



# 360° Smart Building Security for Pros

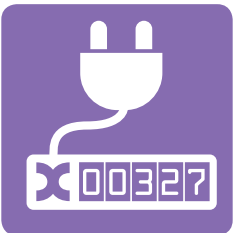
SMART MONITORING



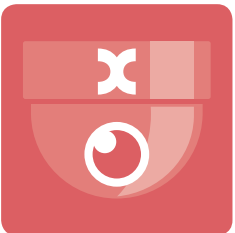
SMART ACCESS



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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## 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 BSI baseline protection and 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 periodically 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.



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



**Environmental monitoring**  
It hardly makes sense to only secure single parameters of mission-critical infrastructures. The Kentix MultiSensor® technology monitors all major environmental parameters and reports any critical system states immediately.  
▶ See page 8

**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 8

**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 30

**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 8

**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 50

**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 44



## 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 MultiSensor® 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

### STARTERSET-PRO – SECURES YOUR IT ROOMS ACCORDING TO BSI BASELINE PROTECTION AND THE ISO 27001



Monitors up to 37 threats!

AlarmManager, MultiSensor KMS-RF and MultiSensor-DOOR

For more info on the StarterSets see page 24



### 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.



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



# 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



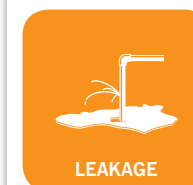
### Supply voltage

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



### PIR motion detection

- Fast motion detection
- Secure detection of unauthorized persons



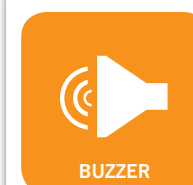
### External signal inputs

- 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



### Carbon monoxide (CO)

- Early fire detection via highly sensitive CO sensor
- Detection of emerging fires



### Sabotage monitoring

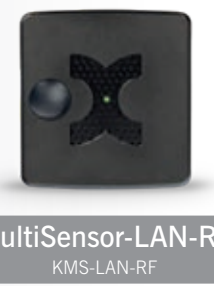
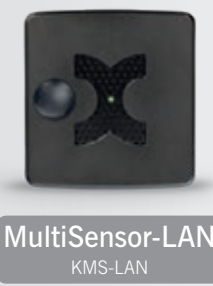
- Continuous monitoring of possible manipulation and sabotage of MultiSensor and AlarmManager



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



LAN (PoE)





## 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.

### 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

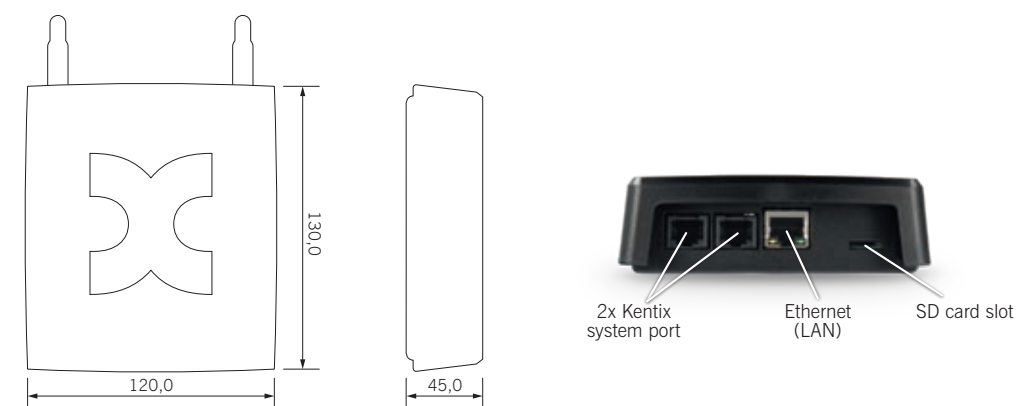
Type	Item number
PoE Injector	KPOE150S
I/O Module with relays	KIO3
Gain magnet antenna	KMA3
Antenna extension (5m)	KMA3-5

### 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 3G modem	Quad-Band (GSM/3G) 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 130 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 m <sup>2</sup>	up to approx. 4.000 m <sup>2</sup>
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)	130 x 120 x 45	130 x 120 x 45







## MultiSensor

The MultiSensor is the ingeniously easy solution for server 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.



### 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

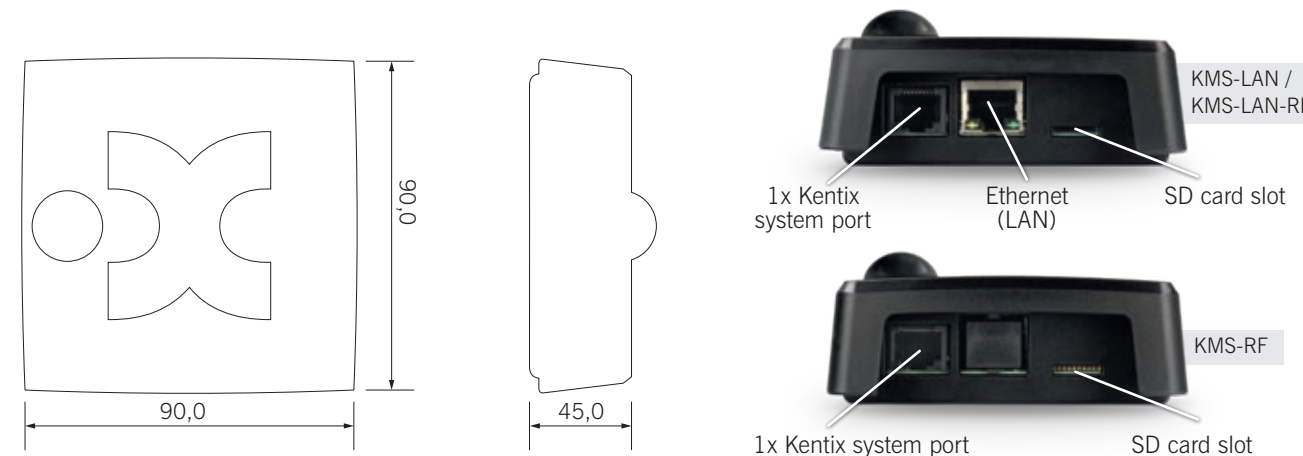
Type	Item number
PoE Injector	KPOE150S
I/O Module with relays	KIO3
Test gas	CO-TEST-3

### 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

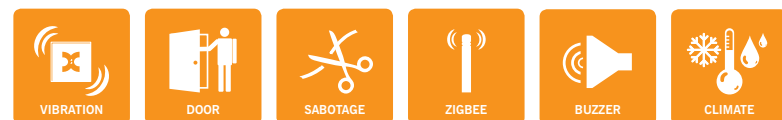




BATT  
RADIO

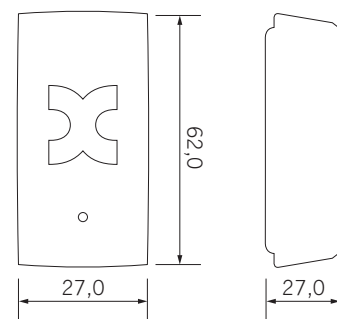
## MultiSensor-DOOR

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).



### 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

### Technical Details

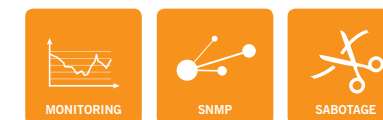
Connectivity	AlarmManager-BASIC (KAM-BASIC); AlarmManager-PRO (KAM-PRO)
Sensor – Temperature	Measurement range -20°C/-4°F up to +99°C/210°F (accuracy +/- 0,5°C)
Sensor – Relative humidity	Measurement range 0 up to 100% (accuracy +/- 3%)
Sensor – Dew point	Measured in °C/°F
Sensor – Vibration	3 axis, 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

LAN  
PoE



## 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

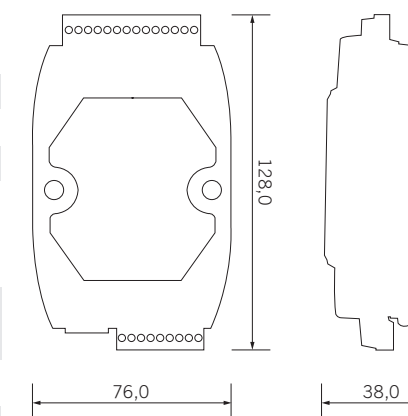
Type	Inputs	Outputs	Configuration alarm outputs	Item number
I/O Module	Digital inputs for voltage wiring; ON: +10-50VDC, OFF: +4DC; input impedance: 10kOHM, overvoltage protection 70VDC	Open-Collector outputs 10-40VDC, capacity 650mA (up to 1.1A overcurrent protection), overvoltage protection 47VDC	Openly 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 (-58°F) to 100°C (212°F)	KESAN1
External cable Temperature Sensor (IP66) -50°C (-58°F) to 100°C (212°F)	KESAN2

### Technical Details

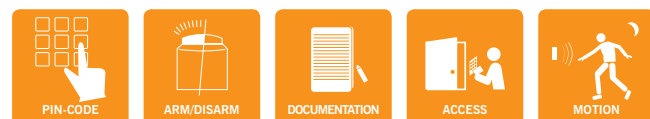
Connectivity	External alarms of existing system components (air conditioners, UPS systems, generators, alarm systems)
AlarmManager	Connection to Kentix AlarmManager-PRO
Configuration	Integrated web server (HTTP)
Protocols	KAM-IO-Communication per IP-Port: 502 (Default)
Security	ID, password and IP filter
Terminal clamps	Pluggable screw terminals for cables up to 1 mm <sup>2</sup>
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





## 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).

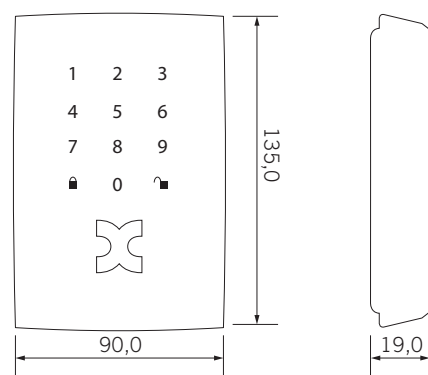


### Products

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

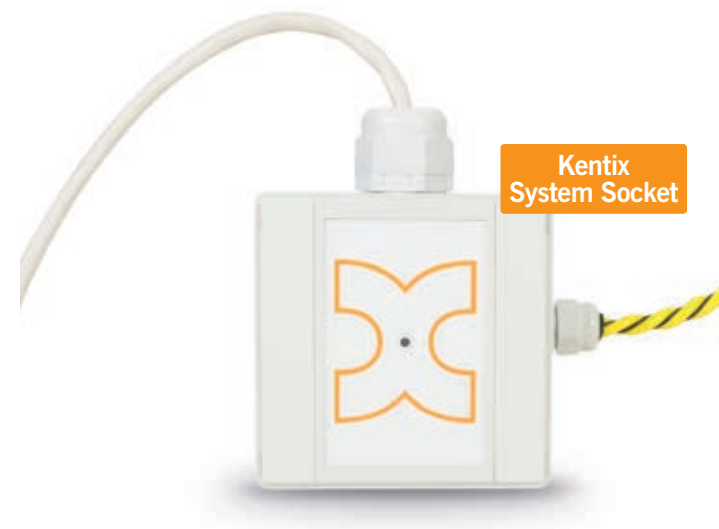
### Accessories

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



### 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°C; 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



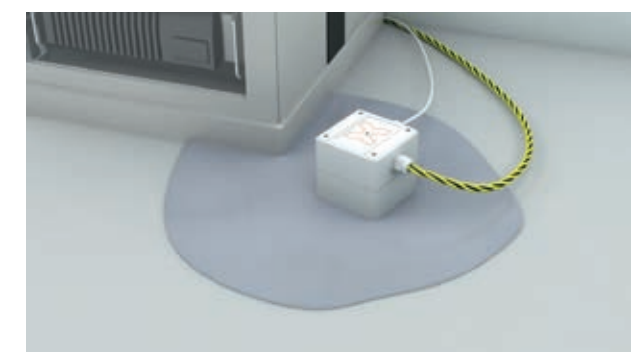
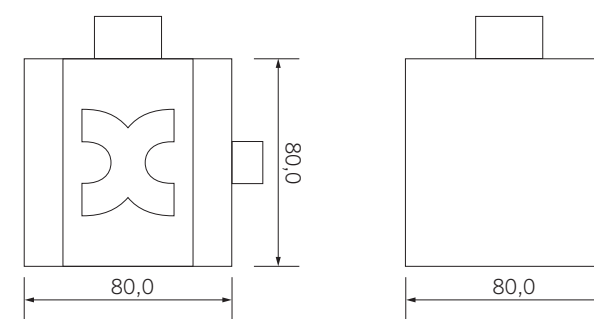
## LeakageSensor

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.



### Products

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



The LeakageSensor detects water ingress quickly and reliably

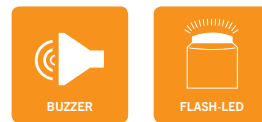
### Technical Details

Connectivity	Kentix system socket (RJ45)
Power supply	Via Kentix system socket
Status LED	RED/GREEN
Temperature range	-25°C up to 70°C / 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



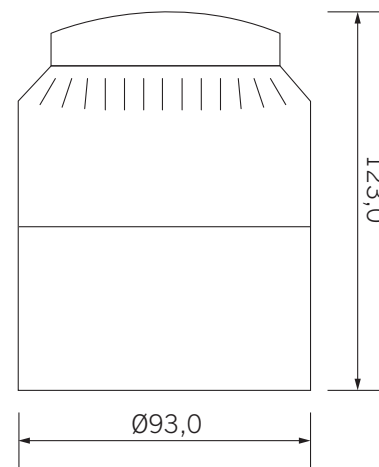
## Sounder

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).



### Products

Type	Item number
Sounder	KFLASH1



### 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

## 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
<b>TEMPERATURE - CLIMATE - ENVIRONMENTAL ISSUES</b>					
Overtemperature	✓	✓	✓	✓	✓
Undertemperature - frost	✓	✓	✓	✓	✓
Defective air-conditioning	✓	✓	✓	✓	✓
Defective dehumidification	✓	✓	✓	✓	✓
Defective climate control	✓	✓	✓	✓	✓
Clogged filters	✓	✓		✓	✓
General malfunction of air-conditioning	✓	✓		✓	✓
<b>SMOULDERING FIRE - FIRE</b>					
Smouldering fire on cables, devices	✓	✓		✓	✓
Smouldering fire in electricity distributors	✓	✓		✓	✓
Charred, defective electronic components	✓	✓		✓	✓
Fire - Combustion gases	✓	✓		✓	✓
Battery degassing (H-hydrogen)	✓	✓		✓	✓
<b>BURGLARY - THEFT - SABOTAGE</b>					
Unauthorized access	✓	✓	✓	✓	✓
Intrusion	✓	✓	✓	✓	✓
Attempted intrusion - securing perimeters			✓		
Access to unauthorized sections (racks, cabinets)	✓	✓	✓	✓	✓
<b>HARDWARE FAILURE</b>					
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				✓	✓
<b>WATER INGRESS - MOISTURE (optional LeakageSensor required)</b>					
Open windows	✓*	✓*		✓*	✓*
Defective plumbing in the room	✓*	✓*		✓*	✓*
Defective plumbing in adjoining rooms and floors	✓*	✓*		✓*	✓*
Leakage - climate or heating systems	✓*	✓*		✓*	✓*
<b>POWER - VOLTAGE - NETWORK QUALITY</b>					
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 20m<sup>2</sup>: an AlarmManager-BASIC and wireless MultiSensor-RF. The set can be expanded with additional MultiSensor-RF (up to 200). Updating to the PRO-versi-

on 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 20m<sup>2</sup> up to 10.000m<sup>2</sup> in size as well as for distributed sites. Due to the included AlarmManager-PRO, the system can be expanded with additional MultiSensors 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

Connectivity	Integrated web server (HTTP/HTTPS)
Alarming	Integrated 3G modem for network-redundant alarm messages, e-mail, SMS, push, SNMP
User management	Up to 1.000 user accounts and alarm recipients
Management – control	Via integrated web server, smartphone app for iOS and Android
SNMP	SNMP V2/V3, SNMP Traps
Online connection	Kentix360 Cloud usable any time

## StarterSet-BASIC

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



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 4.000m<sup>2</sup>
- Up to 200 wireless sensors
- SMS / E-mail / SNMP
- Up to 10 alarm recipients

► More info on the system components on pages 26+27

## StarterSet-PRO

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



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 10.000m<sup>2</sup>, expandable for distributed sites
- Up to 500 sensors (wireless and LAN)
- SMS / E-mail / SNMP / Push
- Up to 1.000 alarm recipients

# 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. 10.000m <sup>2</sup>	Up to approx. 4.000m <sup>2</sup>	20m <sup>2</sup> , IT rack	20m <sup>2</sup> , 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 GSM modem (3G)	✓	✓	✗	✗
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)	130 x 120 x 45	130 x 120 x 45	90 x 90 x 45	90 x 90 x 45



MultiSensor-RF	MultiSensor-DOOR	KeyPad-Touch	I/O Module	LeakageSensor	Sounder
KMS-RF	KMS-DOOR	KKPT	KIO7052/53	KLS03	KFLASH
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
20m <sup>2</sup> , IT rack	Door, window, rack	Door, room	External alarms	Up to 100m <sup>2</sup> , floor	Room
-	-	-	-	-	-
- AlarmManager	- AlarmManager	- AlarmManager	Web server AlarmManager	AlarmManager, MultiSensor-LAN	AlarmManager, MultiSensor-LAN
✗	✗	✗	✗	✗	✗
✗	✗	✗	✓	✗	✗
✗	✗	✗	✗	✗	✗
✗	✗	✗	✗	✗	✗
✗	✗	✗	✗	✗	✗
✗	✗	✗	✗	✗	✗
✗	✗	✗	✗	✗	✗
✗	✗	✗	✗	✗	✗
✗	✗	✗	✗	✗	✗
✗	✗	✗	✗	✗	✗
✗	✗	✗	✗	✗	✗
✗	✗	✗	✗	✗	✗
✓ (KAM)	✓ (KAM)	✗	✓ (KAM-PRO)	✗	✗
2	✗	✗	8 / 0	✗	✗
2	✗	✗	8 / 16	✗	✗
✓	✗	✗	✓	✗	✗
✗	✗	✗	✓	✗	✗
✓	Battery (Li)	Battery (AAA)	✓	✓	✓
✓	✗	✗	✗	✗	✗
✗	✗	✗	✓	✗	✗
✓	✓	✓	✗	✓	✗
✓	✓	✓	✗	✓	✗
✓	✓	✓	✗	✓	✗
✓	✓	✓	✗	✓	✗
✓	✓	✓	✗	✓	✗
✓	✓	✓	✗	✓	✗
✗	✗	✗	✗	✗	✗
✗	✗	✓	✗	✗	✗
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.

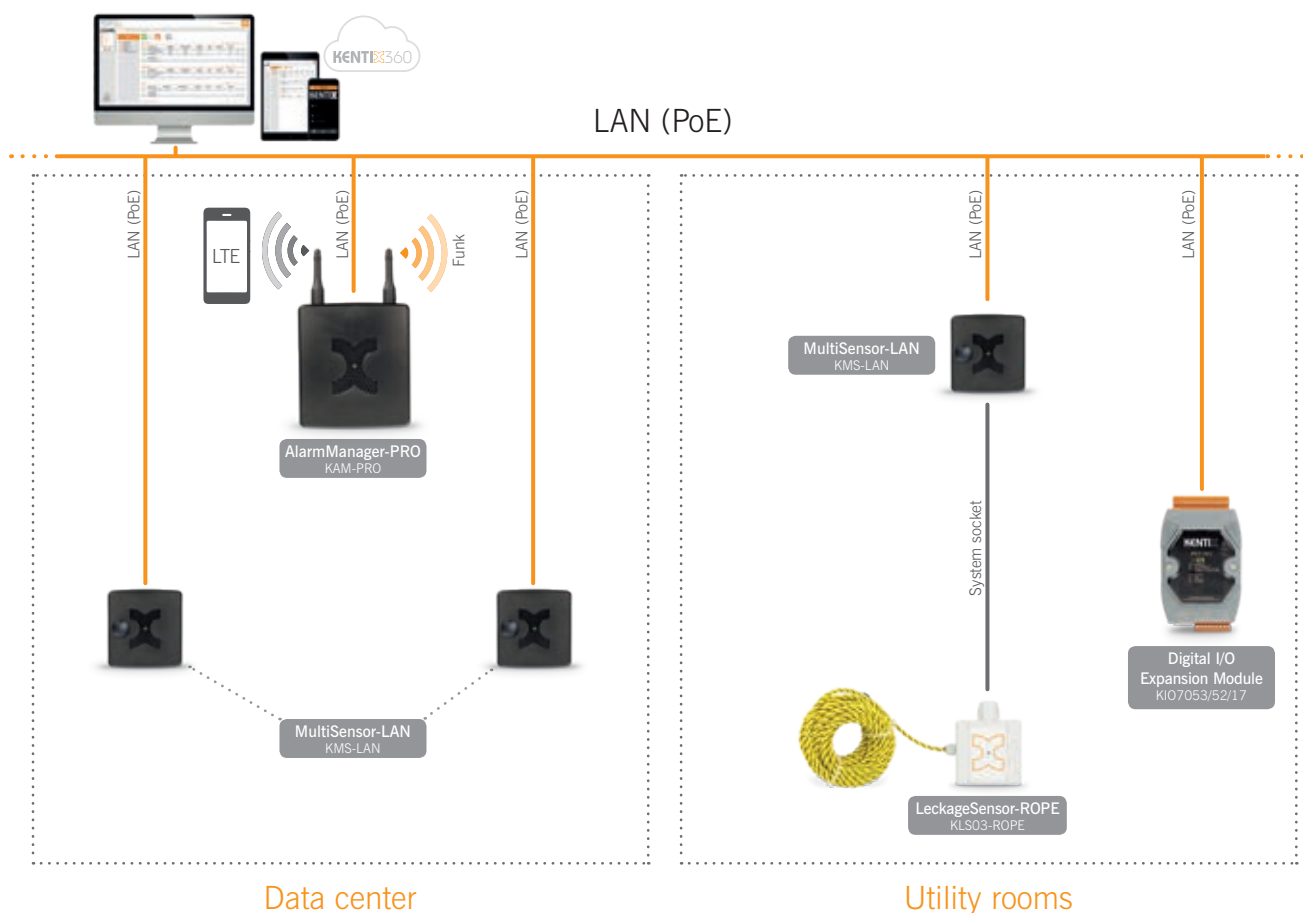
The monitoring can also happen via external network monitoring if desired. In this case, the AlarmManager provides all measured values and system states via the SNMP interface.

### 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



## 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.

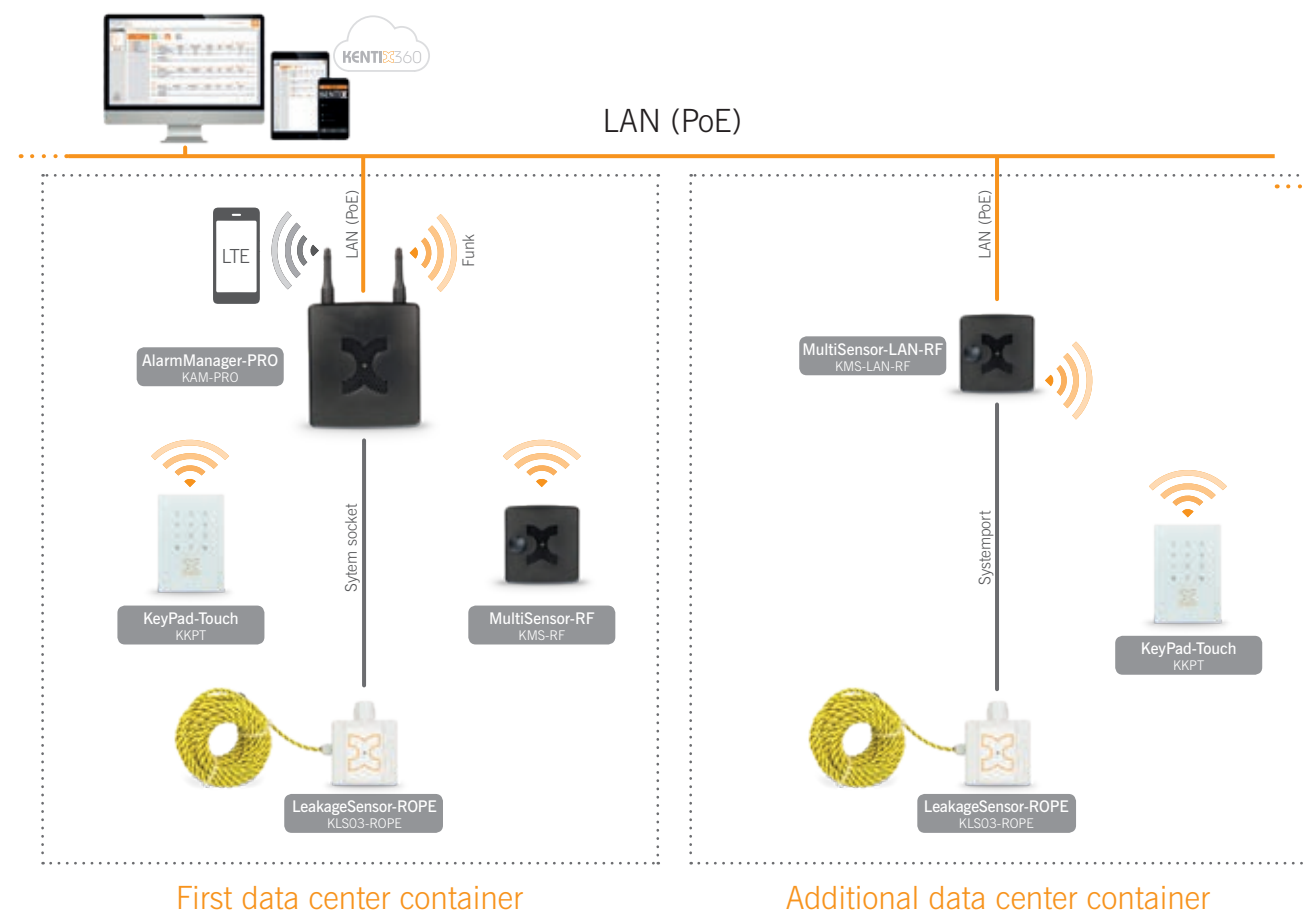
The monitoring of the entire system happens centrally via the AlarmManager. Integrating it into a central monitoring tool is also possible.

### 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 number	Quantity
MultiSensor-LAN-RF	KMS-LAN-RF	1 each
LeakageSensor	KLS03-ROPE	1 each
KeyPad-Touch	KKPT	1 each



## 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

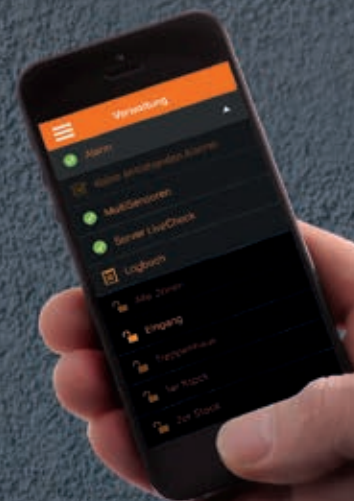
If desired, any door in the system can be connected to an IP camera that will be triggered any time the door is unlocked or tampered with. The recorded image series is saved together with the according user data. Non-authorized access attempts are immediately e-mailed to the responsible persons with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

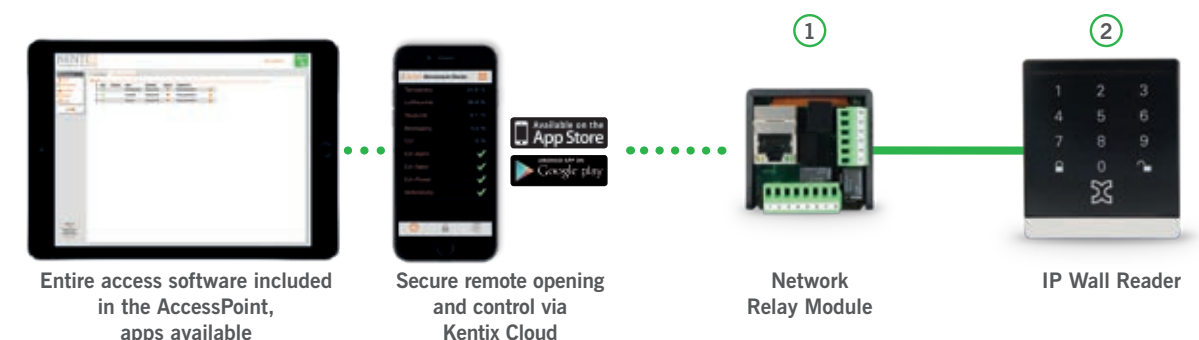


### STARTERSET-DOORLOCK-IP – THE EASIEST STARTER SOLUTION FOR YOUR INTRODUCTION TO ONLINE ACCESS CONTROL

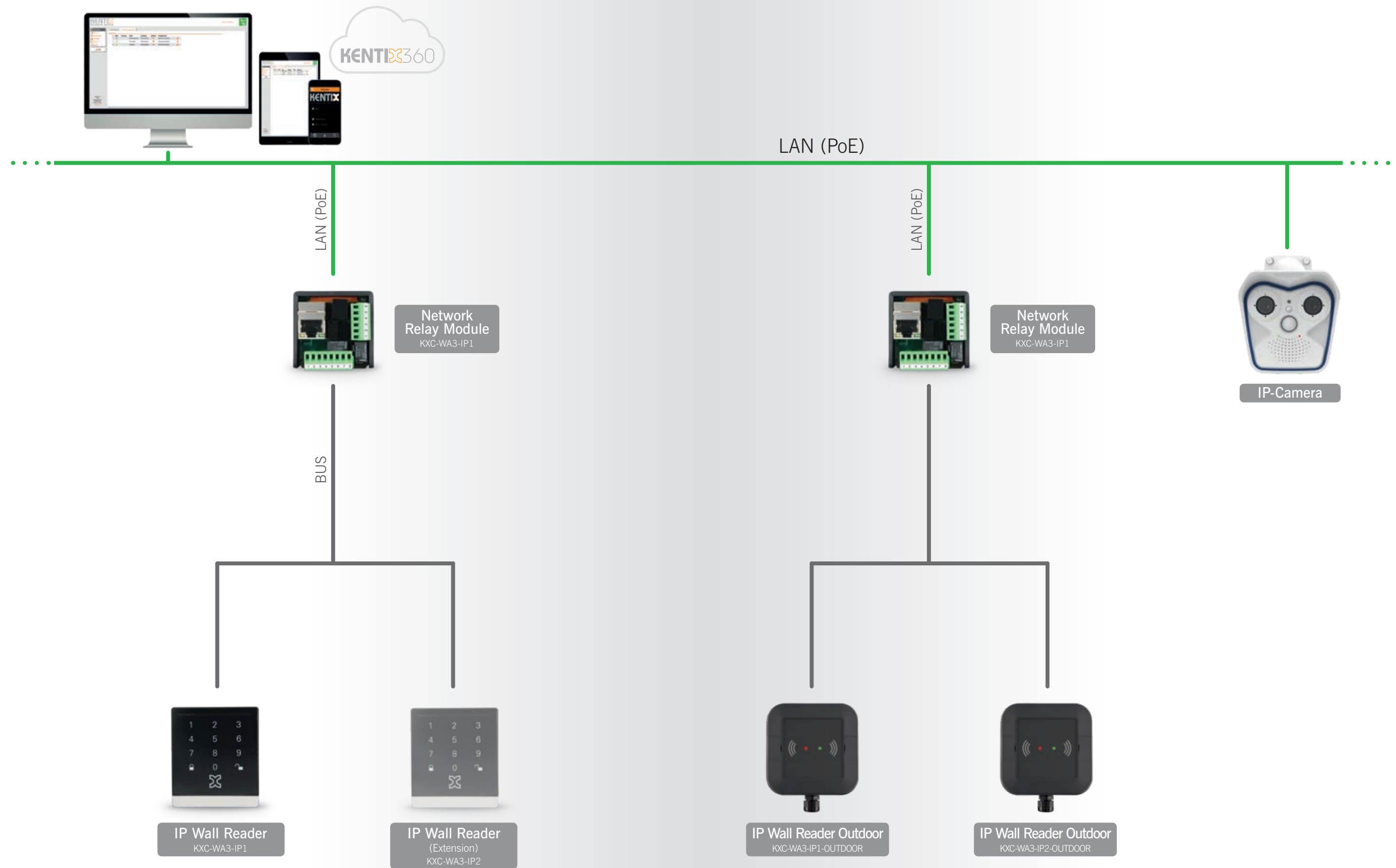
IP Wall Reader  
Network Relay Module  
RFID Token



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







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

## Everything at a glance – anytime and from anywhere

With the AccessPoint, you set up a complete IT networkable access solution in no time. Due to the interconnection of several AccessPoints, 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.

#	Status und Uhrzeit	DoorLock	Benutzer	Belegungsstatus	Detail
1	2019-07-19 08:53:27	DL001	Carl Strömer	OK	
2	2019-07-19 08:54:08	DL001	John Smith	OK	
3	2019-07-19 08:54:24	DL001	Andreas Langer	OK	
4	2019-07-19 08:55:12	DL001	John Smith	OK	
5	2019-07-19 08:57:16	DL001	John Smith	OK	
6	2019-07-19 08:58:02	DoorLock 1	John Smith	OK	
7	2019-07-19 08:58:40	DoorLock 1	John Smith	OK	Alarm "Türverriegelung"
8	2019-07-19 08:58:58	DoorLock 1	John Smith	OK	Alarm "Türverriegelung"
9	2019-07-19 08:59:16	DoorLock 1		OK	RFID-Tag nicht lesbar (Schlüsselkarte)

Access log book

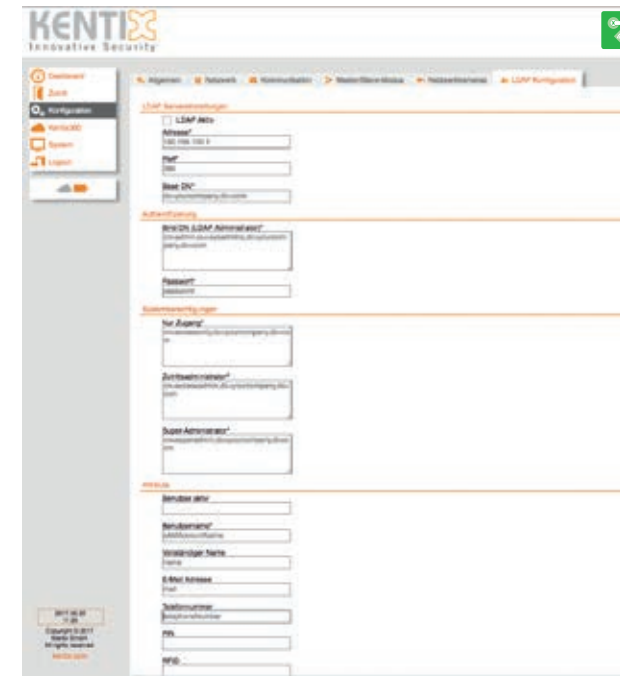
Time profile configuration screen showing a grid for defining access times for different doors.

Time profile

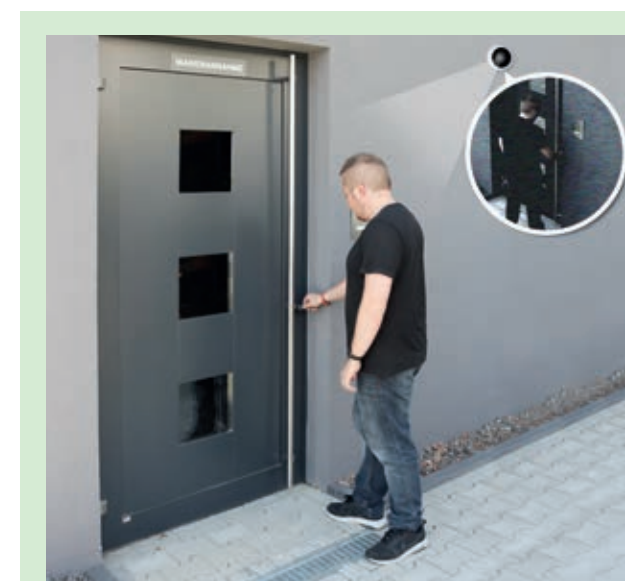
## Making access management even easier: Integration of Microsoft Active Directory (AD) and LDAP

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.



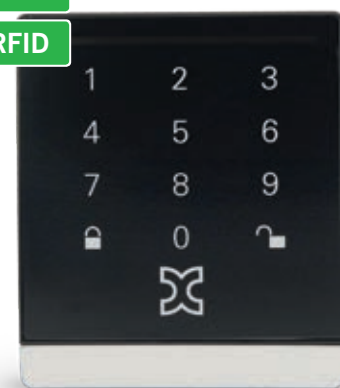
### Control is good, video is better

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.

LAN

PoE

RFID



## 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.



### Products

Type	Item number	Type	Delivery content	Item number
StarterSet Network Reader with IP Relay Module	KXC-WA3-IP1	RFID Token	1 piece	KKT-M
Network Extension Reader for StarterSet	KXC-WA3-IP2	RFID Tokens	25 pieces	KKT-M25
		RFID Card	1 piece	KKT-MC
		RFID Cards	25 pieces	KKT-MC25

### Accessories

### 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)

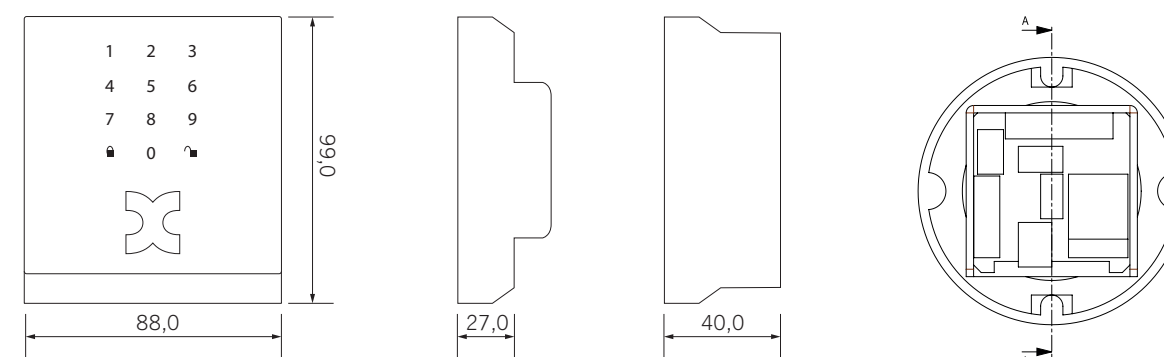
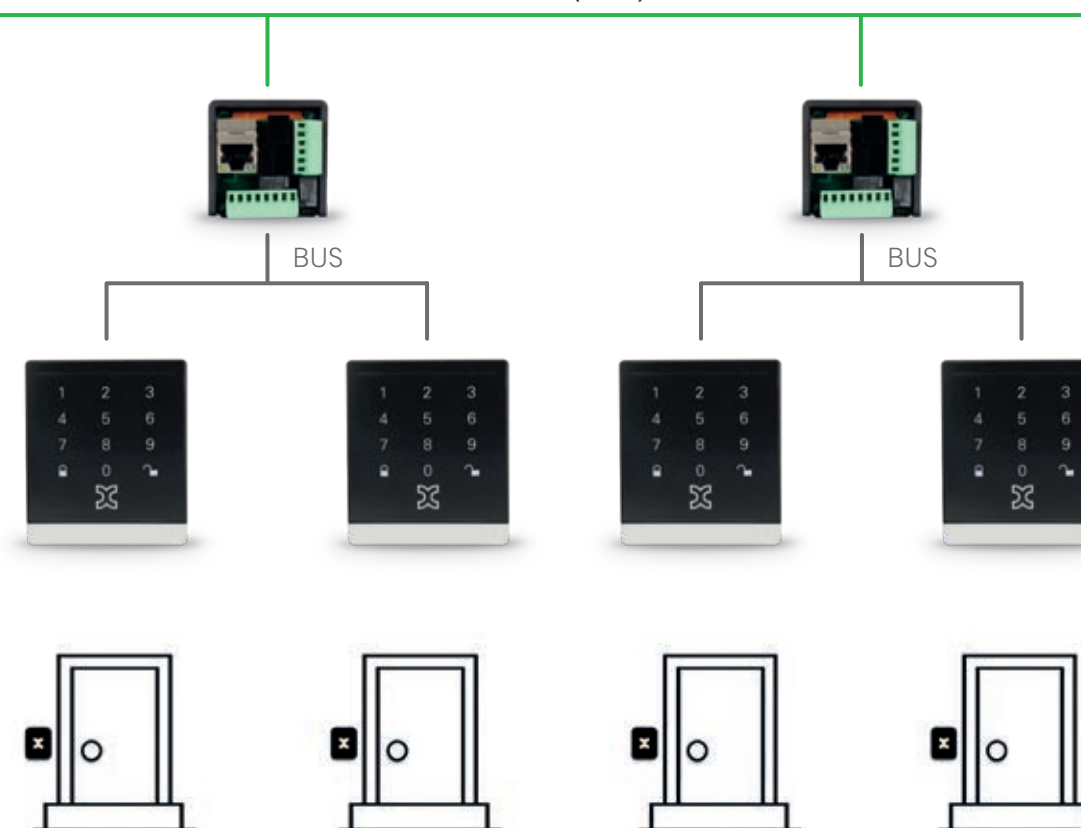
### StarterSet DoorLock-IP



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)





## IP Wall Reader Outdoor

The IP Wall Reader for outdoor use enables access control via RFID medium for harsh environments with IP67 protection rating and a wide temperature range. The Network Relay Module (PoE) forms the central unit with network connection. The administration is done centrally via the integrated web server (HTTPS). The Network Relay Module communicates via Bus connection with the IP Wall Reader. With the integrated PoE splitter, the door strike or opener is supplied with 24VDC directly via the reader module; additional cables are not required for power supply.



### Products

Type	Item number	Type	Delivery content	Item number
StarterSet Network Reader with IP Relay Module	KXC-WA3-IP1-OUTDOOR	RFID Token	1 piece	KKT-M
Network Extension Reader for StarterSet	KXC-WA3-IP2-OUTDOOR	RFID Tokens	25 pieces	KKT-M25
		RFID Card	1 piece	KKT-MC
		RFID Cards	25 pieces	KKT-MC25

### Accessories

### Technical Details

Function	IP Wall Reader for 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 +65°C, Relay Module 0 - 60°C, non-condensing
Protection class	Wall Reader IP67, Relay Module IP20
Configuration	Integrated web server (HTTP/HTTPS)
Extensibility	Extendable to two readers
Size Wall Reader	100 x 100 x 40
Size Relay Module	47 x 48 x 33 mm, mounting in outlet socket or on DIN rail
Audits	CE
Delivery content KXC-WA3-IP1-OUTDOOR	Wall Reader, Network Relay Module, 1x RFID Token, 3m SlimLine cable
Delivery content KXC-WA3-IP2-OUTDOOR	Wall Reader (requires KXC-WA3-IP1 as basis)

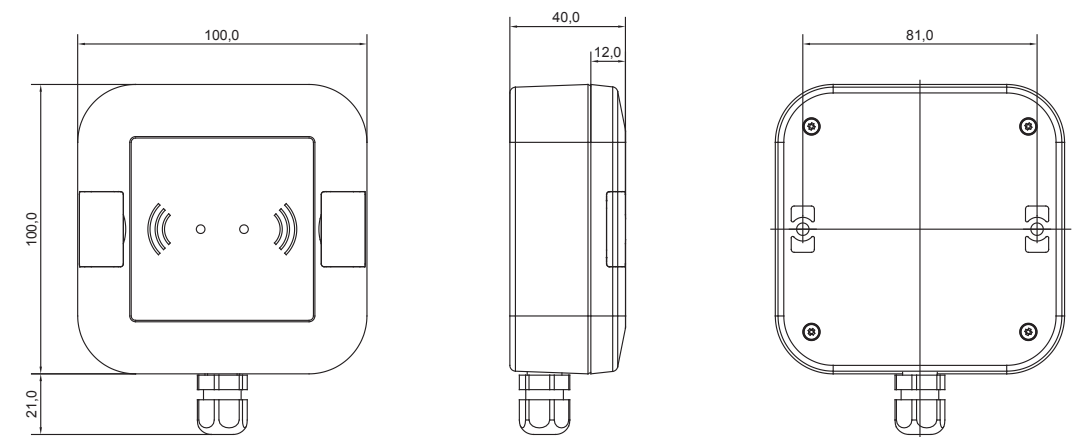
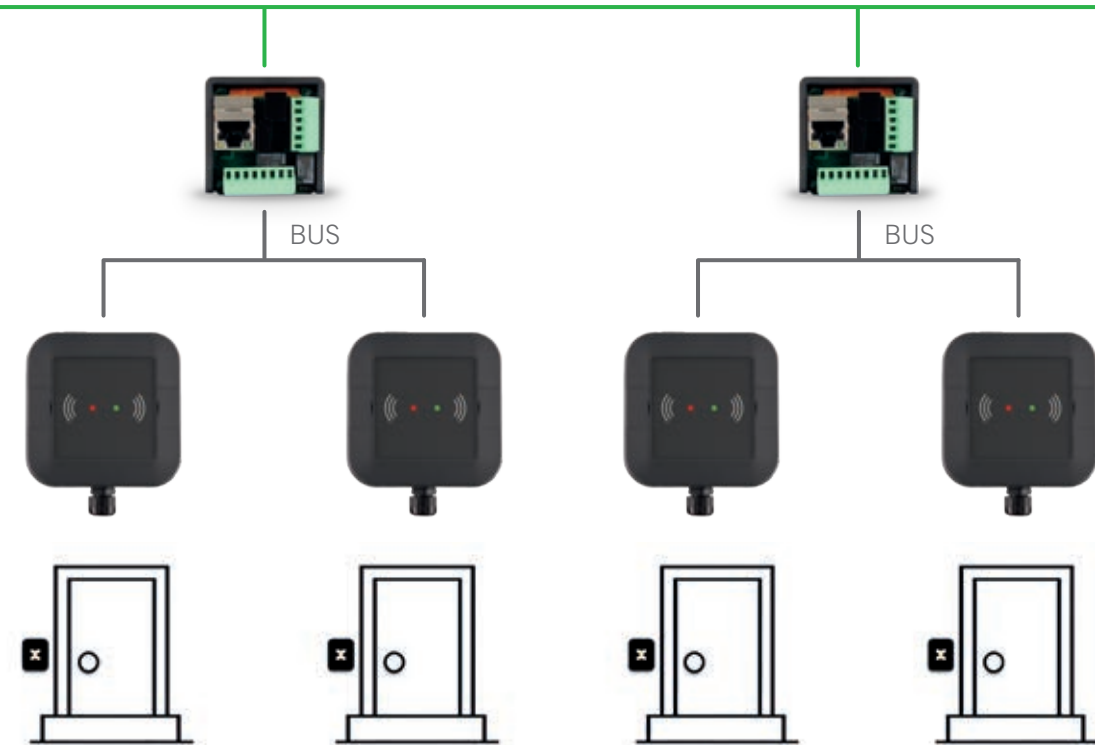
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### LAN (PoE)








## System components



Device	DoorLock-WA-IP	IP Wall Reader Outdoor
Type	KXC-WA3-IP1	KXC-WA3-IP1-OUTDOOR
Function	IP Wall Reader with RFID and LAN-networking	IP Wall Reader with RFID and LAN-networking
Maximum number of doors	Up to 1.998 doors	Up to 1.998 doors
Maximum number of DoorLocks per AccessPoint	2	2
Configuration	Web server (HTTPS)	Web server (HTTPS)
Smartphone app	✓	✓ (IP 67)
Online memory in the AccessPoint	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	✓	✓
RFID reader with MIFARE®	Classic®, DESFire®	Classic®, DESFire®
Remote opening	✓	✓
Arm/disarm Kentix alarm system	✓	✓
Maximum number of networkable AccessPoints	999	999
Door profiles	unlimited	unlimited
Time profiles (day of the week, time of day)	unlimited	unlimited
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)	✓	✓
PoE Splitter 24VDC	✓	✓
Alarm-Input	2	2
Door-Open alarm	✓	✓
Approvals	CE	CE
Power supply	PoE class 3	PoE class 3
Temperature range	-20°C up to +65°C	-20°C up to +65°C
Size (L x W x H in mm)	88 x 99 x 27	100 x 100 x 40

## Overview accessories

Type	Delivery content	Item number	Description
Master Card Set	 1 Master Card 2 Service Cards 2 Transponder Cards Battery Changing Tool	KXC-PS1	Master Card Set in MIFARE® DESFire® technology for setting up and managing the access systems (only required for wireless systems)
RFID Token	 1 piece	KKT-M	RFID key pendant in MIFARE® DESFire® technology Color: black*
RFID Tokens	 25 pieces	KKT-M25	RFID key pendant in MIFARE® DESFire® technology Color: black*
RFID Card	 1 piece	KKT-MC	RFID transponder card (MIFARE® DESFire®, 13.56MHz) Color: white, blank*
RFID Cards	 25 pieces	KKT-MC25	RFID transponder cards (MIFARE® DESFire®, 13.56MHz) Color: white, blank*

\*Special colors and printing upon request

## Application example: Access control for offices across branches

Protection of non-public doors in or outside the building against nonauthorized access across multiple branches

For the protection of the building or rooms respectively concerning authorized/unauthorized access, you will need the access control system Kentix DoorLock. In the area of the door, the IP wall reader is installed on the wall. The network-relay module can be installed in a flush-mounted socket directly underneath the reader or inside the room on a DIN rail. The IP wall readers are connected to the network-relay module via a fixed wiring. The module provides a central administration for up to 2 connected doors

via a web interface. It also contains a central log-book of all transaction (all access). Transactions in the entrance area are automatically linked to a video image.

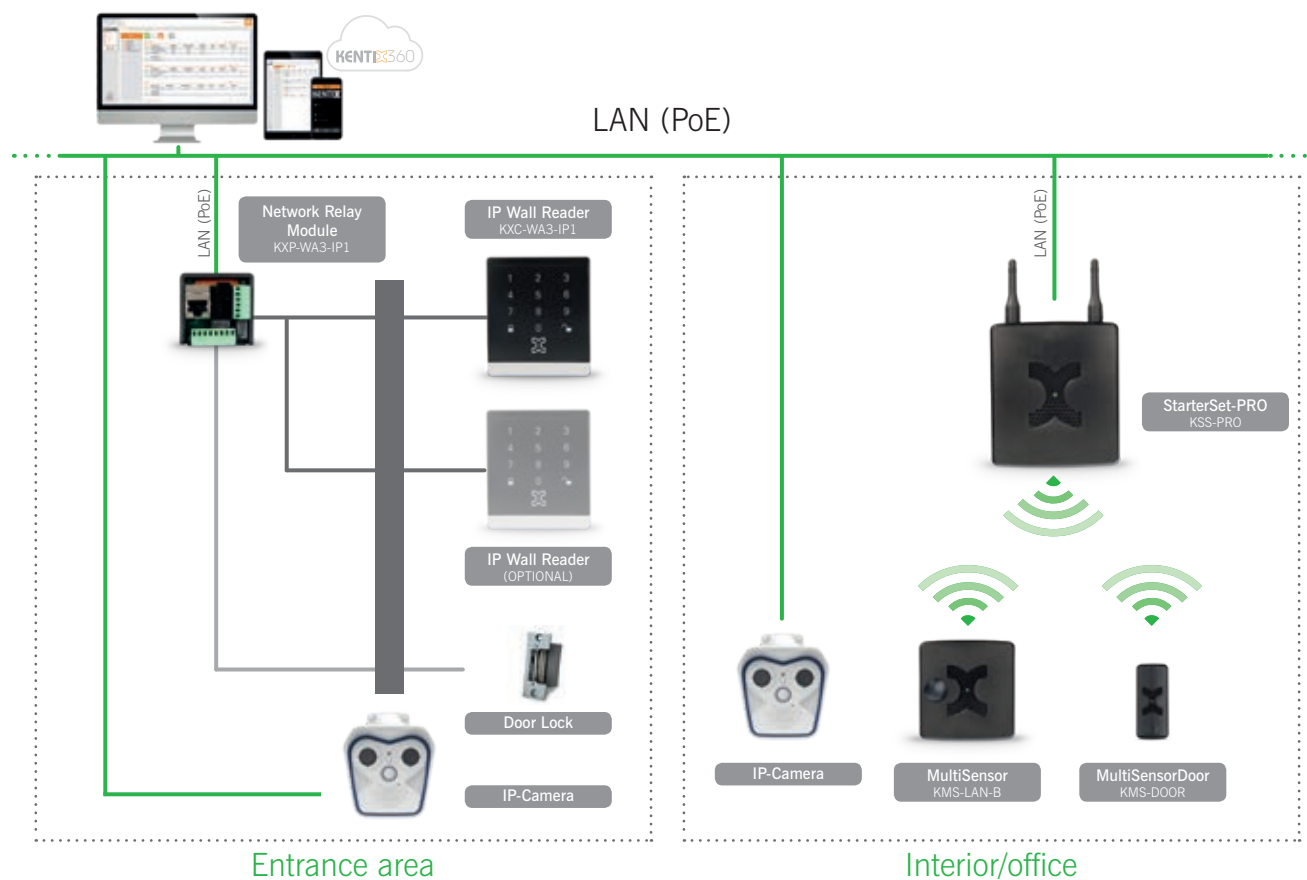
Multiple network-relay modules can be combined to one system, so that changes only have to be made once. This way, the installation can always be expanded with additional branch locations. As the IP wall readers are suitable for outdoor use, they can also be used for barriers or roller doors for example.

### Parts list/Order assistance

Type	Item number	Quantity
IP wall reader incl. network-relay module	KXP-WA3-IP1	1
Expansion reader for network-relay module	KXP-WA3-IP2	1
Camera	M3105-LVE	1

### Extensions

Type	Item number	Quantity
StarterSet-PRO	KSS-PRO	1
Camera	M3105-LVE	1



## 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 AccessPoint via radio. On a web surface, the AccessPoint 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.

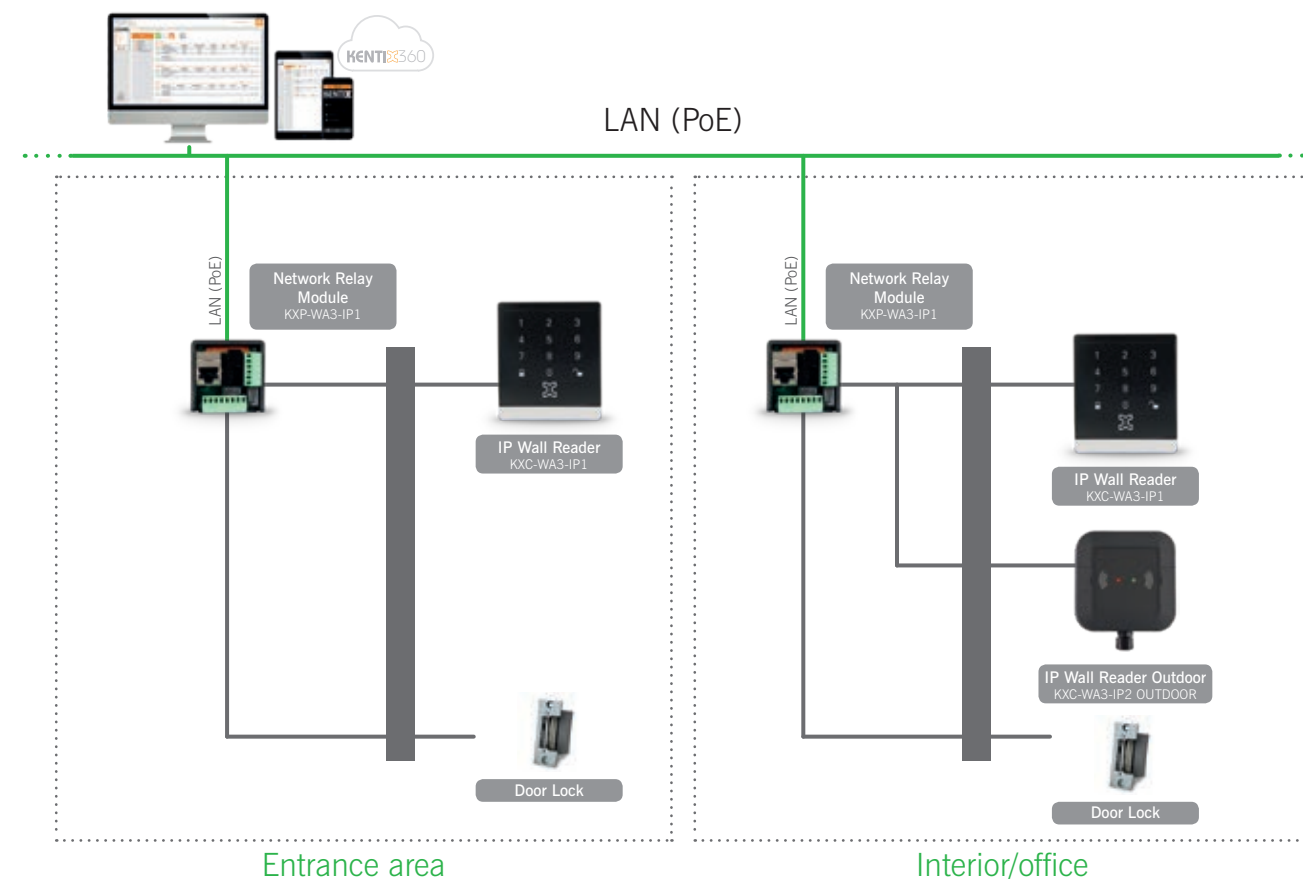
Several AccessPoints can be connected to one system so that changes only need to be made from one central position. This way, the site can be extended any time with more server cabinets or doors to adjoining rooms as well.

### Parts list/Order assistance

Type	Item number	Quantity
AccessPoint	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





## 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 channel/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)
- Effect 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 SmartMeters offer the easiest solution in order to monitor these completely and to consistently integrate them into your network.



### 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

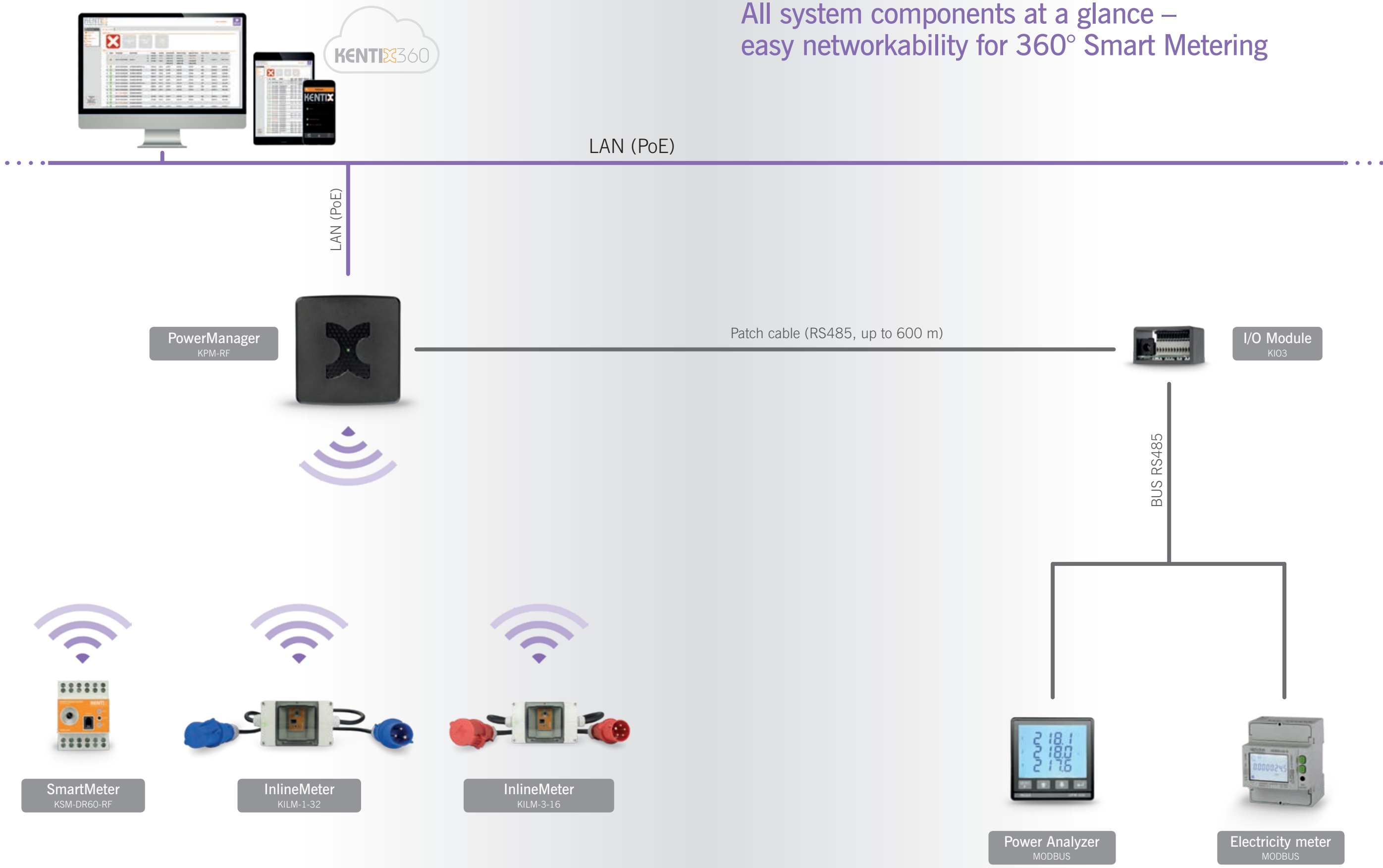


PowerManager Central monitoring with radio, ModBus and LAN

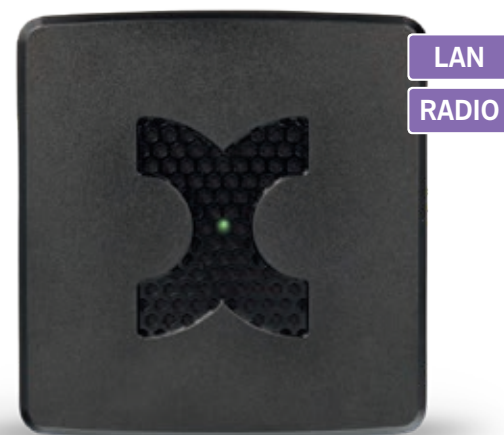


ZigBee PowerMeter for easy integration without complex network integration

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







## 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.

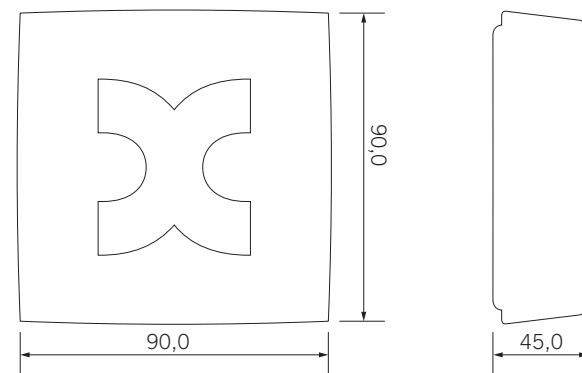


### Products

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°C, humidity 5-95%, non-condensing
Delivery content	PowerManager, antenna, mounting bracket, mounting material, 3 m SlimLine cable
Audits	CE

### RADIO



## Wireless SmartMeter

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 PowerManager 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.

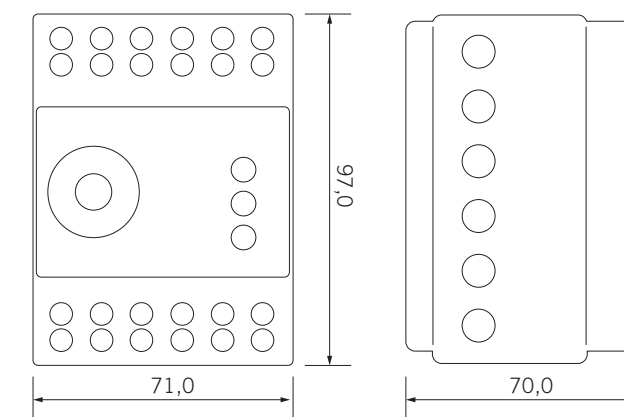


### Products

Type	Item number
Wireless SmartMeter	KSM-DR60-RF
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

Type	Item number
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 32
Power supply	1/3 x 230/400V (neutral) +/-10%
Current measurement	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), effect factor, consumption (kWh)
LED	Signal, teach-in signalization
Clamps	Screw terminals, diameter 5.5 mm (up to 16 mm <sup>2</sup> )
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
Audits	CE



## 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.

### The following systems support video recording:

- AlarmManager (KAM-BASIC/PRO)
- MultiSensor-LAN (KMS-LAN)
- AccessPoint (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

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.

### Example for integration (HTTP/HTTPS):

**MOBOTIX:** /cgi-bin/image.jpg?size=640x480

**AXIS:** /axis-cgi/jpg/image.cgi?resolution=640x480

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.



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

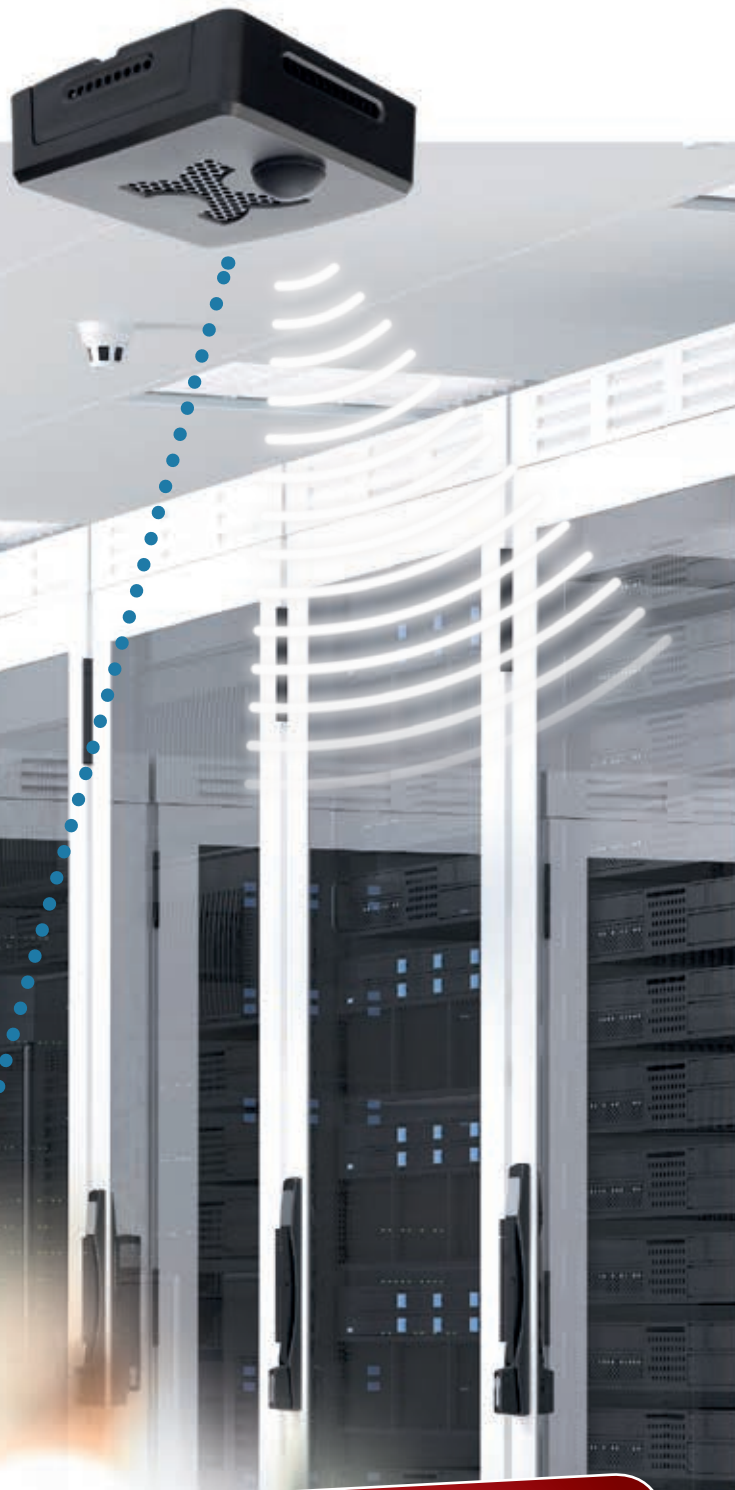




## Remote Management with the Kentix360 Cloud: Access anytime and from anywhere

### 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.



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

Available on the App Store | ANDROID APP ON Google play

Kentix360 is the cloud-based security central monitoring mission-critical IT infrastructures. System administrators receive information on the security state of their IT environment anytime and anywhere with the Kentix Cloud solution. With Kentix360, critical applications in Industry 4.0, logistics and supply can be monitored even more efficiently. The Cloud solution informs users on any terminal device about the state of the IT in-

frastructure and about potentially forming threats and therefore, the responsible persons can react as quickly as possible.

The advantage is that you have an overview of your rooms at any time via the app and therefore you can take action without being on site yourself or having to commission somebody.

#### The Kentix360 Cloud in key words:

- Included in any Kentix AlarmManager and Kentix AccessPoint or in the StarterSets respectively
- Remote Management of the entire system from anywhere and at any time, e.g. to unlock doors or arm/disarm alarm zones
- Redundant messages: SMS, SNMP, E-Mail, Push notifications, mobile Kentix app (Android, iOS)
- Routine system checks, regularly testing all system components for functionality
- Easy activation via the device's web interface (cost: 96,00 EUR/year plus VAT)
- Also included in the product: Kentix SIM card including 600 alarm SMS (cost if used: 72,00 EUR/year plus VAT), alternatively using an own SIM card is possible

#### Advantages:

- Secure access via app from anywhere
- Data storage for 24 months
- Push messages on smart phone and integrated e-mail service
- Backup, daily system check
- Already integrated SIM card for redundant alarm SMS
- No additional Cloud service provider necessary

#### Security:

- Encrypted communication
- No open ports from outside
- Multi stage authentication with ID and password
- Brute Force detection with interlock
- Hosting in German data center

### Kentix360 Cloud

**96,00 EURO plus VAT**  
per year, per device  
Usable for Kentix AlarmManager or AccessPoint or StarterSets respectively  
Minimum contract term 12 months

- Secure access via app from anywhere
- Data storage 24 months
- Push notifications and integrated e-mail service
- Backup for AlarmManager configuration
- Hourly routine check for availability
- Regular updates with new functions
- Kentix360-SIM included in any StarterSet

### Kentix360 SIM card

**72,00 EURO plus VAT.**  
Free of charge for the first year in connection with the Kentix360 Cloud, costs after that are 72,00 EUR plus VAT per year or 600 alarm messages respectively

- Service provider: Deutsche Telekom
- Included with any AlarmManager and StarterSet
- Activation if required, alternatively using an own SIM card is possible
- Only usable in connection with Kentix360 Cloud
- Contains 600 alarm SMS that are recharged after being used up or after one year (depending on which occurs first)
- Unused SMS expire

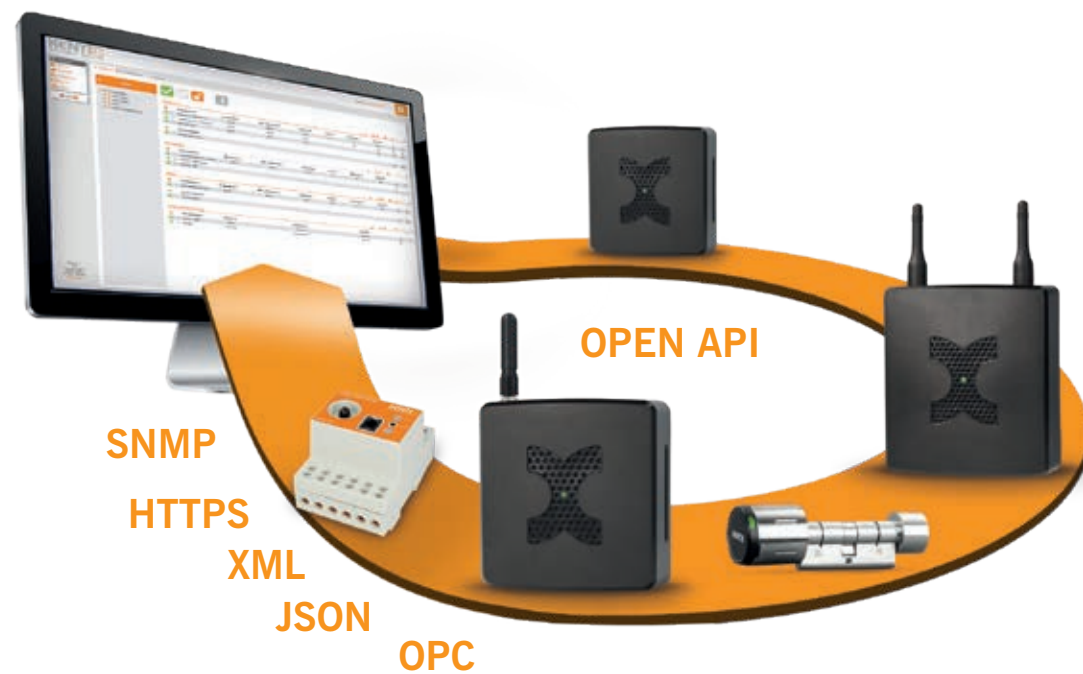
## Complete IT Infrastructure Monitoring

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.



#### 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



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



# IPTechView™

The RMM Platform for MSPs in IP Technology

The Kentix Environmental and Access Control solution is compatible with IPTechView™



### What is IPTechView™?

[www.iptechview.com](http://www.iptechview.com)

The need to easily configure, manage and monitor complex systems is essential to providing support, care and maintenance to ensure long-term system health and functionality. IPTechView™ helps oversee and maintain these systems in IP technology. This easy and simple management tool acts as a central command and control center for all IP systems an MSP touches, ranging from servers to devices and everything in between.

With IPTechView™ you'll be able to provide faster response time to your customers, save costs on installation, do remote maintenance and overall achieve higher uptime. Make more but work less with IPTechView™ RMM.



Focus



Proactive Escalation



Proactive Health Monitoring



Recurring Revenue



Branded Reporting



Secure

Distributed by ABP Technology:



IPTechView

ABP Technology is a Dallas, TX-based, value-added distributor of IP Technology products and solutions throughout the Americas, including the United States, Latin America, Canada and the Caribbean. The ABP Tech solutions portfolio includes IP Communications Voice & Video, IP Surveillance & Physical Security, and IP Infrastructure Wired & Wireless. The company serves Technology Partners of many kinds and industries such as IT integrators, telecom resellers, IT VARs, MSPs, ITSPs and WISPs. Find out more at [www.abptech.com](http://www.abptech.com)



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

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