



HW group

Solutions and applications 2021



HW group IoT solutions

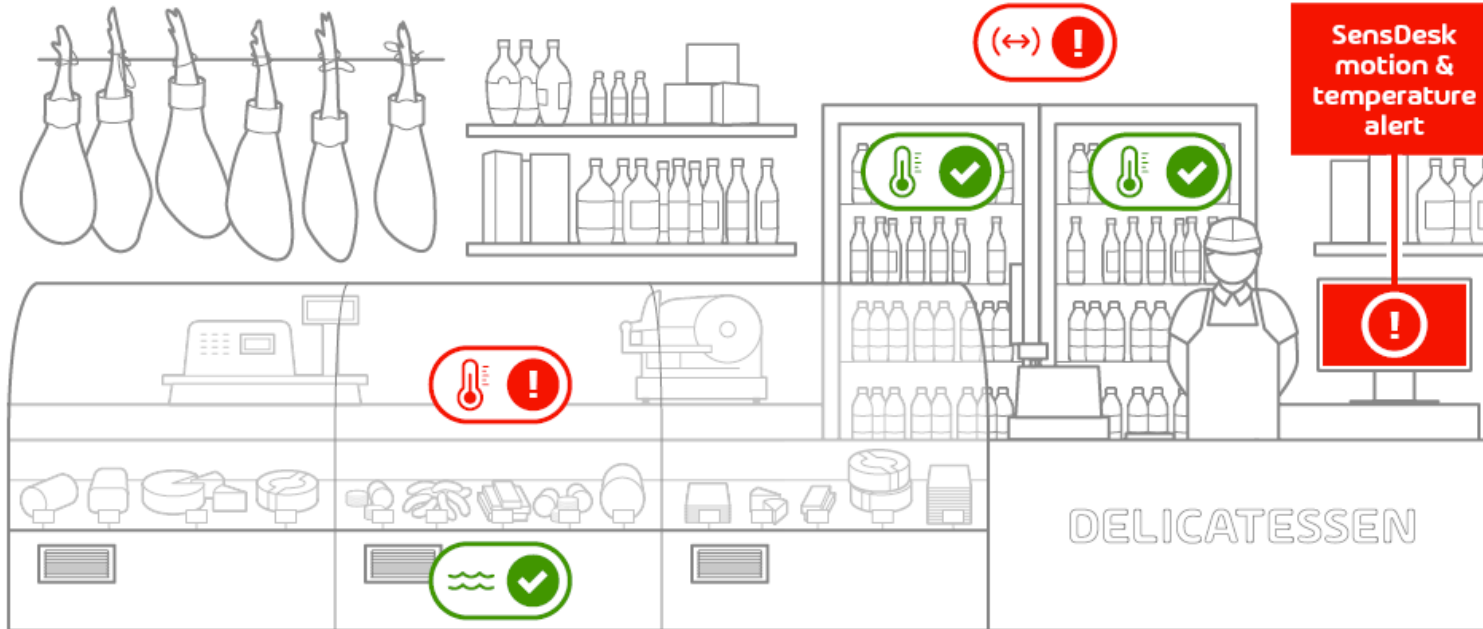
*18 years of experience
with projects in industry and IT.*

- Solutions for small end users as well as large industrial IoT
- We can do all types of data collection:
 - Public or private cloud
 - Third party SW or cloud
 - Direct connection to devices
- Easy setup and installation, remote maintenance
- Set and forget devices, stable and proven technology



Typical Applications

Stores & retail

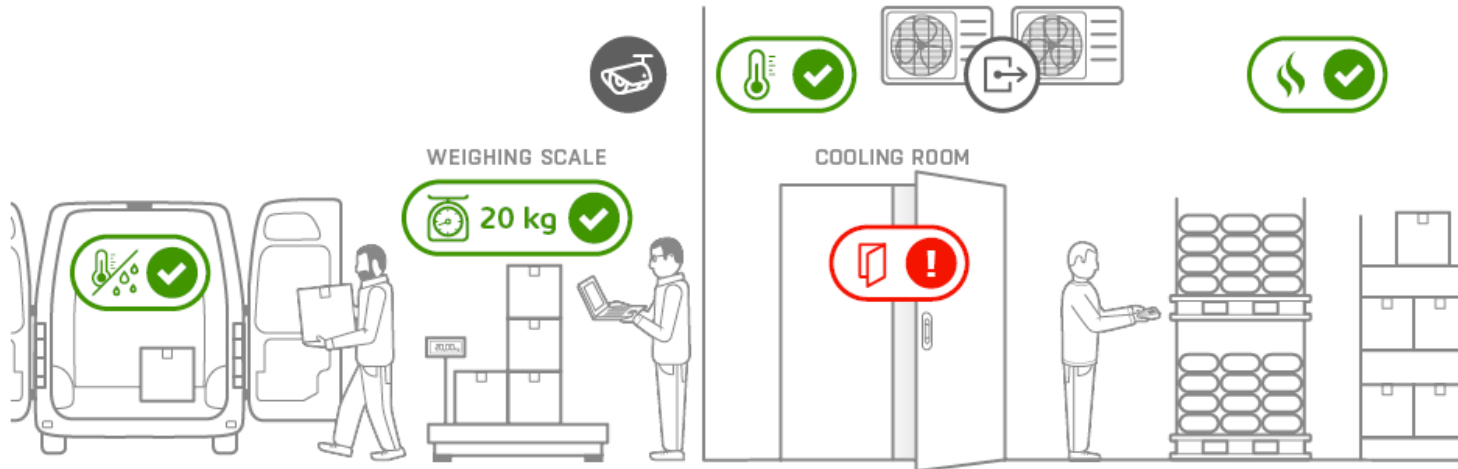


Requirements

- Temperature and humidity
- Water leaks and fire detection
- Motion detection
- Automatic reports
- Easy installation



Warehouses & storage rooms

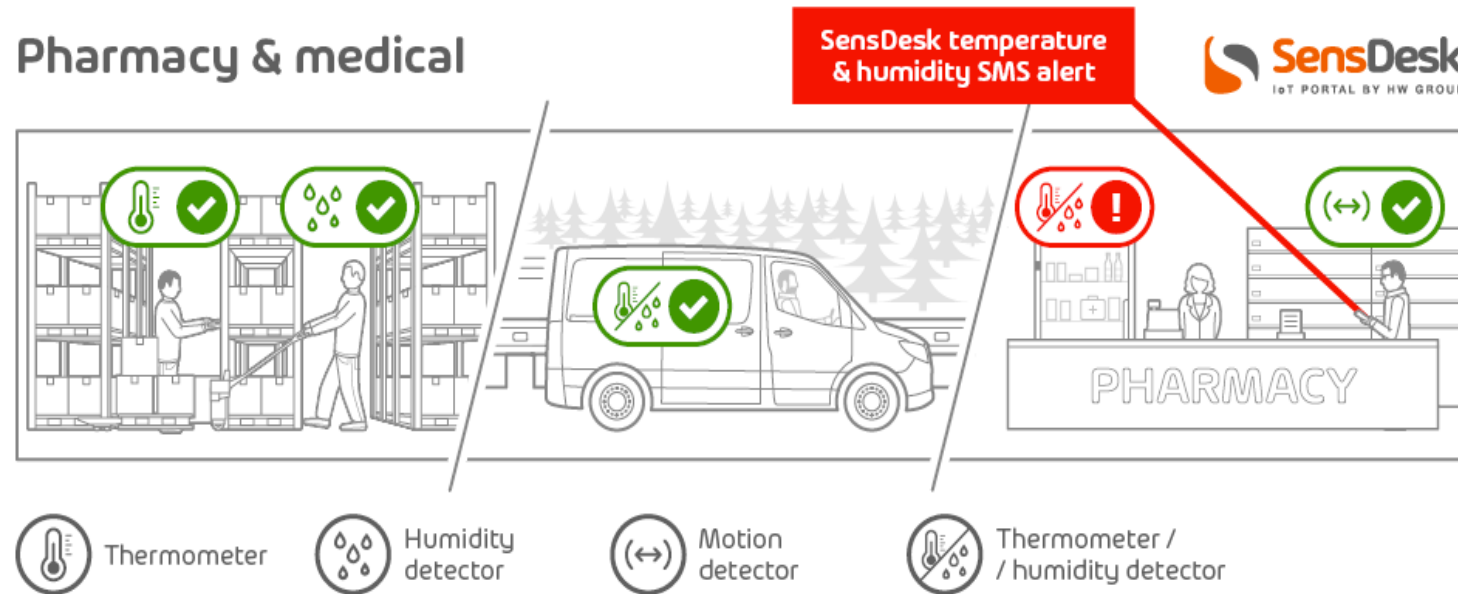


- | | | | |
|-----------------------|--------------|----------------|--------------------------------------|
| Scale | Thermometer | Smoke detector | Thermometer /
/ humidity detector |
| Door contact detector | Relay output | Camera | |

Requirements

- Temperature and humidity
- Water leaks and fire detection
- Intrusion detection
- Remote air condition control
- Easy deployment

Pharmacy & medical



Requirements

- Temperature and humidity
- Precise flat sensors for fridges
- Wide temperature range (-200 °C)
- Easy installation and setup
- Multiple fridges and sites

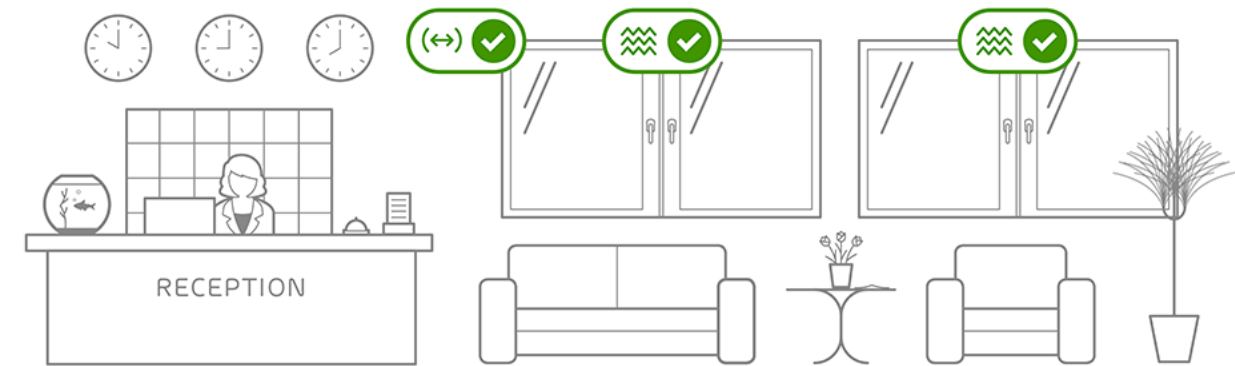
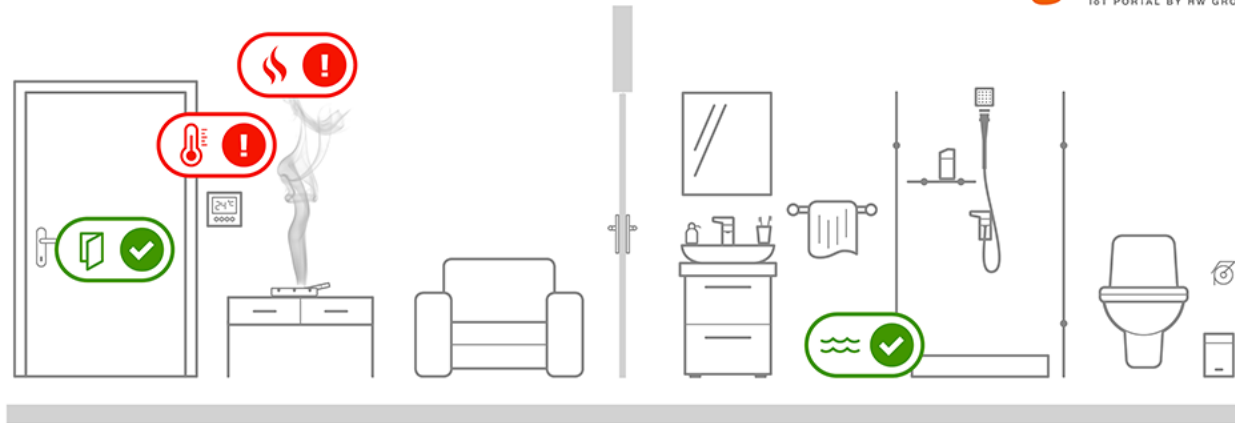
Schools & public buildings



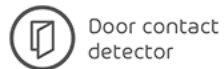
Requirements

- Complex IoT monitoring
- Hundreds of measuring points
- Detailed analysis of data, reports
- Several layers of alarming
- Access control solution available

Hotels & house rentals



Vibration detector



Door contact detector



Smoke detector



Water leak detector



Motion detector

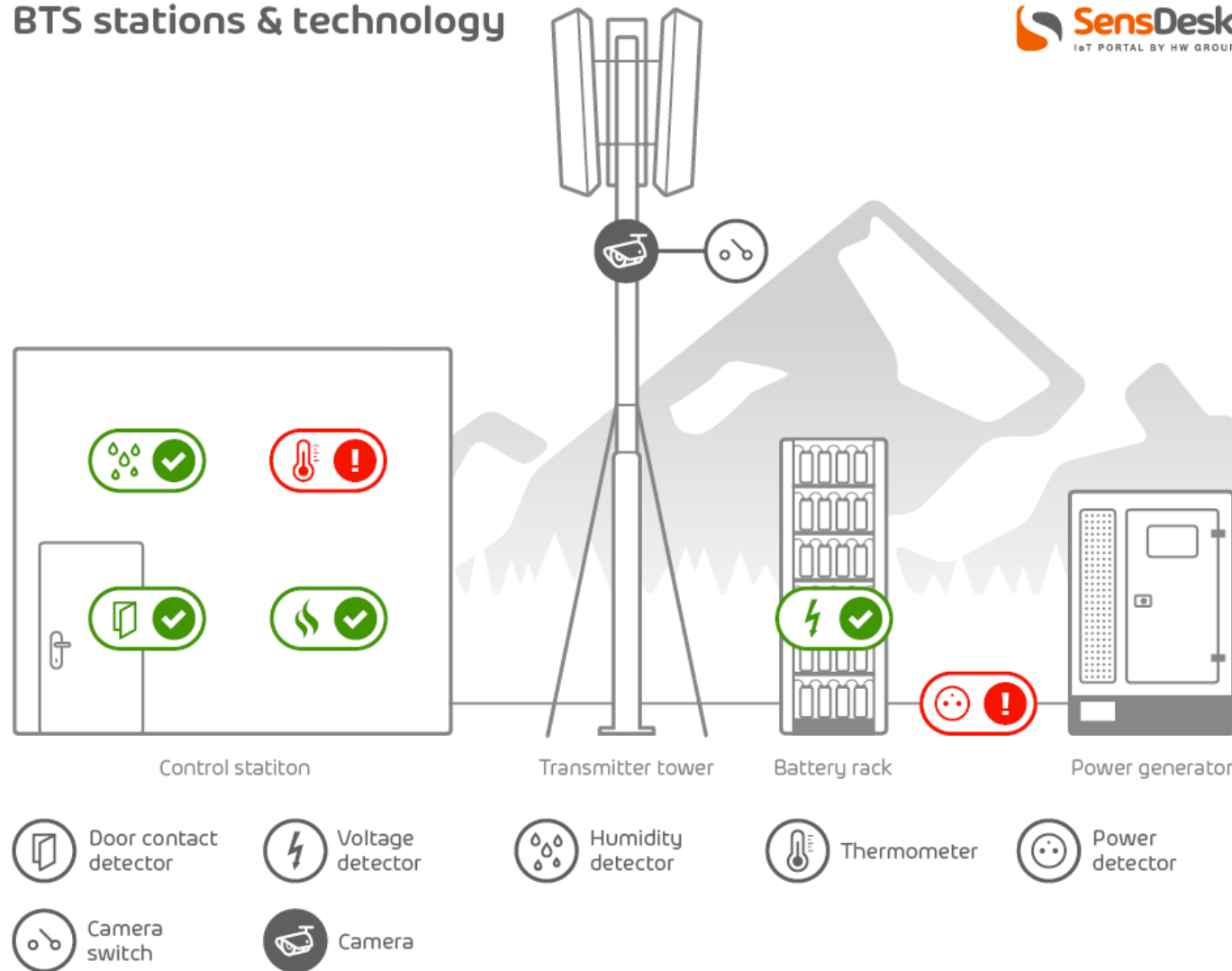


Thermometer

Requirements

- Complex IoT monitoring
- Detailed analysis of data, reports
- Several layers of alarming
- Access control solution available
- Billing and consumption data

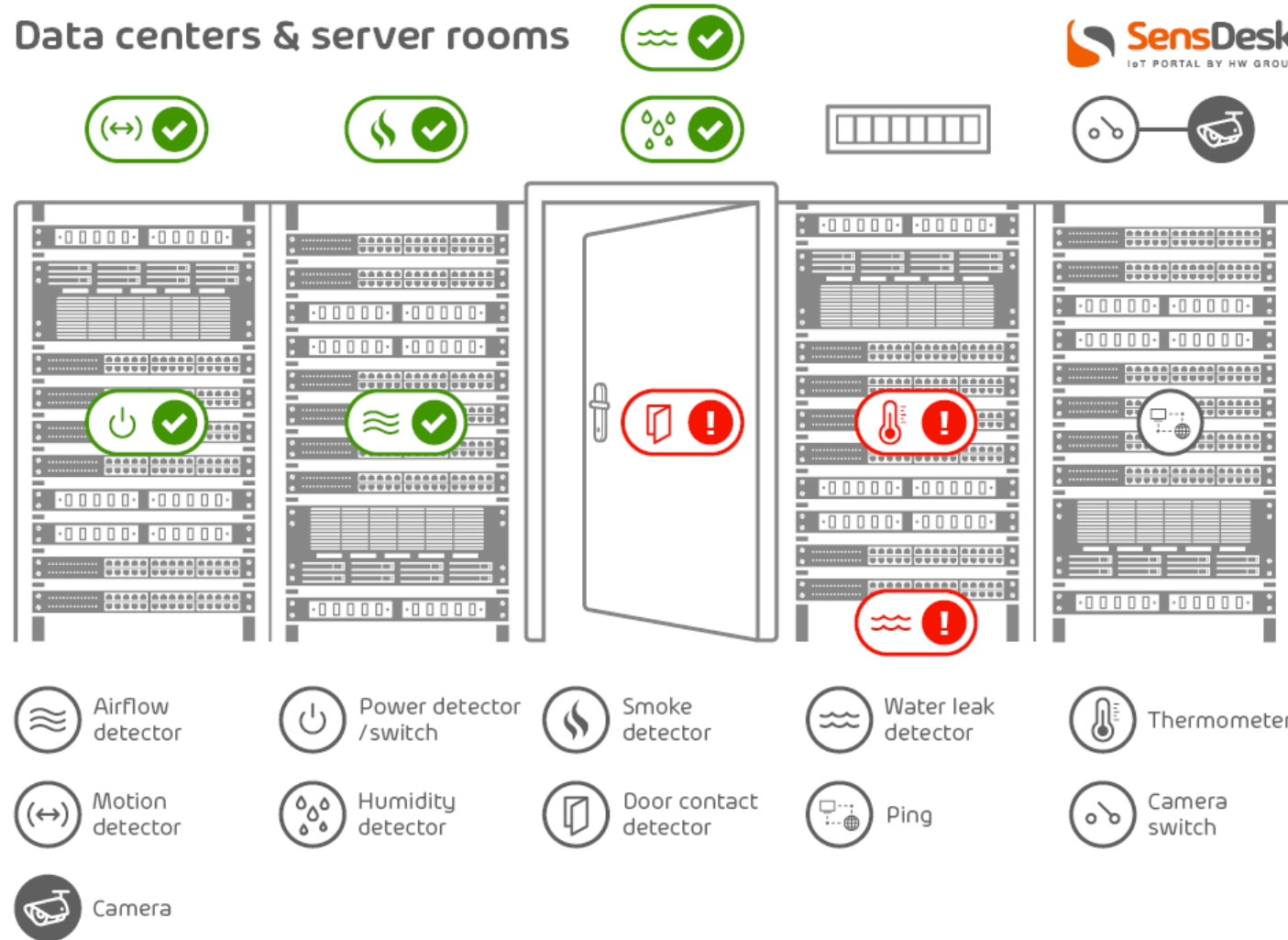
BTS stations & technology



Requirements

- Complex remote monitoring
- Hundreds of measuring points
- Detailed analysis of data, reports
- Several layers of alarming
- User levels and management
- Output data to other systems

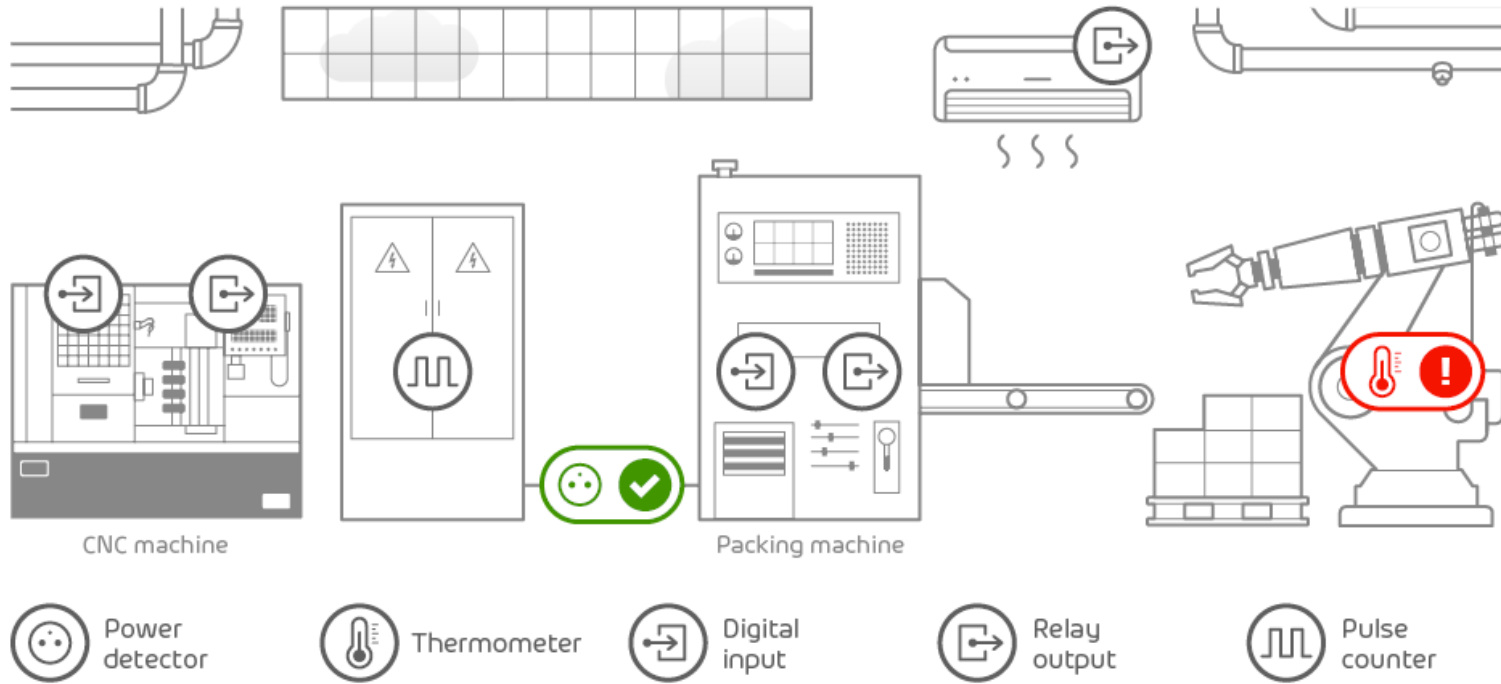
Data centers & server rooms



Requirements

- Temperature and humidity
- Water leaks and fire detection
- Motion detection
- Access Control
- SNMP v3
- Technology can be retrofitted

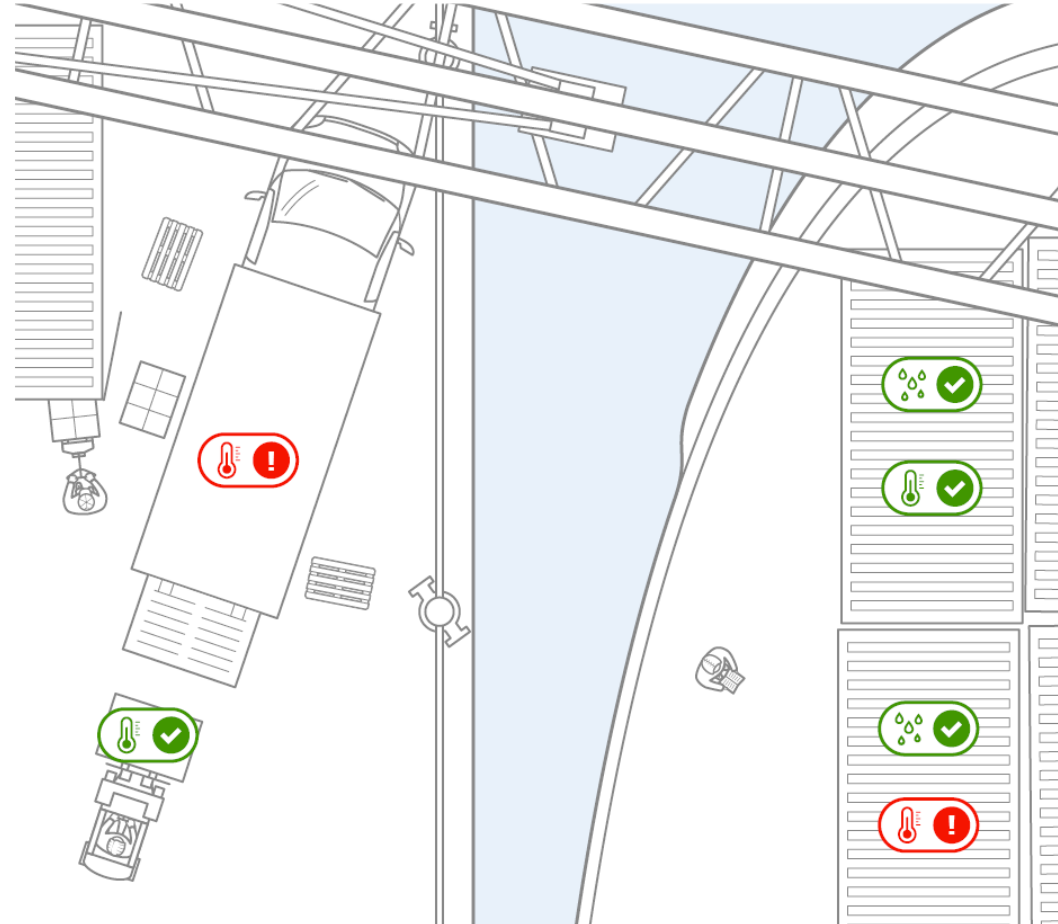
Industry & manufacturing



Requirements

- Industrial I/O and RS-232
- Pulse counters
- Motion detection
- Industrial grade devices
- Connectivity to 3rd party systems

Logistics & transportation



Humidity detector



Thermometer

Requirements

- Temperature and humidity
- Water leaks and fire detection
- Intrusion
- Automatic reports
- Battery backup
- LTE or NB-IoT connectivity

IoT solutions and hardware



Designing a project

There are many ways to design a HW group system.

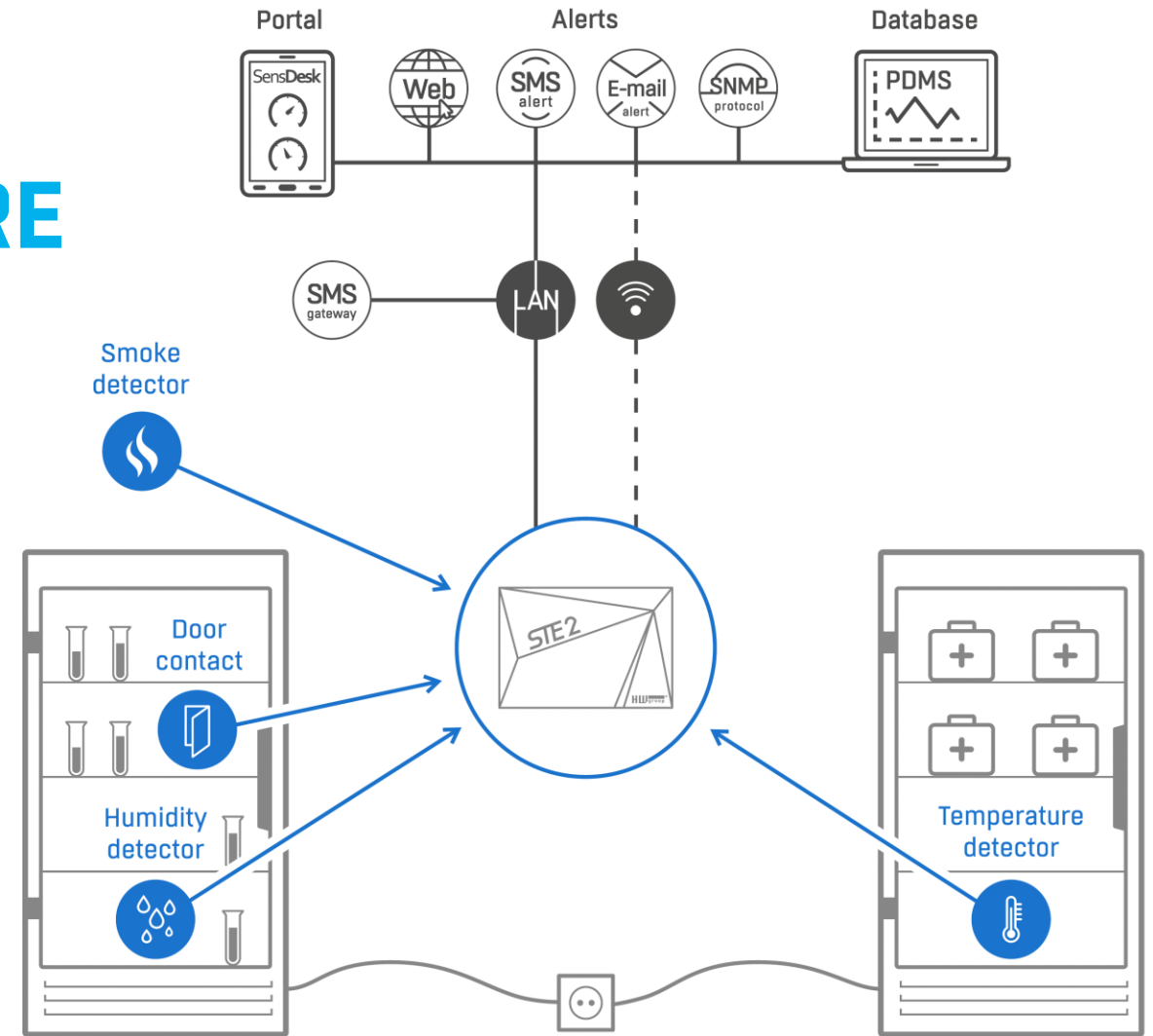
- We usually start with:
 - What is the available connectivity?
 - What is the topology of measurement points?
 - What sensors and ranges do we need?
 - How are the sensors and devices mounted?
 - What alarming is required?
 - How do we see the data?

- Some typical solutions examples follow.

MEDICAL AND HEALTHCARE

Most of the time the customer request a portal to analyse the data and get alarms.

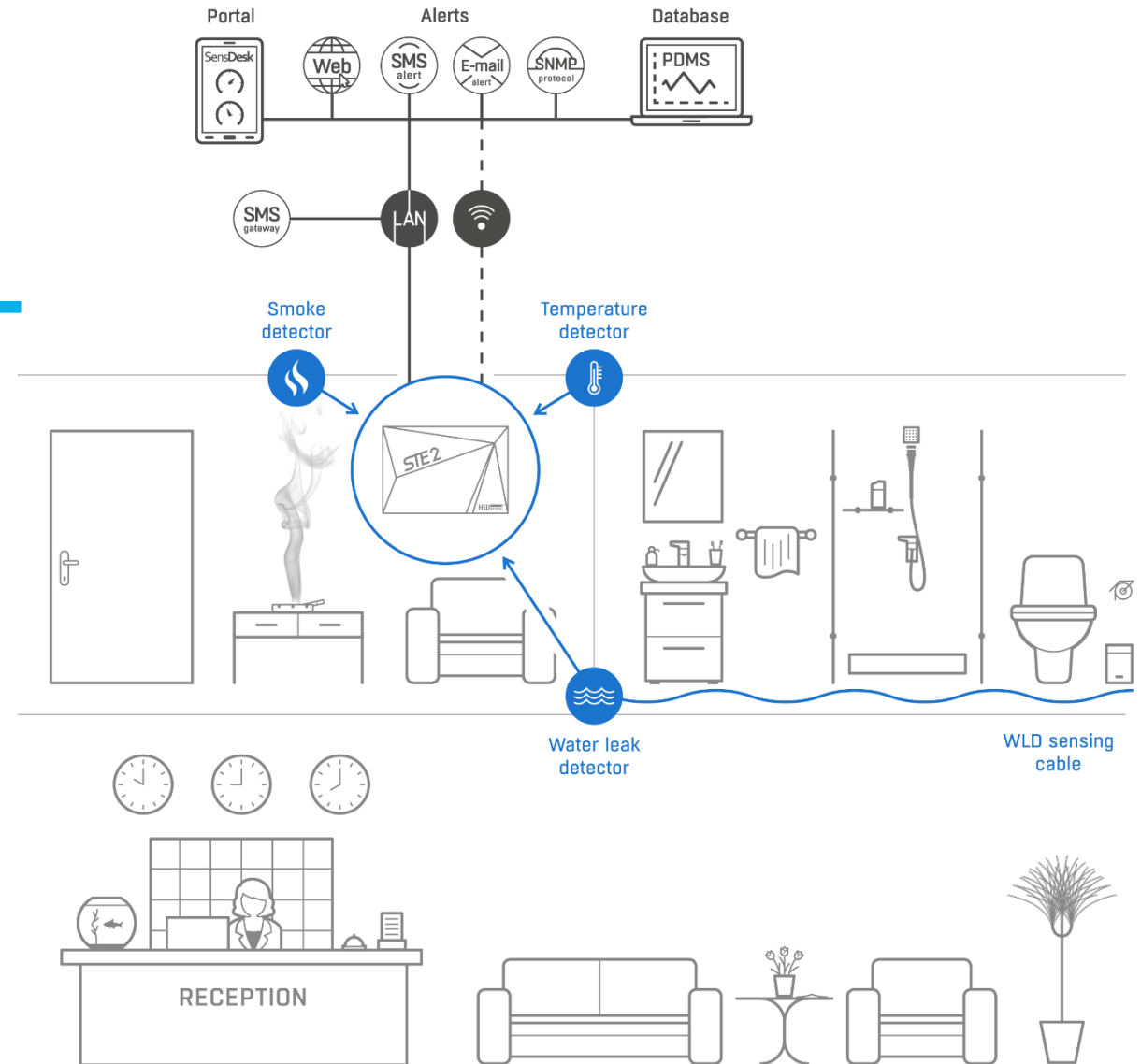
The STE2 is a cost effective device capable of connecting 2 T/H sensors and 2 door contacts.



HOTELS AND RESIDENTIAL

Usually an STE2, SD or Poseidon device based on the topology.

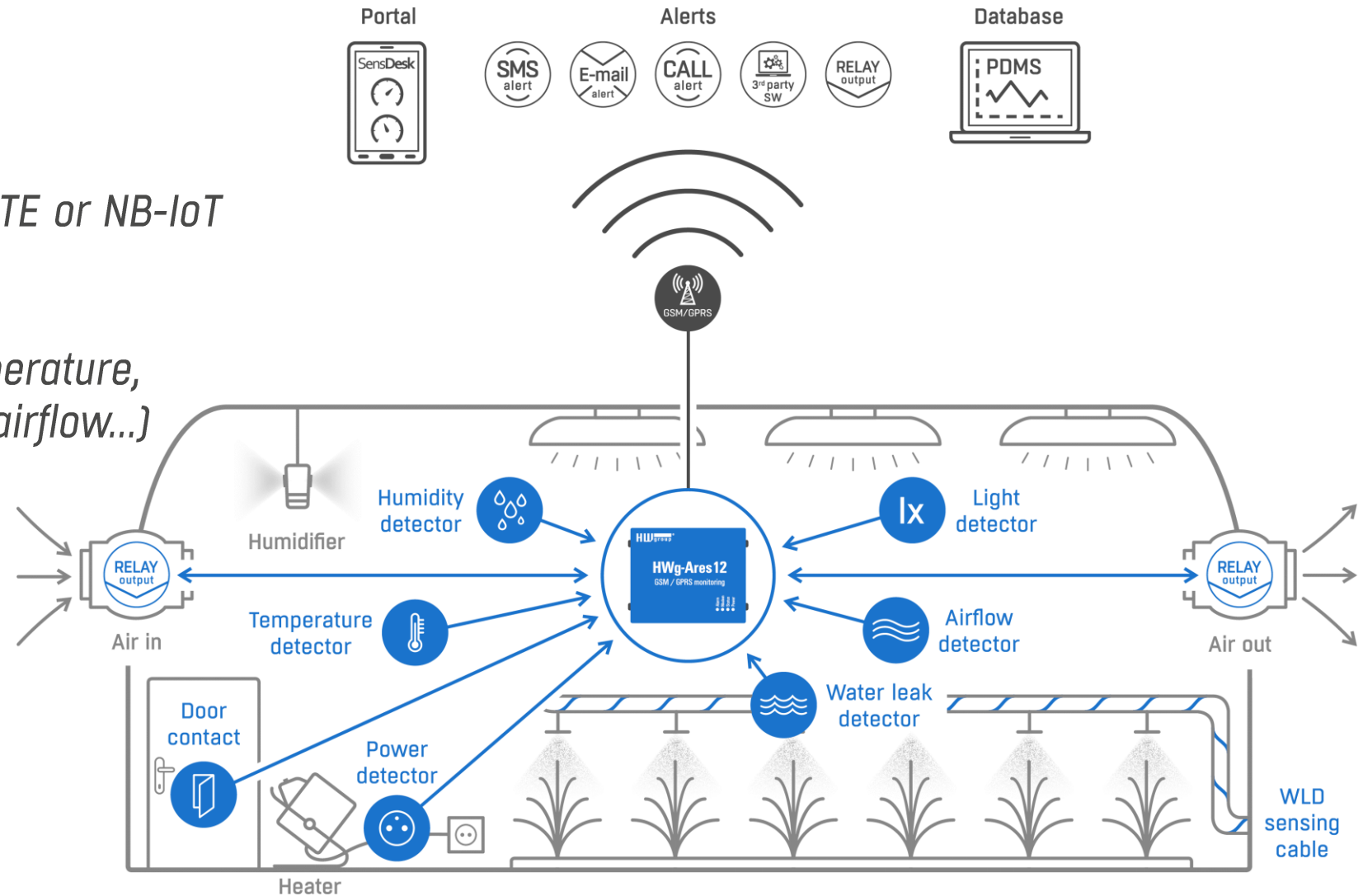
Data is collected to a portal or existing SW. Simple SMS and email alarms for the staff.



AGRICULTURE

No cable connectivity, GPRS, LTE or NB-IoT required (Ares, NB devices).

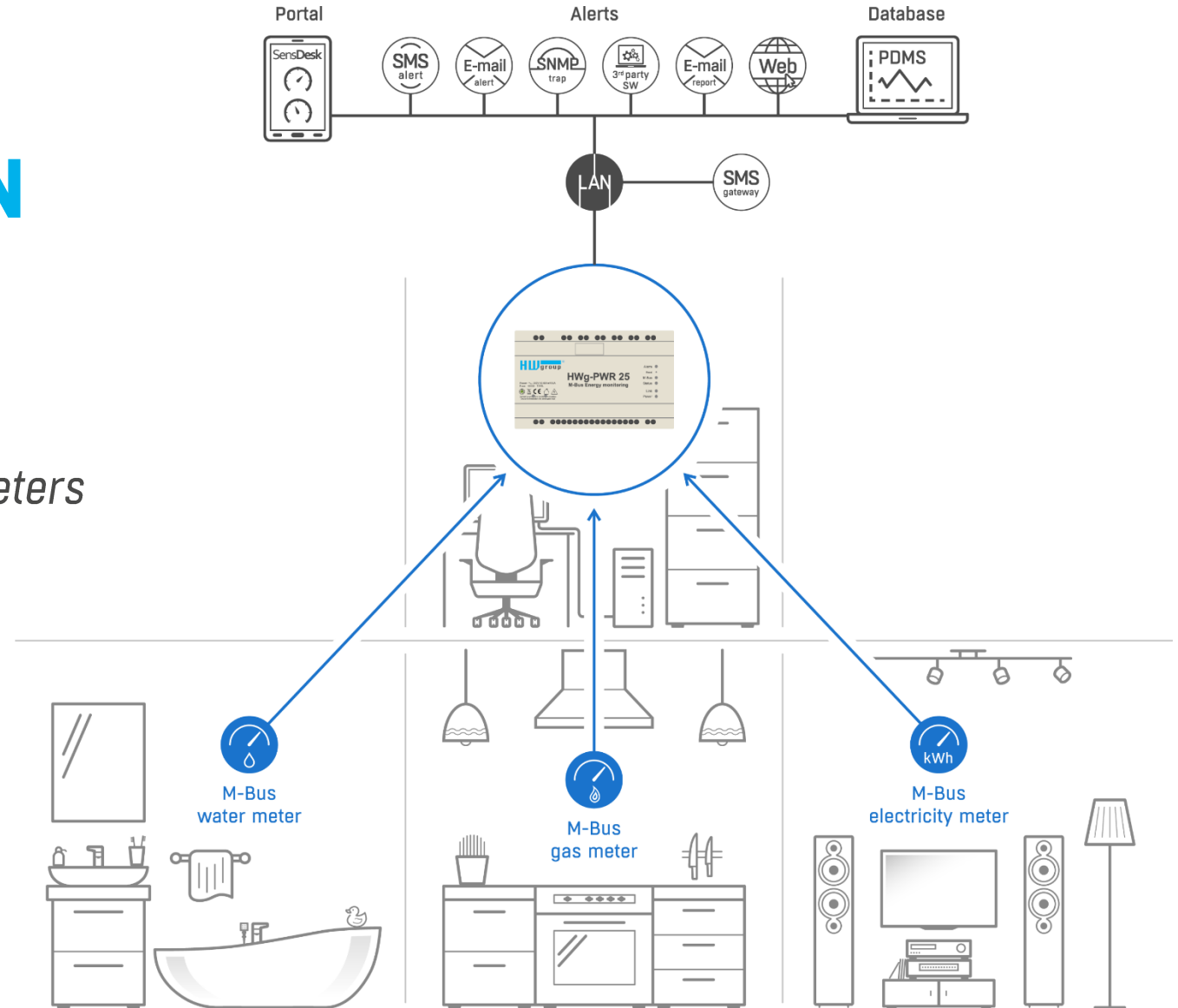
A lot of sensors needed (temperature, humidity, light, power supply, airflow...)



ENERGY CONSUMPTION

Electrical energy, gas and water monitoring for smart buildings and home.

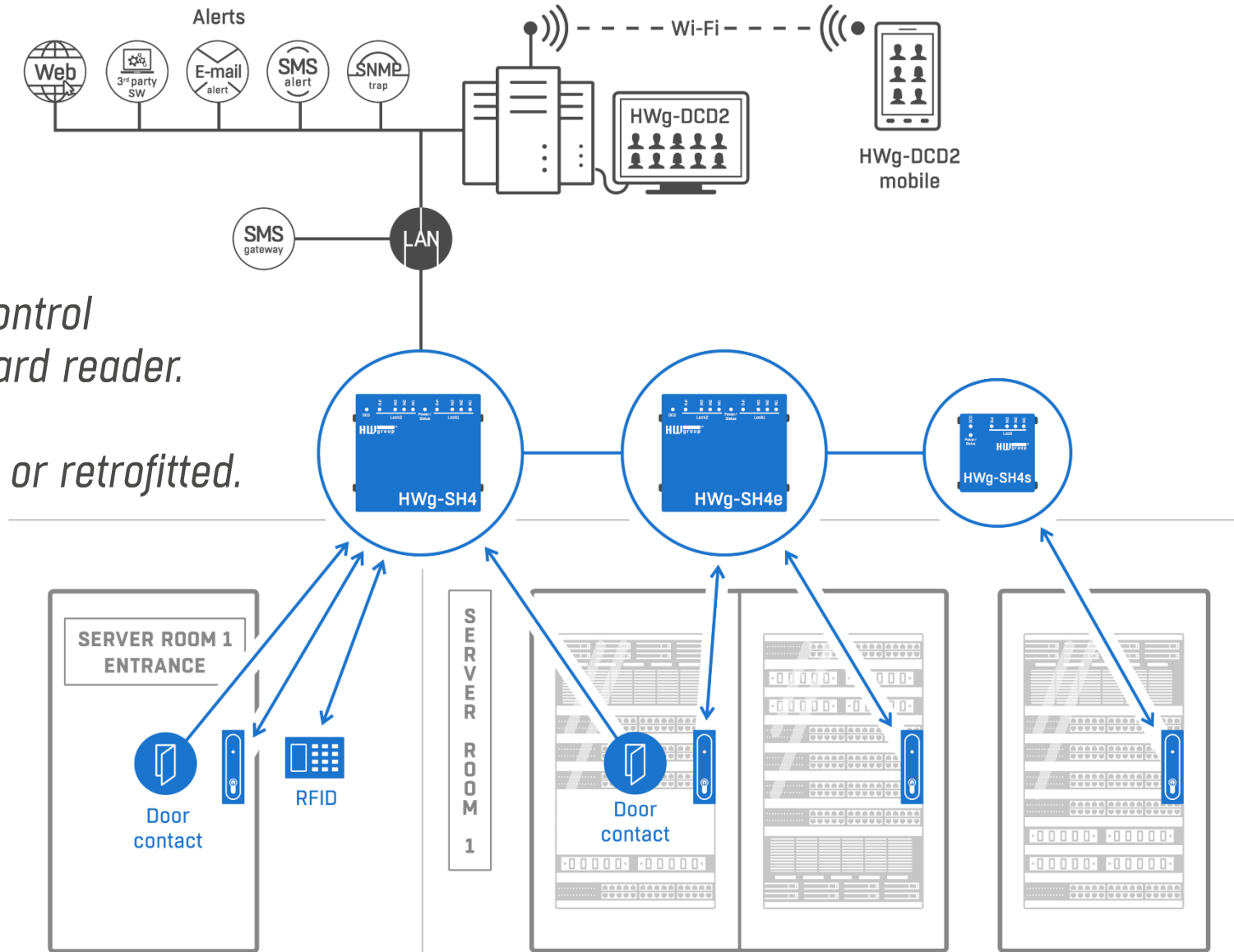
Solved using the PWR device with M-Bus meters and SO impulse counters.



ACCESS CONTROL

Datacentre and residential access control that works with any lock and RFID card reader.

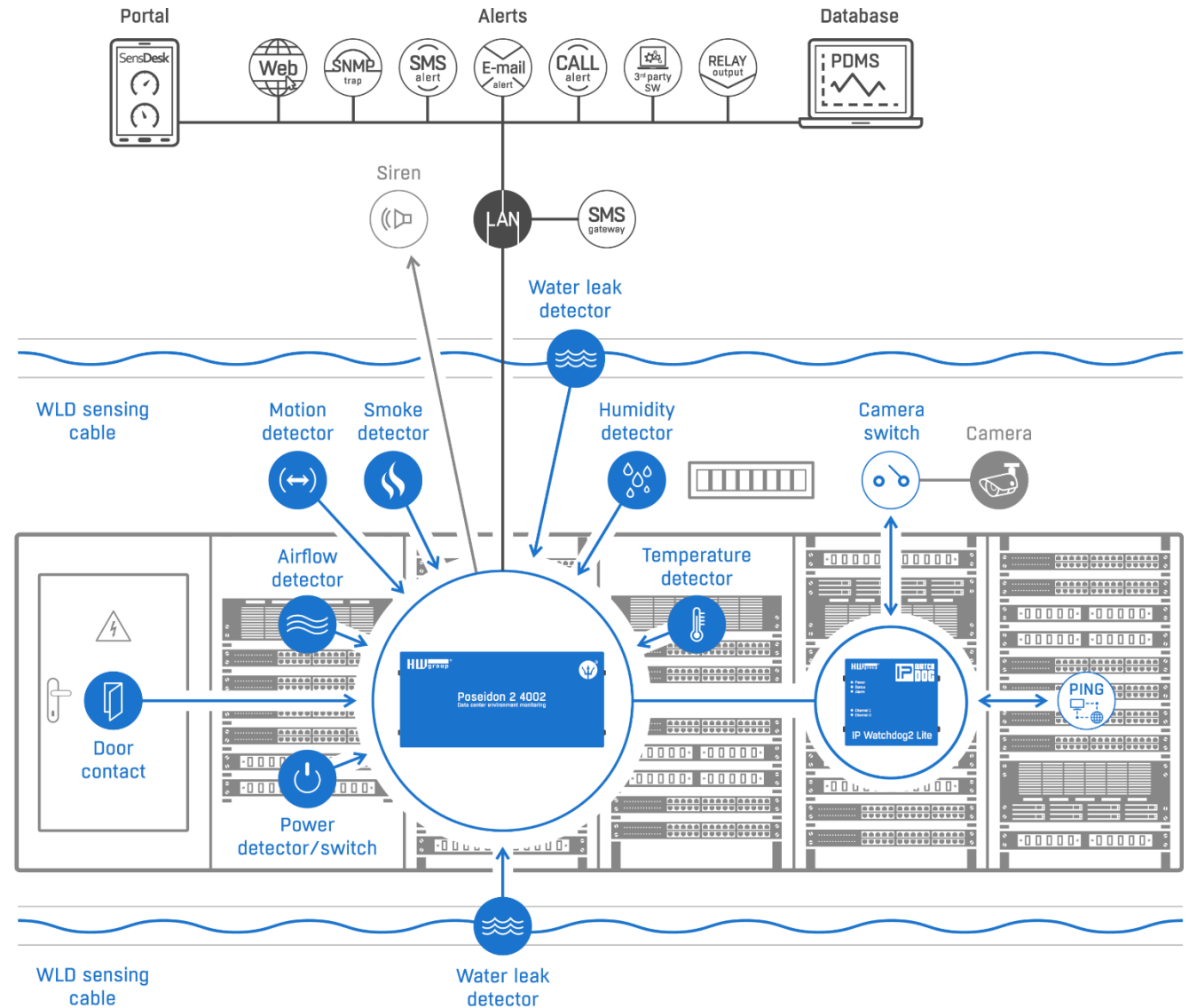
Our solution can be installed as new or retrofitted.



DATACENTERS

Critical infrastructure and large EMC means cable solution is preferred.

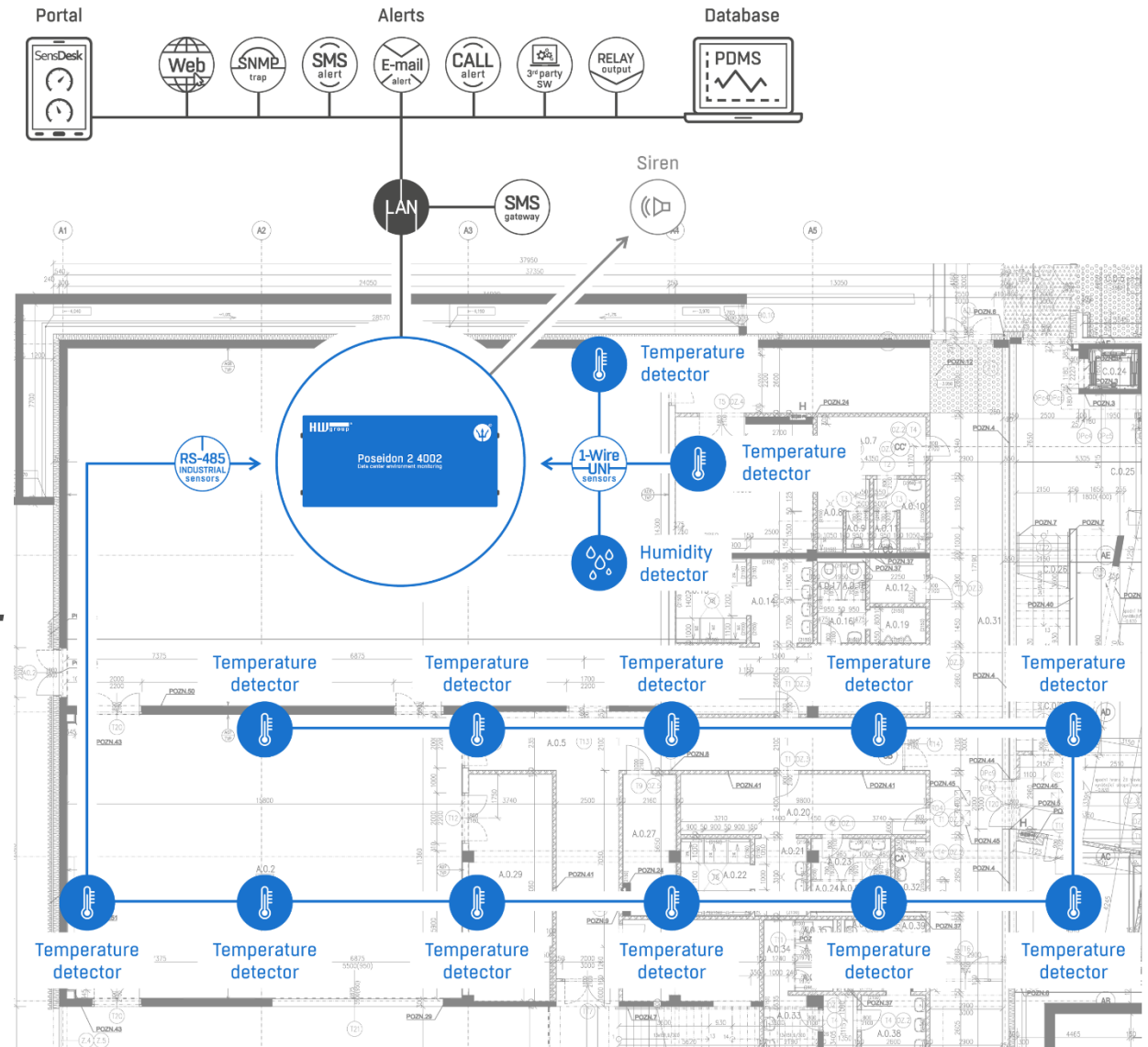
Temperature and humidity sensors, door contacts, motion, smoke and water leaks. SNMP is a must, portal is a nice addition.



INDUSTRY AND MANUFACTURING

Long range sensor cabling requires RS-484 bus.
Poseidon2 4002 is used.

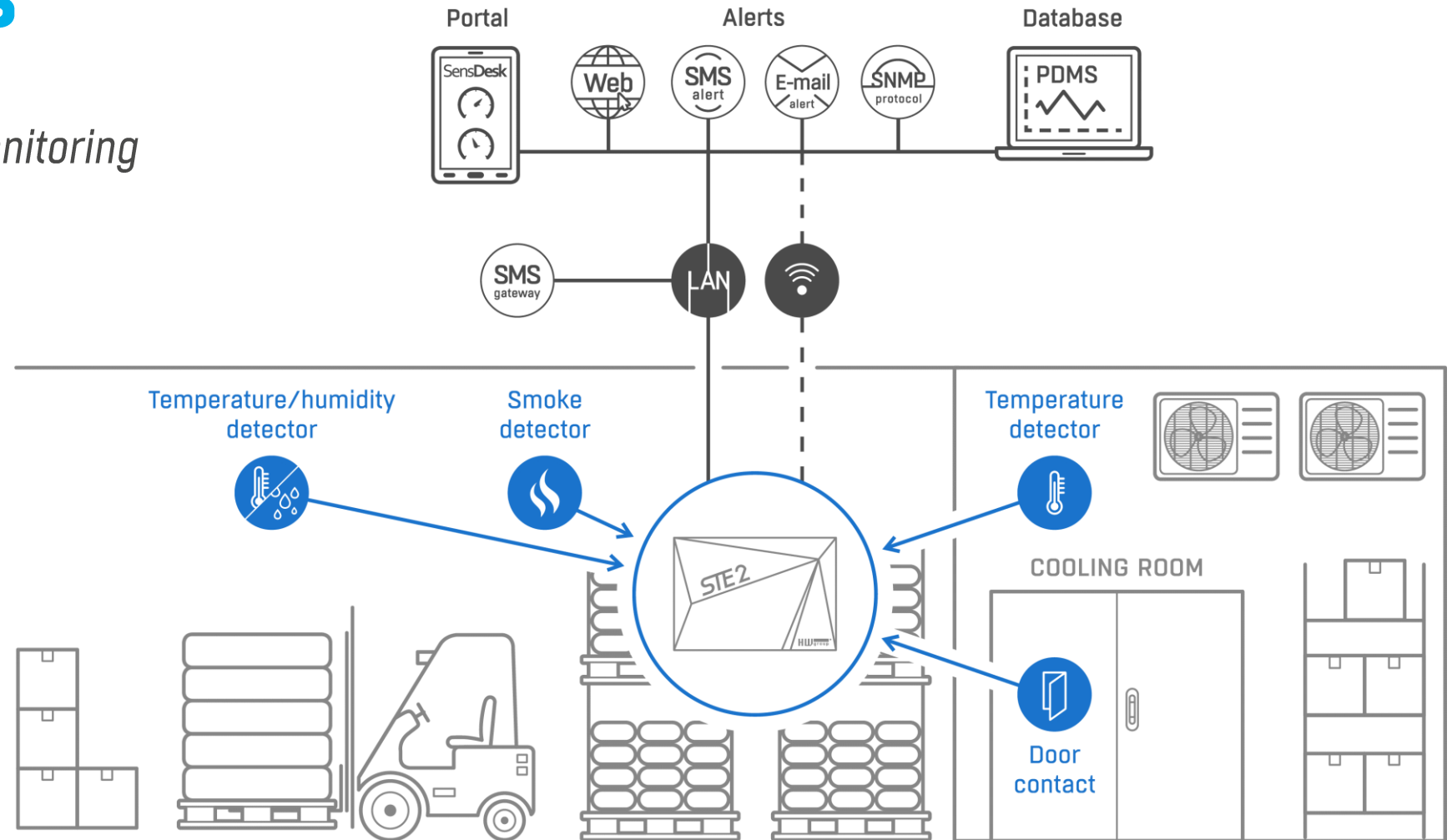
Lot of I/O points, temperature sensors, water leaks.



WAREHOUSES

Multi point temperature monitoring with STE2 or SD devices.

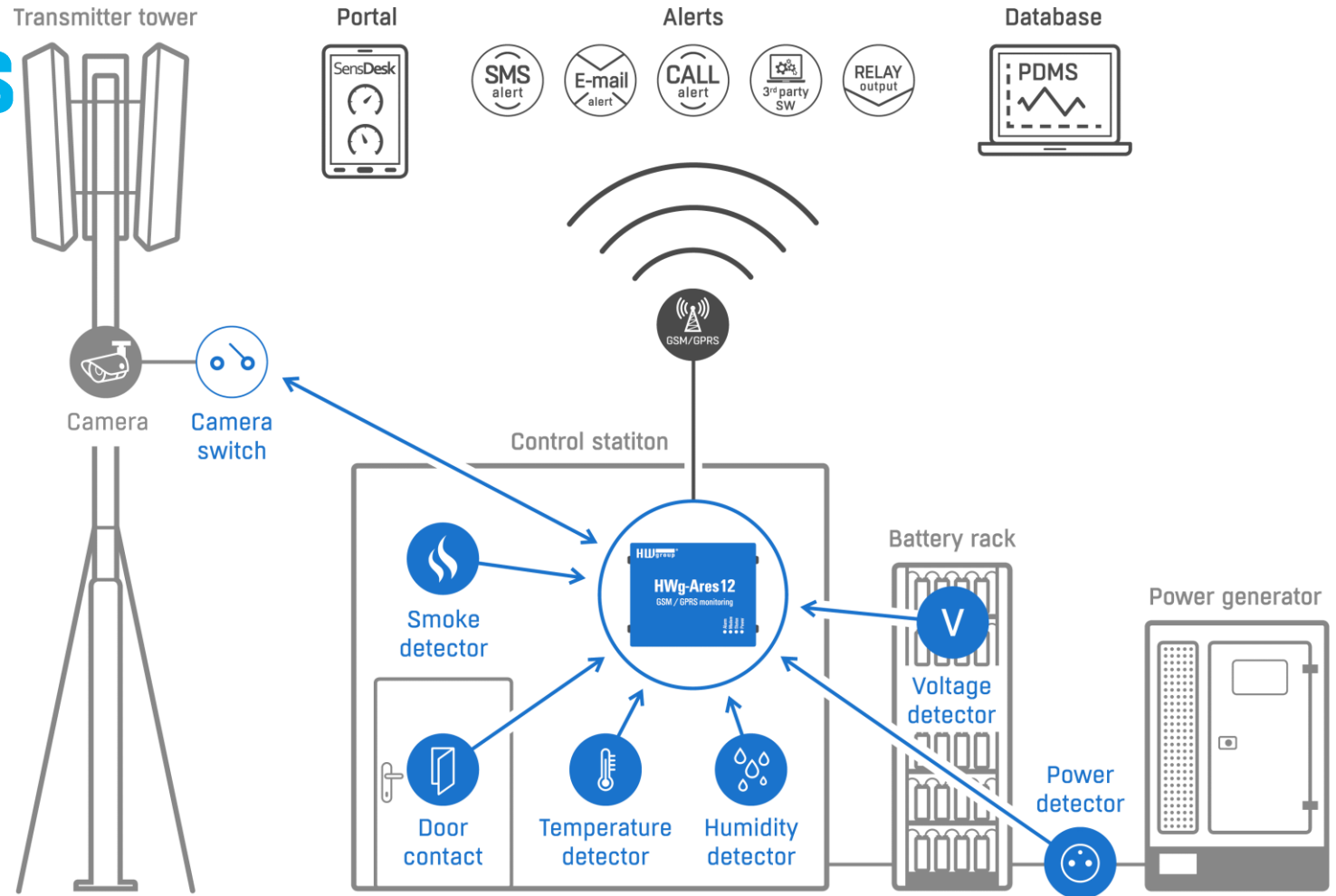
Door contacts, smoke, fire, air conditioning control.



CELL PHONE TOWERS

Remote locations require LTE, GPRS or NB-IoT. Remote upgrade and management is a must.

Usually a monitoring of temperature, intrusion, smoke, UPS, power supply....





SensDesk portal

You can do with or without the portal. But here is how it makes things easier for you.

- Ultimate scalability:
 - **SensDesk.com** – end users and small projects
 - **SensDesk Pro** – private and company installations
 - **SensDesk DC** – for distributors and enterprise
- Easy topology and deployment
- Portal for everything:
 - Monitoring, reporting and analysis
 - Alarming and output control
 - Device management and setup
 - Mass operations and upgrades
 - Connects to third party systems

SensDesk portal

IoT monitoring portal that you can resell.

- Robust technology
(SensDesk.com - over 50000 sensors)
- 9 years of development and testing
- Frequent upgrades and new features

Machine
Simple se
all HWg c
protocol i

Sensor In alert

Solution

SensDesk
IOT PORTAL BY HW GROUP

Login: John Newman | Help | My account | License | Log out

Dashboard | My Dashboard | Sensors & Detectors | Devices | Groups | **Locations** | My Graph

SensDesk > Locations

Locations

Prague - Jažlovická
138 Sensors

65 ✓
27 !
37 ?
9 ✕

8 Sublocations

Sublocations	Sensors
Not Assigned	10
Storage	1
1. Floor	3
2. Floor	2
3. Floor	1
Dock	5
Cabin	1
Office	1
Server room 2. floor	1

10 Devices + Add Device

Milan - Via Monte Velino
58 Sensors

38 ✓
12 !
2 ?
6 ✕

6 Sublocations

Sublocations	Sensors
Not Assigned	2
Stock	2
Freezer room	1
Server room	3
Server room 2	1
1. Floor	1
2. Floor	1

8 Devices + Add Device

Göteborg - Eklandagatan
57 Sensors

42 ✓
5 !
9 ?
1 ✕

2 Sublocations

Sublocations	Sensors
Not Assigned	2
Stock	2
Freezer room	1
Server room	3
Server room 2	1
1. Floor	1
2. Floor	1

5 Devices + Add Device

Create new Location

+ Add Device

CUSTOMER REFERENCES

For the last 18 years we were lucky enough to provide services to the following companies.

We would be thrilled if your customers were next.



**Thank you for
your attention.**



HW group s.r.o.
Formanská 296, Praha 4, 149 00
Czech Republic

Phone: +420 222 511 918
E-mail: sales@hwg.cz
www.hw-group.com