManager

| | |
|---|---|
| Connectivity | LAN (PoE) – integrated web server (HTTPS), expandable up to 999 AccessManager |
| Radio frequency | 868 MHz, encryption AES 128 Bit |
| LAN | 10/100 Mbit, integrated web server |
| Power supply via PoE | 12-72VAC/DC power consumption approx. 1.5W, PoE Class 1 |
| Housing | Material: PS 90 x 90 x 45 mm; weight approx. 100g; colors: black, white |
| Environmental conditions | Temperature 0 – 50°C, humidity 10-90% non-condensing |
| Audits | CE |

# StarterSet DoorLock-BASIC

RADIO
LAN
LDAP
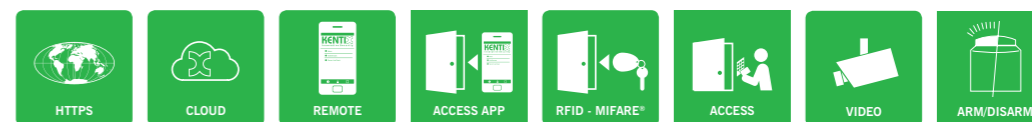
Delivery content
**StarterSet DoorLock-BASIC:**
· 1 AccessManager
· 1 Wireless door knob BASIC (IP55)
· 1 Master card set
· 1 Slim-line patch cable 3 m

HTTPS | CLOUD | REMOTE | ACCESS APP | RFID - MIFARE® | ACCESS | VIDEO | ARM/DISARM

# StarterSet DoorLock-PRO

**IMPORTANT:**
Always order a matching profile cylinder KXC-80/140-AABB or KXC-50-AA for the Wireless Door Knob.

RADIO
LAN
LDAP
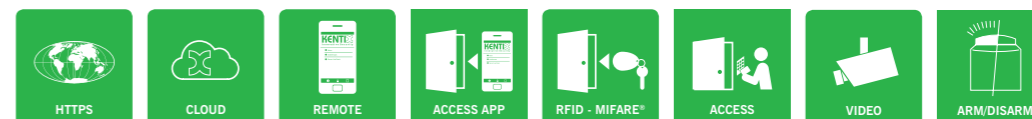
Delivery content
**StarterSet DoorLock-PRO:**
· 1 AccessManager
· 1 Wireless door knob PRO (IP55)
· 1 Master card set
· 1 Slim-line patch cable 3 m

HTTPS | CLOUD | REMOTE | ACCESS APP | RFID - MIFARE® | ACCESS | VIDEO | ARM/DISARM

# System components

| Device | AccessManager | DoorLock-DC | DoorLock-LE | DoorLock-WA | DoorLock-RA | DoorLock-WA-IP |
|---|---|---|---|---|---|---|
| Type | KXP-16-B/W | KXC-KN1/2/4 | KXC-LE-XXXX | KXC-WA1/ KXC-WA1-OUTDOOR | KXC-RA | KXC-WA3-IP1 / KXC-WA3-IP1-OUTDOOR |
| Function | Access system for the web-based administration and networkability of wireless DoorLocks | Door knob with RFID and wireless networkability | Door lever with RFID and wireless networkability | Wall reader with RFID and wireless networkability | Rack/Cabinet lock with RFID and wireless networkability | IP Wall Reader with RFID and LAN-networking |
| Maximum number of doors | Up to 15.000 doors | One door | One door | One door | One door | Up to 1.998 doors |
| Maximum number of DoorLocks per AccessManager | 16 | - | - | - | - | 2 |
| Configuration | Web server (HTTPS) | AccessManager, programming key | AccessManager, programming key | AccessManager, programming key | AccessManager, programming key | Web server (HTTPS) |
| Smartphone app | ✔ | ✗ | ✗ | ✗ | ✗ | ✔ |
| Wireless networkability | ✗ | ✔ | ✔ | ✔ | ✔ | ✗ |
| Standard mortise lock (DIN18252 and DIN 1303) | ✗ | ✔ | ✗ | ✗ | ✗ | ✗ |
| Offline memory in the device | - | 1.000 users | 1.000 users | 1.000 users | 1.000 users | - |
| Online memory in the AccessManager | 5.000 users | - | - | - | - | 5.000 users |
| Suitable for exterior doors (IP66) | ✗ | ✔ | ✔ | ✔ | ✔ | ✔ |
| Suitable for fire doors | ✗ | ✔ | ✔ | ✔ | ✔ | ✔ |
| Anti-panic version for escape doors | ✗ | ✔ | ✔ | ✗ | ✗ | ✗ |
| RFID reader extendable on both sides | ✗ | ✔ | ✔ | ✗ | ✗ | ✔ |
| Battery life (years) | - | Up to 4 years | Up to 6 years | - | Up to 8 years | - |
| Battery status alert | ✔ | ✔ | ✔ | ✗ | ✗ | ✗ |
| Door thickness | - | Up to 140 mm | Up to 110 mm | - | - | - |
| RFID reader with MIFARE® | - | Classic®, DESFire® | Classic®, DESFire® | Classic®, DESFire® | Classic®, DESFire® | Classic®, DESFire® |
| Remote opening | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| Arm/disarm Kentix alarm system | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| Maximum number of networkable AccessManager | 999 | - | - | - | - | 999 |
| Radio range | approx. 25 m | approx. 25 m | approx. 25 m | approx. 25 m | approx. 25 m | - |
| Door profiles | unlimited | - | - | - | - | 100 |
| Time profiles (day of the week, time of day) | unlimited | - | - | - | - | 100 |
| Access protocol memory depth | 200.000 | - | - | - | - | 200.000 |
| Ethernet | ✔ | ✗ | ✗ | ✗ | ✗ | ✔ |
| Power over Ethernet (PoE) | ✔ | ✗ | ✗ | ✗ | ✗ | ✔ |
| IEEE 802.1X authentication | ✔ | ✗ | ✗ | ✗ | ✗ | ✔ |
| Integratable into AlarmManager | ✔ | ✗ | ✗ | ✗ | ✗ | ✔ |
| Video recording IP camera (HTTP/S) | ✔ | ✗ | ✗ | ✗ | ✗ | ✔ |
| Sabotage monitored | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| SNMP (V2/V3) | ✔ | ✗ | ✗ | ✗ | ✗ | ✔ |
| LDAP - Active Directory | ✔ | ✗ | ✗ | ✗ | ✗ | ✔ |
| Memory extension (SD card) | ✔ | ✗ | ✗ | ✗ | ✗ | ✔ |
| Radio frequency | 868MHz | 868MHz | 868MHz | 868MHz | 868MHz | - |
| Approvals | CE | CE, DIN15684 | CE | CE | CE | CE |
| Batteries/power supply | PoE Class 2 | 2 x CR2 (3V) | CR123A | Supply voltage 8-40V | AA lithium | PoE class 3 |
| Temperature range | 0℃ up to 50℃ | -20℃ up to +65℃ | 5℃ up to 55℃ | -20℃ up to +65℃ | -20℃ up to +65℃ | -20℃ up to +65℃ |
| Size (L x W x H in mm) | 90 x 90 x 45 | 30-140 | 30-110 | 71 x 71 x 26 | 148.4 x 44.6 x 35.9 | 88 x 99 x 27 |

## Application example:
## Access for office, law firms or medicinal practices

Protection of entrances and rooms in the same or in other buildings
against unauthorized access with an online-capable solution

The wireless Door Knob with profile cylinder, the wireless Door Lever and wireless Wall Reader are available as locking components. These are connected wirelessly to the Kentix AccessManager. On a web surface, the AccessManager provides the central administration for all locking components in the system and contains a central log book. If required, each transaction can be connected to a video recording. Several AccessManager can be connected to one system in which one of them takes on the central administration. This makes the extension to more rooms or buildings very easy.
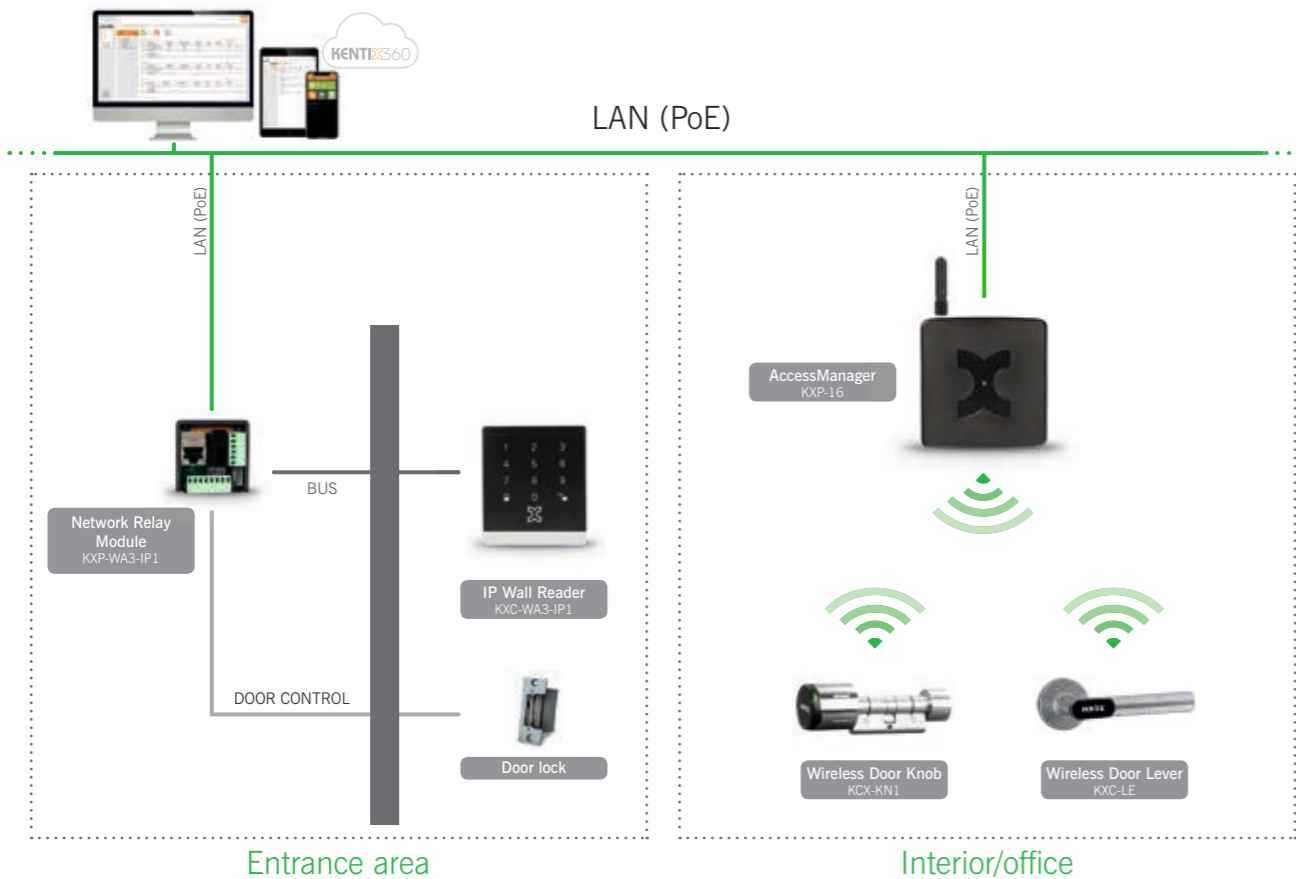
The IP Wall Readers and Network Relay Modules are fully compatible to the DoorLock series. Therefore, extra rooms can also be equipped with wireless DoorLock components and can be integrated into the system.

### Parts list/Order assistance

| Type | Item number | Quantity |
|---|---|---|
| AccessManager | KXP-16 | 1 |
| Wireless Door Knob for interior or exterior doors (IP65/66) | KXC-KN1 | 1 |
| Profile cylinder | KXC-80-AABB | 1 |
| Wireless Door Lever | KXC-LE | 1 |
| Wireless Wall Reader | KXC-WA1 | 1 |

### Extensions

| Type | Item number | Quantity |
|---|---|---|
| Camera | M3105-LVE | 1 |
| IP Wall Reader incl. Network Relay Module | KXP-WA3-IP1 | 1 |
| Extension reader for Network Relay Module | KXP-WA3-IP2 | 1 |



LAN (PoE)

LAN (PoE)

Network Relay Module
KXP-WA3-IP1

BUS

IP Wall Reader
KXC-WA3-IP1

DOOR CONTROL

Door lock

AccessManager
KXP-16

Wireless Door Knob
KCX-KN1

Wireless Door Lever
KXC-LE

Entrance area

Interior/office

- 70 -

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## Application example:
## Access solution for IT racks

Protection of one or several IT racks (server cabinets) against unauthorized access, expandable to other rooms or areas and combinable with video recording if required

To implement an access control system for IT racks, the wireless Door Knob with profile half cylinder and the wireless Cabinet Lock are available as locking components. These components are connected to the Kentix AccessManager via radio. On a web surface, the AccessManager provides the central administration for all locking components in the system and contains a central log book of all transactions. If required, each transaction can be combined with a video recording.

Several AccessManager can be connected to one system so that changes only need to be made from one central position. This way, the site can be extended any time with more server cabinets or doors to adjoining rooms as well.

### Parts list/Order assistance

| Type | Item number | Quantity |
|---|---|---|
| AccessManager | KXP-16 | 1 |
| Wireless Door Knob for interiors (IP55) | KXC-KN1 | 1 |
| Profile half cylinder | KXC-50-AA | 1 |
| Wireless Cabinet Lock | KXC-RA1 | 1 |

### Extensions

| Type | Item number | Quantity |
|---|---|---|
| Camera | M3105-LVE | 1 |
| Wireless Door Knob for interior or exterior doors (IP55/66) | KXC-KN1/2 | 1 |
| Profile cylinder | KXC-80-AABB | 1 |
| Wireless Wall Reader | KXC-WA1 | 1 |



LAN (PoE)

LAN (PoE)

AccessManager
KXP-16

Wireless Door Knob for server room door
(OPTIONAL)

Wireless Cabinet Lock
KXC-RA1

Wireless Door Knob with half cylinder
KXC-KN

Server/data center room

- 71 -
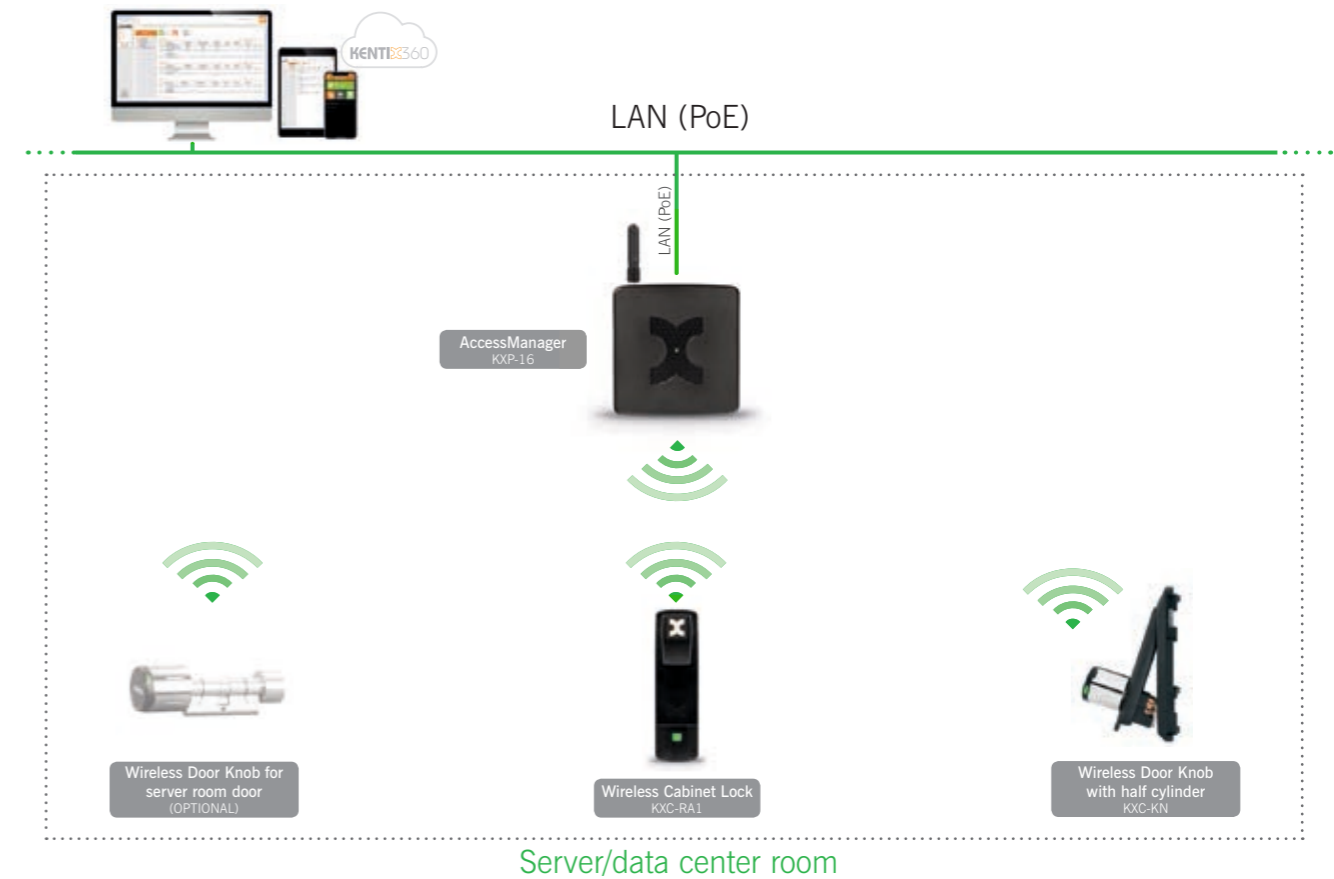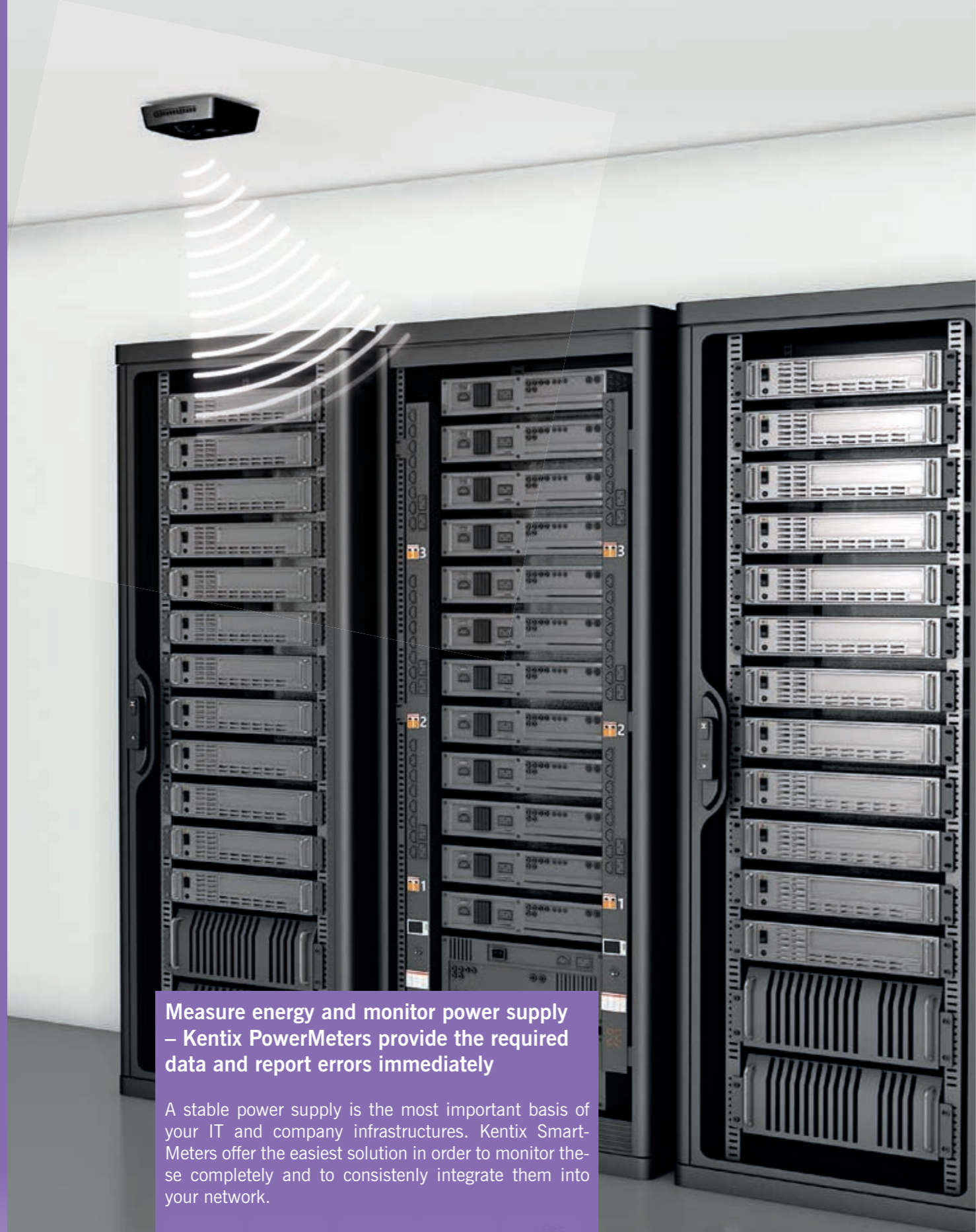
# IP Power Monitoring ingeniously easy – with the wireless Kentix SmartMeters

A stable power supply is the most important basis of your IT and company infrastructures. The Kentix PowerManager offers the easiest solution to monitor these completely and to integrate them into your network. The advantages are on the one hand the choice between wireless and wired meters and on the other hand the simple IP network integration. The central unit, the Kentix PowerManager, offers full SNMP V2/V3 support, an easy installation and a web-based user interface with all important data.

The combination of the Kentix PowerManager as a central unit in connection with the ZigBee-radio-based SmartMeters offers enormous integration and cost advantages in contrast to wired systems. Due to the radio technology, power and fuse outages can be reported reliably.

**Connectable types of meters:**
- Kentix ZigBee-radio SmartMeter
- Meters with ModBus RTU
- Meters with ModBus IP
- Pulse counter via Kentix I/O Module (16 channels / meter)

**Application possibilities:**
- Data centers
- Measuring single racks (A+B)
- Customer billing colocation
- Network monitoring
- Technology distributors
- PUE measuring



Power consumption (kWh)
Power (A)
Voltage (V)
Frequency (Hz)
Output (W, VA, kVar)
Power factor
Supply-phase fault

**Measure energy and monitor power supply – Kentix PowerMeters provide the required data and report errors immediately**

A stable power supply is the most important basis of your IT and company infrastructures. Kentix Smart-Meters offer the easiest solution in order to monitor these completely and to consistenly integrate them into your network.

ENERGY    ANALYSIS    PUE    BREAKDOWN    HISTORY

## Kentix PowerManager – IP Smart Metering with SNMP and more. Central monitoring with radio, ModBUS and LAN



Entire software already included, apps available

Secure remote opening and control via Kentix360 Cloud

PowerManager Central monitoring with radio, ModBus and LAN

Wireless PDU for easy integration

All system components at a glance –
easy networkability for 360° Smart Metering

KENTIX360

LAN (PoE)

LAN (PoE)

LAN

LAN

**PowerManager**
KPM-RF

**PowerAnalyser**
ETHERNET · MODBUS

**Electric Meter**
ETHERNET · MODBUS

**SmartPDU**
RADIO

**SmartPDU**
RADIO

**SmartPDU**
ETHERNET · MODBUS

Raised floor
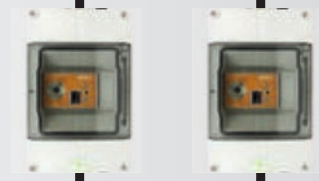
**InlineMeter**
RADIO

Power grid 230/400VAC

# Wireless PowerManager

The Kentix PowerManager manages radio- and bus-capable electricity meters. All measured values merge in one web-based surface. For each measured value, independent threshold values can be determined for the alarming. Via automatic monthly e-mail reports, consumption data can easily be transmitted. By specifying a measuring point for each meter (IT or building), the PUE (Power Usage Effectiveness) value is automatically determined. Moreover, all data and alarm values are available at any time via SNMP V2/3 and are easily integratable in superordinate management systems.
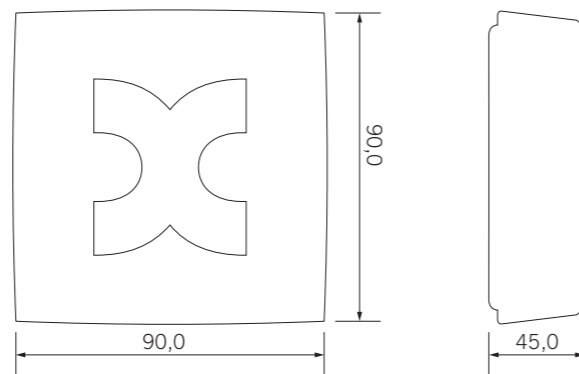
| ENERGY | BILLING | ANALYSIS | PUE | BREAKDOWN | RADIO | SNMP | E-MAIL |

## Products

| Type | Item number |
|---|---|
| PowerManager-RF | KPM-RF-B |

## Accessories

| Type | Item number |
|---|---|
| I/O Module with Relay | KIO3 |

## Technical Details

| | |
|---|---|
| Connectivity | LAN (PoE) – Integrated web server, interconnectable with another 999 Kentix PowerManagers |
| LAN | 10/100 Mbit, integrated web server, communication ports: 80/443 |
| Radio frequency | 868 MHz, encryption AES 128 Bit |
| Number of wireless meters | Up to 32 |
| RS485 | Interface for ModBus meter (via KIO3 I/O Module) |
| SD card | Micro SD card slot for cards of up to 128GB |
| Kentix system socket | RJ45, for the connection of external Kentix plug'n'play modules |
| Switching outputs (system socket) | 2x Open Collector 0.1A/24V, optional: I/O Module (KIO3) 2x switch relay 1A/24V |
| SNMP | SNMP (V2/3), SNMP Traps (V2/3) |
| Power supply | PoE 12-72VAC/DC power consumption approx. 1.5W, PoE class 1 |
| Housing | Protection class IP20, 90 x 90 x 45 mm; weight approx. 100g; color: black |
| Environmental conditions | Temperature 0 – 50℃, humidity 5-95%, non-condensing |
| Delivery content | PowerManager, antenna, mounting bracket, mounting material, 3 m SlimLine cable |
| Audits | CE |

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# Wireless InlineMeter

Radio extension meter for easy integration of consumers in the IT infrastructure or technical rooms. Ideal for measuring rack PDUs, UPSs, air conditioning systems or building services. The meter fits any standard DIN rail in the electrical distribution or can be used directly as a so-called InlineMeter. A major advantage of radio technology is that in the event of a power failure, a last message is sent to the PowerManager. Thus, network and phase failure are optimally monitored. The counter is also ideal for large colocation data centers with hundreds of racks. The ZigBee wireless technology creates a stable wireless network without complicated cabling.
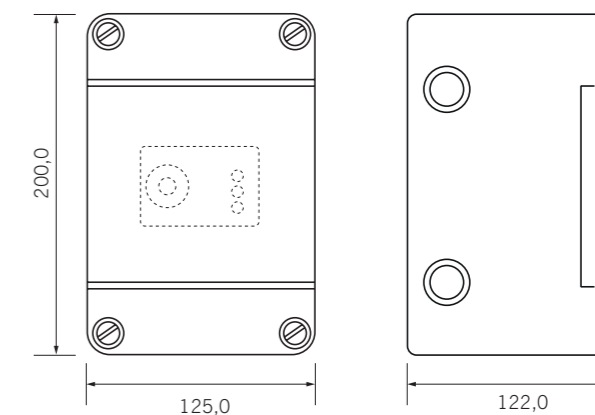
| ENERGY | ANALYSIS | RADIO |

## Products

| Typ | Artikelnummer |
|---|---|
| Wireless Inline-Meter 16A, 1-phase | KILM-1-16 |
| Wireless Inline-Meter 16A, 3-phase | KILM-3-16 |
| Wireless Inline-Meter 32A, 1-phase | KILM-1-32 |
| Wireless Inline-Meter 32A, 3-phase | KILM-3-32 |

## Accessories

| Typ | Artikelnummer |
|---|---|
| ZigBee stub antenna | KSM-DR60-ANT1 |

## Technical Details

| | |
|---|---|
| Connectivity | Kentix PowerMeter |
| Radio frequency | ZigBee® 2,4GHz; ISM Band +3dBm; output IEEE8 02.15.4; encryption AES 128 Bit, antenna connection SMA |
| Number of wireless meters | Up to 25 |
| Power supply | 1/3 x 230/400V (neutral) +/-10% |
| Current measurement | max. 60A per phase |
| Power consumption | 1.5W |
| Measurement accuracy | < 2% |
| Resolution | 1W |
| Frequency measurement | 45 - 65Hz, 0.01Hz |
| Measured values | Voltage (U), power (I), apparent power (S), effective power (P), reactive power (Q), power factor, consumption (kWh) |
| LED | Signal, teach-in signalization |
| Housing | Impact-resistant plastic IP64, 125 x 200 x 122 mm; Color: RAL7035 |
| Environmental conditions | Temperature -10℃ up to 50℃, humidity 5-95%, non-condensing |
| Delivery content | InlineMeter |
| Audits | CE |

# The no compromises PDU - Robust to the best standards
## Networking via radio or IP, calibrated current measurement, power from 7.3kVA to 22kVA

Power 7.3/11/22KVA

**MODULE 1**

· Calibrated electricity metering (MID)
· Monitoring of all important parameters
· Easy to network with radio,
  Ethernet or RS485 BUS
· Separately measurable phases
  and PDU areas

· Robust metal housing
· Powder coated, available
  in any RAL color

· Modular configuration
· 24x C13 and 6x C19
  IEC sockets
· 48x C13 appliance sockets
· Cable pull-out protection (V-Lock)

**40U**

**MODULE 2**

Easy optional expansion with:
· Leakage current measurement (DGUV 3)
· Overvoltage protection (fine protection)
· Free-shutdown in case of fire

· Professional circuit breaker with C / G
  tripping characteristic
· Secured against incorrect operation

· Best connection technology
· Wired throughout in 6mm²

## Fail-safe power distribution with proven components

Robust, simple and calibrated: That was the formula for the development of our PDU series. Together with longtime Datacenter customers,we have developed a PDU that meets the essential requirements of a robust and fail-safe power distribution. We have focused fully on using the most proven power distribution components and have incorporated only the really important functions.

The result is an ultrarugged PDU that meets all the requirements for current measurement and monitoring and can be managed using state-of-the-art interfaces (SNMP V2/ 3, JSON). Being a wireless PDU makes networking in the data center easy, even for large data centers. The proven ZigBee wireless technology offers significant advantages:

· No additional cabling
· No assignment of Ethernet ports
· Easiest management over
  Kentix PowerManager
· Also suitable for large data centers
· Encrypted and stable data transmission

## Easy management via Kentix PowerManager

No external software required. Kentix PowerManagers provide a webbased interface which contains the complete software - even for large data centers. The PUE (Power Usage Effectiveness) calculation including monthly reporting is integrated.
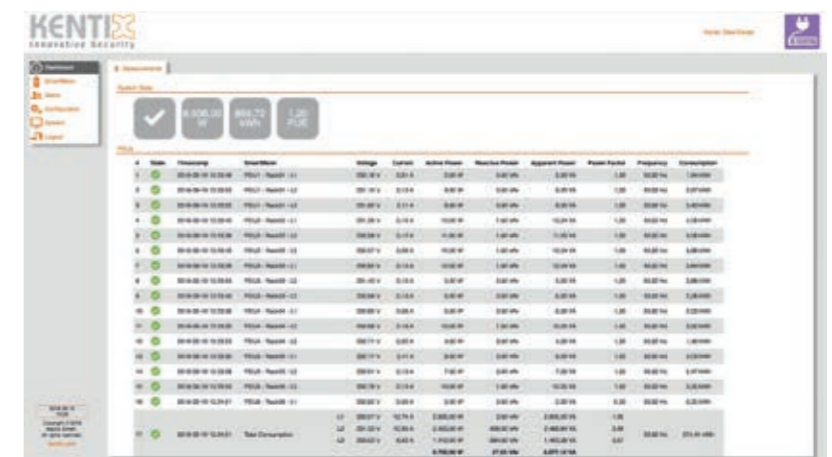
# SmartPDU – 40U with Radio or IP

**RADIO**
**LAN**

The Kentix SmartPDU Series is designed as a modular PDU based on the highest standards of electrical engineering. Only standardized modules such as smart meters and intelligent measuring and safety devices are used. The PDU offers two installation areas for a wide variety of extensions. This results in a significant advantage, namely the use of calibrated and approved current measurements according to EN50470-3 (MID) for cost-effective customer billing in co-location areas. Up to 6 customer areas can be settled legally and accurately. The integration takes place via the Kentix PowerManager and offers a variety of possibilities for evaluation, monitoring and further integration in the management system via SNMP V2 / V3.

| ENERGY | BILLING | ANALYSIS | PUE | BREAKDOWN | RADIO | SNMP |
|--------|---------|----------|-----|-----------|-------|------|

## Technical Details

|                        | 1-32 | 3-32 | 3-16 |
|------------------------|------|------|------|
| Max. Power | 7.360VA | 22.080VA | 11.040VA |
| Connection cable | IEC60309 | IEC60309 | IEC60309 |
|  | (32A-3pol, BLUE) | (32A-5pol, RED) | (16A-3pol, RED) |
| C13 | 24 or 48 | 24 or 48 | 24 or 48 |
| C19 | 6 or 0 | 6 or 0 | 6 or 0 |
| C13/19 lockable | ✔ | ✔ | ✔ |
| Fuse | 3 x 10A C-Type | 3 x 16A C-Type | 3 x 10A C-Type |
|  | 3 x 16A C-Type | 3 x 10A C-Type | 3 x 16A C-Type |
| Overvoltage protection | Optional | Optional | Optional |
| Leakage measurement | Optional | Optional | Optional |
| **Meters options:** | | | |
| Meter ZigBee | ✔ | ✔ | ✔ |
| Number per PowerManager | 25 | 25 | 25 |
| Meter Modbus RTU (calibrated measurement) | ✔ | ✔ | ✔ |
| Number per PowerManager | 100 | 100 | 100 |
| Meter Modbus ETH (calibrated measurement) | ✔ | ✔ | ✔ |
| Number per PowerManager | 100 | 100 | 100 |
| Display light | Ethernet, RS485 | Ethernet, RS485 | Ethernet, RS485 |
| Connected cable | 3m | 3m | 3m |
| Housing | Metal | Metal | Metal |
| Audit CE | ✔ | ✔ | ✔ |
| Audit DGUV 3 | ✔ | ✔ | ✔ |
| Size in mm ( L x B x H) | 1700 x 78,2 x 62,5 | 1700 x 78,2 x 62,5 | 1700 x 78,2 x 62,5 |

## Products

| Item Number | Basetype | | Connectivity | Device sockets | Connection cable |
|-------------|----------|---|-------------|----------------|------------------|
|  | KPMDU | – | xx | – 2406C13C19 – | x-xx |
|  |  |  | RF (Radio) |  | 1-32 (1-pol, 32A) |
|  |  |  | ET (Ethernet) |  | 3-32 (3-pol, 32A) |
|  |  |  | RS (RS485) |  | 3-16 (3-pol, 32A) |
| **Ordering Example:** | KPMDU | – | RF | – 2406C13C19 – | 3-16 |

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**RADIO**
**LAN**
**BUS**

# SmartMeter with Radio or IP

Wireless extension meter for easy integration of consumers into the IT infrastructure or engineering rooms. Ideal for measuring rack PDU, UPS, climate systems or technical sites in the building. The meter fits on any standard DIN rail in the electric distribution or is ready for connection and therefore directly applicable as a so-called InlineMeter. A big advantage of the wireless technology is that in case of power failure, one last message is sent to the Power-Manager immediately. Therefore, power and phase failures are monitored ideally. The meter is also perfectly suitable for large colocation data centers with hundreds of racks. Due to the ZigBee radio technology, a stable wireless network is established without complex wiring.
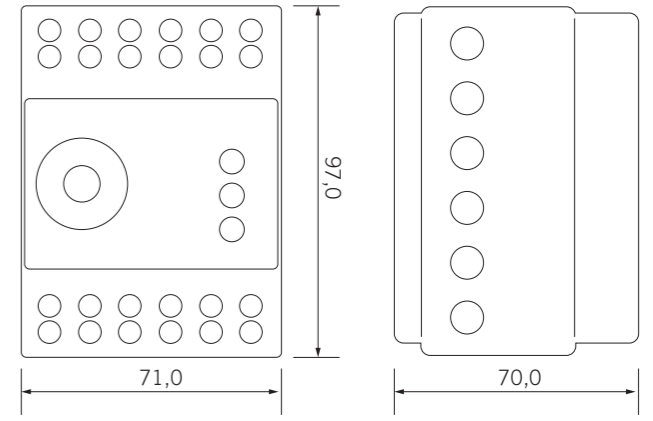
| ENERGY | ANALYSIS | RADIO |
|--------|----------|-------|

## Products

| Typ | Artikelnummer |
|-----|---------------|
| Wireless SmartMeter 400V/60A | KMS-DR60-RF |
| IP SmartMeter 400V/80A (MID) | KSM-DR80-ET |
| RS485 SmartMeter 400V/80A (MID) | KSM-DR80-RS |

Dimensions: 97,0 / 71,0 / 70,0

## Accessories

| Type | Item number |
|------|-------------|
| ZigBee stub antenna | KSM-DR60-ANT1 |

## Technical Details

|  | KSM-DR60-RF | KSM-DR80-ET | KSM-DR80-RS |
|--|-------------|-------------|-------------|
| Connectivity | Kentix PowerMeter | Kentix PowerMeter | Kentix PowerMeter |
| Approval (Verification) | NO | EN50470-3 MID | EN50470-3 MID |
| Connectivity | ZigBee Radio | Ethernet | 2 wire rs485 |
| Power supply | 1/3 x 230/400V | 1/3 x 230/400V | 1/3 x 230/400V |
|  | (neutral +/-10% | (neutral +/-10% | (neutral +/-10% |
| Current measurement | 60A | 80A | 80A |
| Power consumption | 2W | 3W | 3W |
| Measurement accuracy | <2% | Class B (MID) | Class B (MID) |
| Resolution | 1W | 1W | 1W |
| Frequency measurement | 50/60Hz | 50/60Hz | 50/60Hz |
| Measured values | Voltage (U), power (I), apparent power (S), effective power (P), reactive power (Q), effect factor, consumption (kWh) | | |
| Consumption measurement | Total | L1/2/3/Total | L1/2/3/Total |
| LED, Display | LED: Signal, teach-in signalization | Display illuminated | Display illuminated |
| Clamps | Screw terminals, diameter 5.5 mm (up to 16 mm²) | | |
| Housing | DIN rail mounting, 4TE, protection class IP20, 71 x 97 x 70 mm; color: RAL7035 | | |
| Environmental conditions | Temperature -10°C up to 50°C, humidity 5-95%, non-condensing | | |
| Delivery content | SmartMeter, Gain Magnet Antenna | SmartMeter | SmartMeter |
| Audits | CE | CE, MID | CE, MID |

# Seamless integration of IP video cameras into Kentix systems – event-synchronic images and alarms

Kentix systems detect threats early, report them immediately or log authorized and unauthorized access. A video recording simultaneously to the alarms and events enables a fast assessment of critical states even in remote sites. In connection to additional measurement values, it becomes particularly reliable this way.

Kentix systems use the advantage of consistently IP-based systems and can access video data from IP network cameras directly. These are recorded continuously. In the case of an event, pictures prior to and after the event can be connected, saved and transmitted. The advantage lies in the synchronic information of measured data and images in one system; thereby, the search for an external video storage is discontinued.

Basically all network cameras that enable the query of video images via HTTP/HTTPS are supported. Popular camera manufacturers are pre-installed with examples.

**The following systems support video recording:**
- AlarmManager (KAM-BASIC/PRO)
- MultiSensor-LAN (KMS-LAN)
- AccessManager (KXP-16)
- IP Wall Reader (KXCX-WA3-IP1)

**Application possibilities:**
- IT engineering rooms
- Remote technology stations
- Critical production areas
- Remote storage facilities
- Depots and warehouses
- Medicine cabinets

## Example for integration (HTTP/HTTPS):

**MOBOTIX:** /cgi-bin/image.jpg?size=800x600
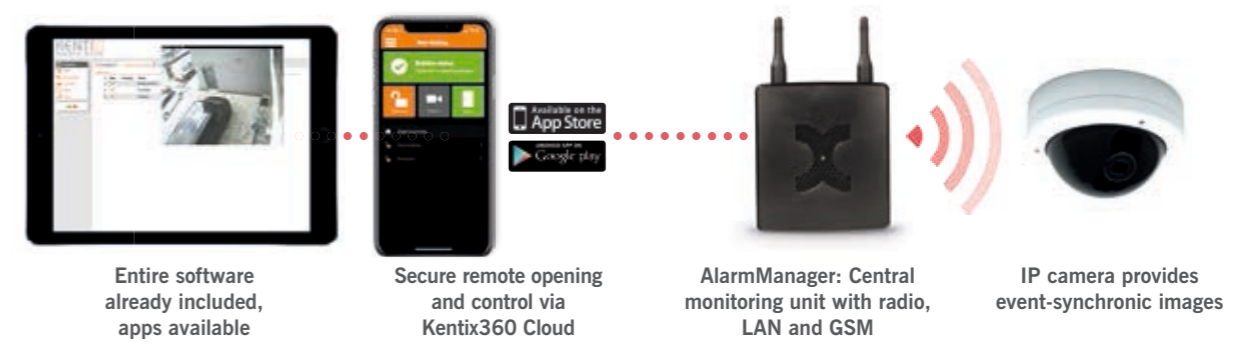**AXIS:** /axis-cgi/jpg/image.cgi?resolution=800x600

The image size can be adjusted freely, depending on the type of camera.
User data, IP address and protocol (HTTP/HTTPS) are added automatically.

**Identifying threats as quickly as possible – besides alarms and access, Kentix systems also record videos**

Kentix systems detect threats early and report them immediately. For a quick assessment of critical states in remote sites, video recording is essential.
Kentix systems transmit system and video information in one message.

CLIMATE    FIRE    BURGLARY    ACCESS    VIDEO    APP

Kentix systems can be extended via microSD card with memory sizes of up to 128GB and save more than 100.000 video sequences.

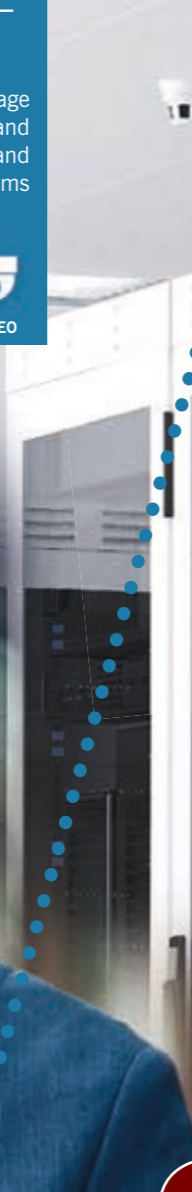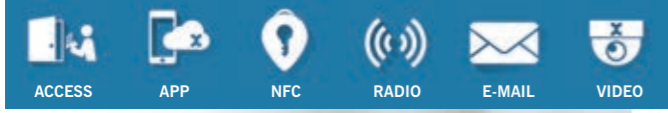Entire software already included, apps available

Secure remote opening and control via Kentix360 Cloud

AlarmManager: Central monitoring unit with radio, LAN and GSM

IP camera provides event-synchronic images

# Remote Management über Kentix360 Cloud und Kentix App

Kentix360 is the cloud-based security center for monitoring business-critical IT infrastructures. The cloud solution in conjunction with the Kentix Mobile App provides administrators with information about the status of their Kentix system anytime, anywhere.
The administrator is directly informed of alarms and access via e-mail, SMS or push message - including video recording - on a tablet or mobile phone. The combination of video and live data simplifies remote assessment and in many cases saves the cost of on-site deployment.

**Kentix360, the alarm central for your coat pocket – already included in our systems**

Access your systems, check the site status, receive and manage alarm messages or simply open doors remotely - any time and anywhere. The Kentix360 Cloud saves all important data and checks the status of your Kentix monitoring or access systems routinely and independently.

| ACCESS | APP | NFC | RADIO | E-MAIL | VIDEO |

## Advantages:
- Secure app access from anywhere
- Data storage over 24 months
- Push-messages on Smartphone and integrated e-mail service
- Daily system check
- SIM card for redundant alarm SMS in the Included in delivery (optional registration)
- No additional external cloud service provider needed

## Security:
- Encrypted communication
- No open ports from the outside
- Multi-level authentification with ID and password
- Brute force detection with lock
- Hosting in german data center

**Always the whole system at a glance**

**The key features of the app**
- Display of system status and logbook
- Arming and disarming of the system
- Display of sensor measurements
- Displays all doors (open/closed)
- Live video view

**Simply activate our devices via the web surface!**

Available on the App Store | ANDROID APP ON Google play

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### Kentix360 Cloud

96,00 Euro / Year / Device plus VAT
(Minimum term 12 Month)
Usable with AlarmManager, AccessManager
or StarterSets

- Secure app access from anywherel
- Data storage over 24 months
- Push and e-mail notifications
- Configurable routine check
- Unlimited number of users per device

### Kentix360 SIM-Karte

72,00 Euro / Year  plus VAT
or. 600 Alarm-SMS
can be used with AlarmManager or StarterSets

- Can only be activated in conjunction with Kentix360 Cloud (optional use)
- Uses the network of the german telecom
- Kentix360-SIM in each StarterSet
- Contains 600 alarm SMS messages that need to be recharged after consumption or one year

# Complete IT Infrastructure Monitoring

In cooperation with our technology partners, we further develop our solutions continuously and offer uniform interfaces for an open system architecture with prospects.

## Simply integrate Network Monitoring Tools into environmental monitoring

The Kentix MultiSensor® technology monitors all major physical threats in rooms and racks such as critical climate factors, fire or burglary with just one system. The different measured and alarm values are made available via SNMP (V2/3) and can very easily be integrated into the according Network Monitoring Tool via the SNMP Management Information Base (MIB).

This way, the Kentix MultiSensor® technology provides the data for your network monitoring simply and reliably. Due to the combination of both systems, a gapless monitoring of your company-wide infrastructure is established – and it is ingeniously easy. Kentix devices support all major monitoring and DCIM (Data Center Infrastructure Management) tools.



**OPEN API**

**SNMP**
**HTTPS**
**XML**
**JSON**
**OPC**
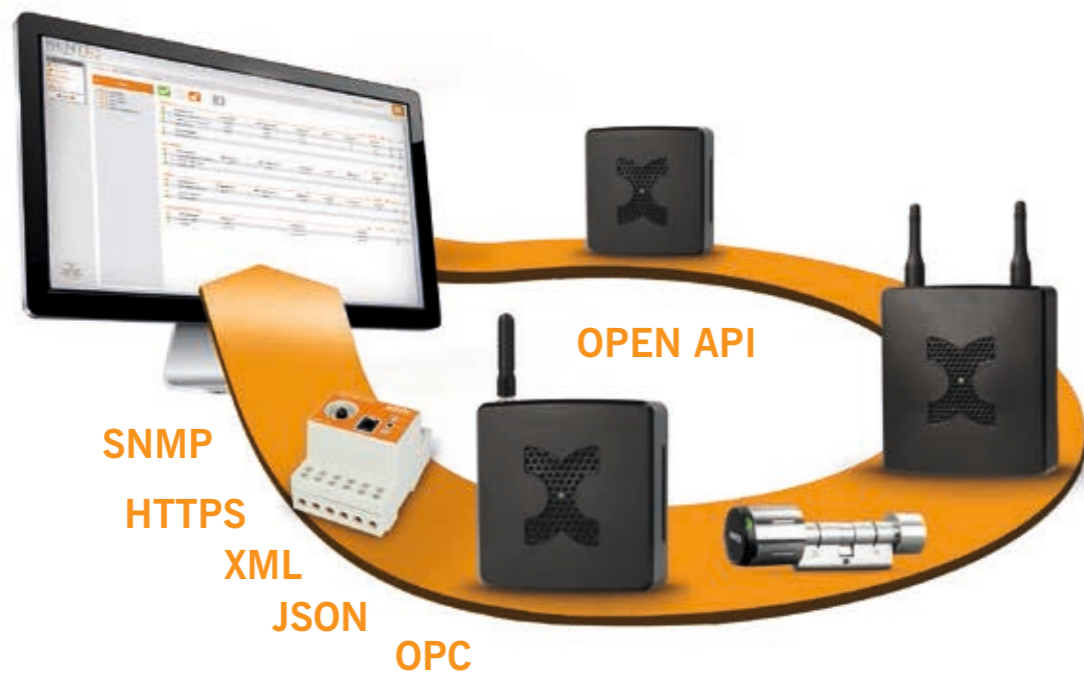
**SNMP Support**
- Complete MIB for all integrated sensors
- Traps supported
- Query and integration of all measured values into network monitoring systems

**HTTP Support**
- Data exchange via XML
- HTTP commands for sending SMS (integrated SMS gateway)
- HTTP triggering of IP cameras

**We support all common Network Monitoring, DCIM and Building Management systems**



**PAESSLER®**   **PRTG** Network Monitor   **servereye**   **op5**   **ENVIMonitor**   **WÜRTHPHOENIX NetEye**

**and many more …**

Nagios    Icinga    CA Unified Infrastructure Management    GFI Network Server Monitor
HP OpenView    IBM Tivoli    Ipswitch WhatsUp Gold (whatsupgold.com)    Microsoft Operations Manager
Adrem Software NetCrunch    OpManager    Quest Big Brother    ruleIT Monitoring Server
Spectrum Enterprise Manager    SysLink Xandria

MultiSensor-LAN wins funkschau reader's choice award „ITC Product Of The Year 2017" in the category Physical Security

FRANKFURT/MAIN

Everything that you need for the
physical security of your mission-critical infrastructures.