KENTIX
Innovative Security

IMPLEMENTATION EXAMPLE WITH TOPOLOGY

Physical security of distributed, critical (IT) infrastructures - Secure, efficient and scalable

Kentix ist Mitglied im

BSKI
Bundesverband für den Schutz Kritischer Infrastrukturen e. V.

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Physical security of distributed, critical (IT) infrastructures - Secure, efficient and scalable

The requirement

The constantly growing digitalisation places special demands on companies and organisations. The aim is to achieve an appropriate level of protection in accordance with the current legal (IT basic protection) and organisational requirements, while at the same time ensuring highly available operation.

The access control of the respective area to be protected and its real-time documentation must be established. In addition, environmental parameters should also provide remote indications of possible error sources, sabotage or imminent system failures (e.g. due to fire, leakage, etc.).

All data are clearly monitored in a dashboard from any location. Installation and operation should be cost-efficient and simple. Open interfaces allow easy integration into third-party systems. Absolutely free scalability, modularity and cost-effective, simple maintenance must be part of the solution concept.

The Kentix system solution

The monitoring of undesirable environmental conditions and risks in the respective room is taken over by the MultiSensor-LAN or MultiSensor-TI. Both systems reliably monitor up to 20 square metres for temperature, humidity, early fire detection, movement, sabotage, etc. With its thermal image sensor, the Multi-Sensor-TI also monitors surface temperatures of e.g. UPSs or electrical sub-distributions.

To monitor leaks, one leakage sensor is connected to each MultiSensor. I/O modules accept additional digital or analogue sensors from third-party systems into the Kentix system. The Kentix AlarmManager manages the connected sensors and monitors all detected values. If threshold values are exceeded, it sends alarms to users via SNMP, email, push message and redundantly via SMS.

Access control is implemented with the Kentix online IP access control system. An IP wall reader connected to a SmartRelay module is fitted to doors with electromagnetic locks. Closing and locking contacts are also connected to the SmartRelay module to ensure permanent monitoring of the door status.

The integrated PoE splitter provides the power needed to open the lock when authorised. Entrance doors as well as doors in buildings are equipped with the Kentix wireless knob or lever handle and connected via the AccessManager. Unlimited networking of Access Manager and SmartRelay modules makes the system freely scalable across locations.

The system is managed automatically from a central location in real time via an integrated web server application and/or open interfaces. Furthermore, it is documented or, if necessary, alerted as to who, when and where access was gained. Remote opening of doors is also possible at any time thanks to the integrated software.

The simple, modern and resource-saving operation is realised by the KentixOS. KentixOS is the integrated, freely scalable and modular IoT software platform that, in addition to the web front ends, provides open interfaces for easy integration into third-party systems (ReST-API, WebHooks, SNMP, LDAP, etc.). At the same time, KentixOS is the basis for further AI analyses and visualisations.

Zentrale

AlarmManager-PRO
ART: KAM-PRO
Central unit with network, radio and 4G. Monitoring and management of all sensors in the network. Redundant alerting via SNMP, email, push message or SMS.

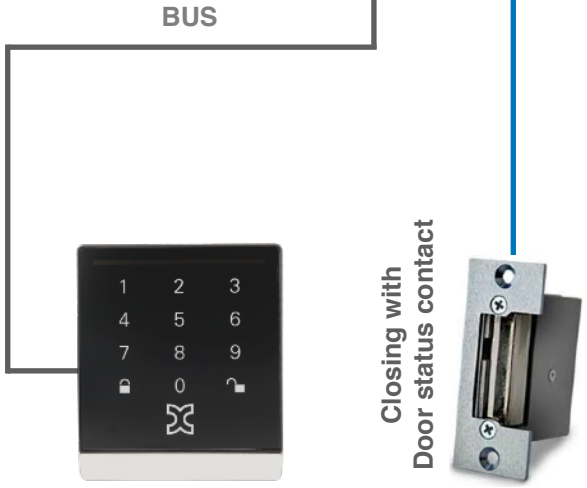
PoP, transformer, pump station

LAN (PoE)

MultiSensor-LAN-RF
ART: KMS-LAN-RF
8 integrated sensors for monitoring up to 19 hazards. 2-factor early fire detection.One MultiSensor-LAN-RF monitors up to 20 m².

LeckageSensor
ART: KLS03
Mounting on the floor or in the raised floor. For point detection or optionally with Rope for larger areas

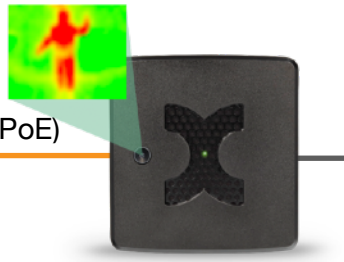
AccessManager SmartRelay
ART: KXP-2-RS
Connection of up to 2 IP wall readers. Powered outputs for opening electromechanical locks. Central management through integrated web server.



IP wall reader (PoE)
ART: KDC1-W
RFID and PIN code wall reader for indoor and outdoor use. Encrypted communication and power supply via bus connection

UPS/Technical room

LAN (PoE)



BUS

MultiSensor-TI
ART: KMS-TI
9 integrated sensors for monitoring up to 20 hazards. 4-factor early fire detection. Integrated thermal image sensor measures surface temperature at 1,024 measuring points.
One MultiSensor TI monitors up to 20 m².

LeckageSensor
ART: KLS03
Mounting on the floor or in the raised floor. For point detection or optionally with Rope for larger areas

LAN (PoE)

Air conditioning
UPS systems
Generator

Digital I/O extension module
ART: KIOXXX
Enables the integration of digital and analogue sensors such as air conditioners, UPS systems or generators.

LAN (PoE)

AccessManager
ART: KXP-16
Central unit with network and radio. Manages up to 16 doors and an unlimited number of users with the appropriate time authorisation profiles. AccessManagers can be networked with each other for an unlimited number of times.

Radio door knob and lever handle
ART: KXC-KN1 / KXC-LE
Doors are equipped with the Kentix radio knob or lever handle.The data from the user RFID cards is sent by radio to the AccessManager, which then checks the authorisation.

LAN (PoE)

Useful system supplement for event documentation

LAN (PoE)

IP camera (Indoor)
ART: KMS-TI
For events (bookings, alarms, etc.) images are retrieved and assigned to the events. The images can be viewed in the event logs or sent by email.

Alarm siren indoor/outdoor
ART: KFLASH1
Loud (110dB), bright flashing light siren. Simple connection via RJ45 connection to the Kentix system port