

IMPLEMENTATION EXAMPLE WITH TOPOLOGY

Physical IT operation in the DC container -
secure, transparent and remote-capable

Kentix ist Mitglied im

BSKI 

Bundesverband für den Schutz
Kritischer Infrastrukturen e. V.

Physical IT operation in the DC container - secure, transparent and remote-capable

The requirement

IT operation in a DC container places special demands on the operator. The aim is to achieve an appropriate level of protection in accordance with legal and organisational requirements, despite difficult environmental conditions, with resource-saving effort. At the same time, high-availability operation must be ensured. An essential basis is to establish controlled access, its documentation and 24/7 monitoring of the locking status of the accesses, technical rooms and, if necessary, the individual IT racks. Environmental parameters should provide remote indications of possible sources of error, sabotage or imminent system failures (e.g. due to fire, leakage, etc.).

The Kentix system solution

Access control is handled by the Kentix online IP access control system at entrances and to the equipment room with the WA6 IP wall readers or directly at the IT rack with RA4 IP cabinet locks. Locking and interlocking contacts monitor the status of all doors. Via an integrated web server application or open interfaces (LDAP, ReST-API etc.), the system can be managed remotely from a central location in real time and authorisations can be granted or revoked. Furthermore, it is documented who, when and where access was granted.

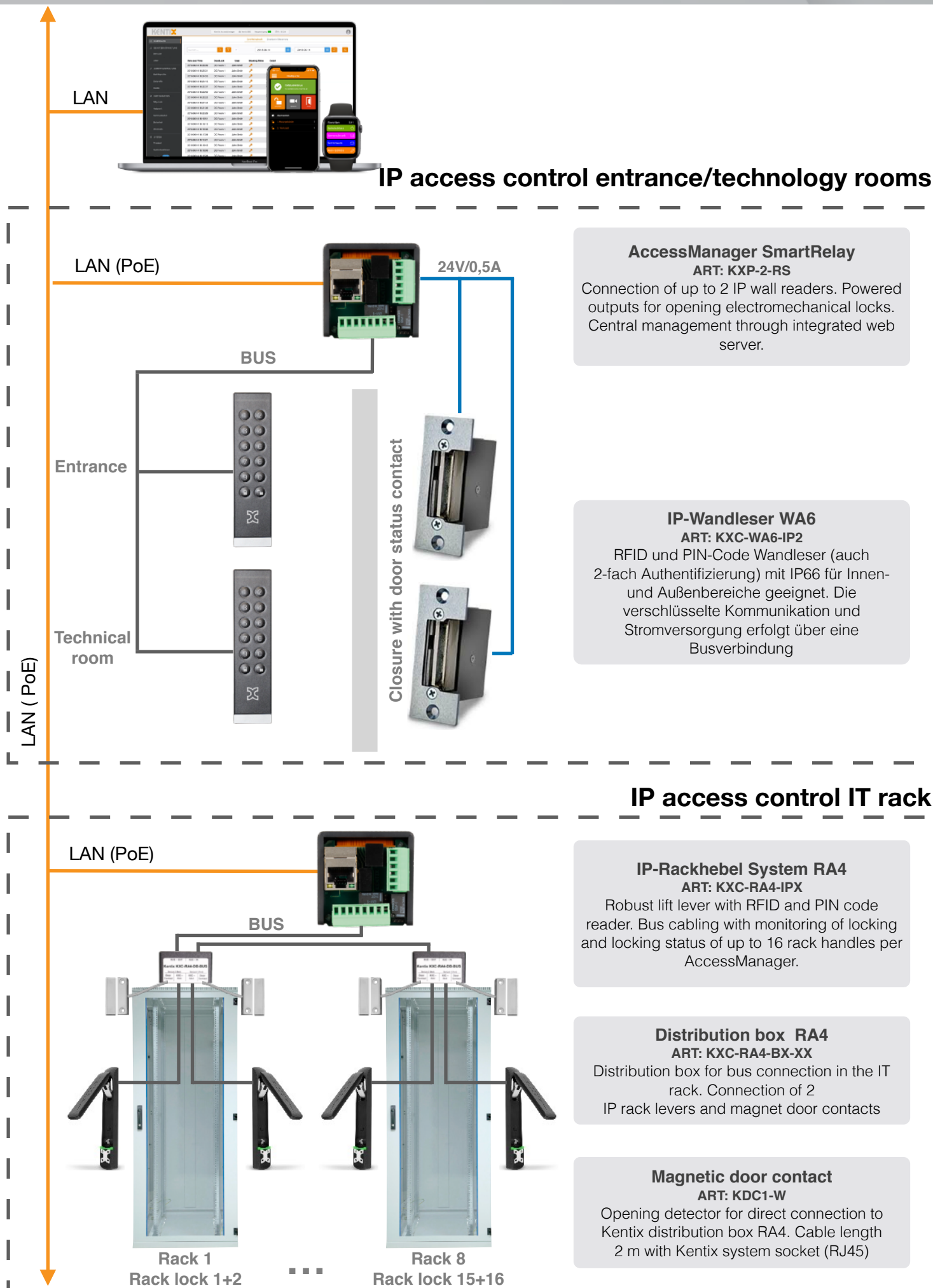
The MultiSensor-TI and MultiSensor-LAN are used to monitor undesirable environmental conditions in the IT and technical room. Both systems reliably monitor up to 20 m² for temperature, air humidity, early fire detection, movement, sabotage, etc. With its thermal image sensor, the MultiSensor-TI also monitors surface temperatures of e.g. UPSs or electrical sub-distributions and thus provides another important detection level for early detection of capital damage. For monitoring leakages and contamination, up to 2 leakage and contamination sensors each are connected to the MultiSensors. 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

The calibrated measurement of power consumption including DGUV V3-compliant leakage current measurement is intended to provide additional transparency and operational safety. This measurement also helps to optimise operation and to be able to react quickly in case of abnormalities and deviations. All data are to be clearly monitored in a dashboard from any location and alarms can be sent. If necessary, it should be possible to switch servers remotely. Installation and operation should be cost-efficient and simple. Open interfaces should enable easy integration into third-party systems. Free scalability, modularity and cost-effective, simple maintenance must be part of the solution concept.

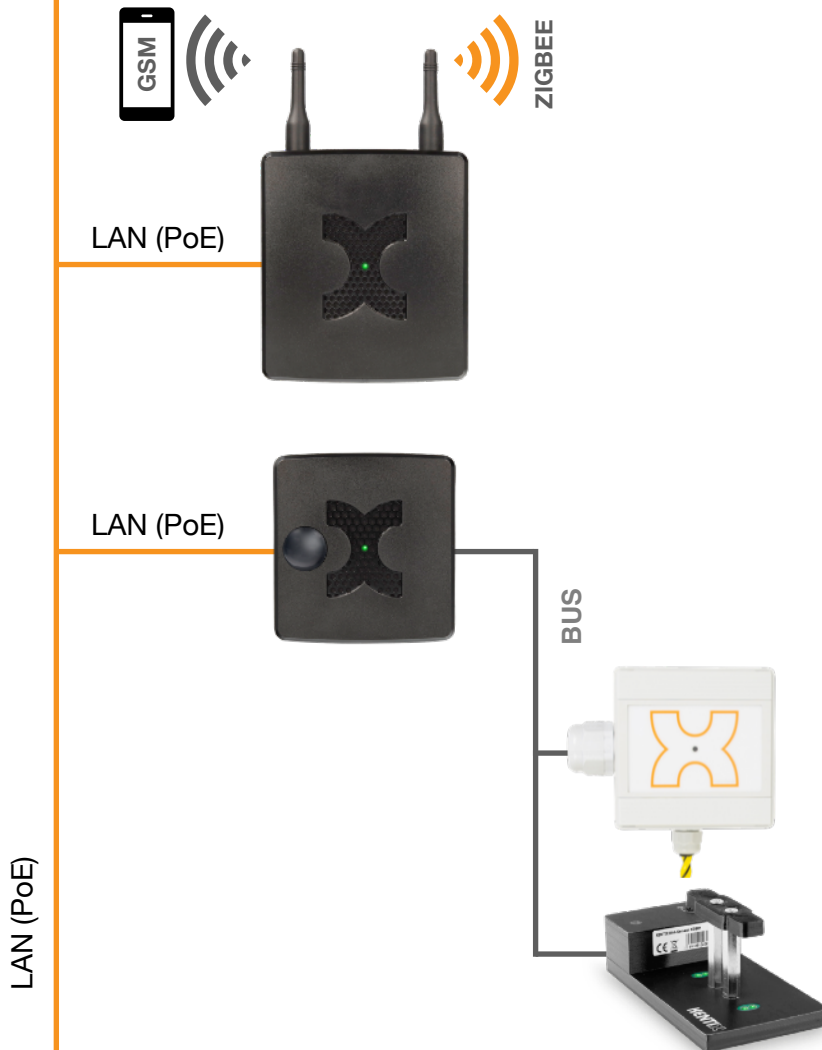
values are exceeded, it sends alarms to users via SNMP, email, push message and redundantly via SMS.

The intelligent and highly available Kentix SmartPDUs are used for calibrated current measurement. In addition to a DGUV V3-compliant leakage current measurement, all important consumption parameters are measured and fed into the monitoring system. Optionally, all IEC C13/C19 ports can be switched and measured individually. The MultiSensor installed in the PDU provides values for temperature, humidity, fire gas and manipulation directly in the rack, thus creating granular transparency and security. The Kentix IP rack locking system RA4 can be optionally connected to the SmartPDU, simplifying installation, operation and maintenance.

The simple, state-of-the-art 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, the KentixOS is the basis for further AI analyses and visualisations.



Environmental monitoring IT room



AlarmManager-PRO

ART: KAM-PRO

Zentraleinheit mit Netzwerk, Funk und LTE. Monitoring und Management aller Sensoren im Netzwerk. Redundante Alarmierung über SNMP, Email, Push-Nachricht oder SMS

MultiSensor-LAN

ART: KMS-LAN

8 integrierte Sensoren zur Überwachung von bis zu 19 Gefahren. 2-Faktor Brandfrüherkennung. Ein MultiSensor-LAN überwacht bis zu 20qm

LeckageSensor

ART: KLS03

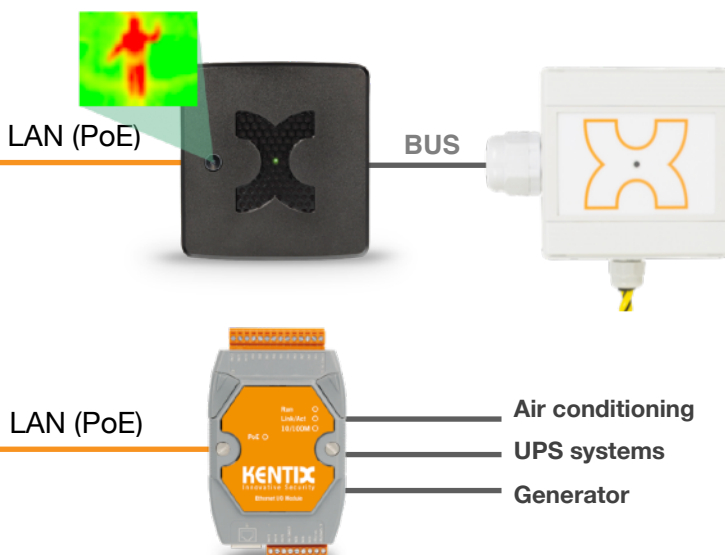
Montage am Boden oder im Doppelboden. Zur Punktdetektion oder optional mit 10 m bzw. 20 m Rope für größere Flächen

Staub/Schmutzsensord

ART: KDS01

Optischer Staub-/Schmutzsensord zur Erkennung des Verschmutzungsgrades in IT-Racks und Doppelböden

Environmental monitoring UPS/technology room



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.

Leakage sensor

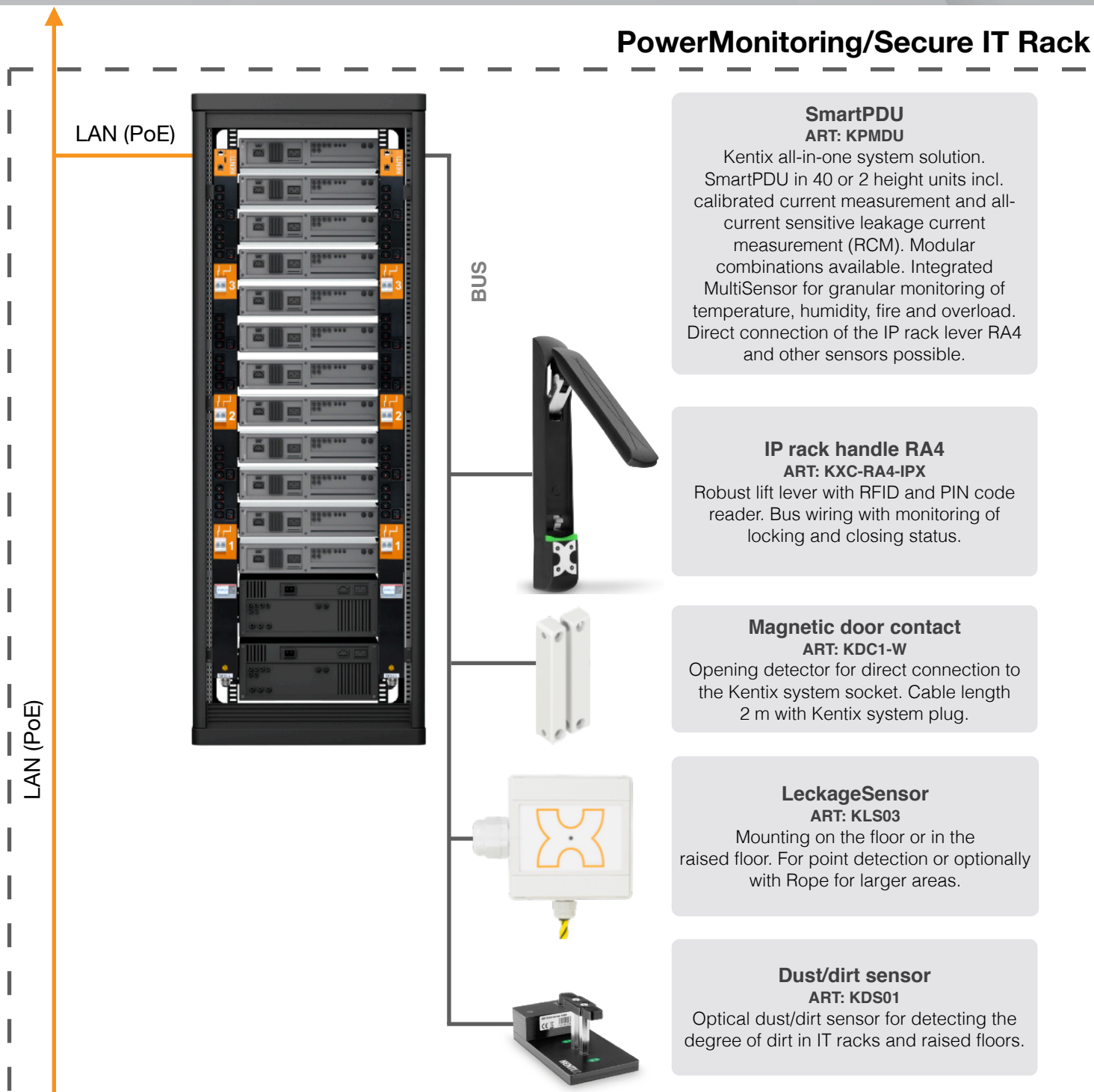
ART: KLS03

Digital I/O extension module

ART: KIOXXX

Enables the integration of digital and analogue sensors such as air conditioners, UPS systems or generators.

PowerMonitoring/Secure IT Rack



System supplement for monitoring and alerting

