

Internet of Systems - Breakthrough in Sensor Technology

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CSO
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Disruptive Technologies



MIPIM Global Competition



Plant 4.0 by Total



Norwegian Tech Award



EU Seal of Excellence



Gartner Cool Vendor



British Telecom IoT Operations Award



Nordic Startup Award



TÜV SÜD Innovation Award



Early Metrics Award

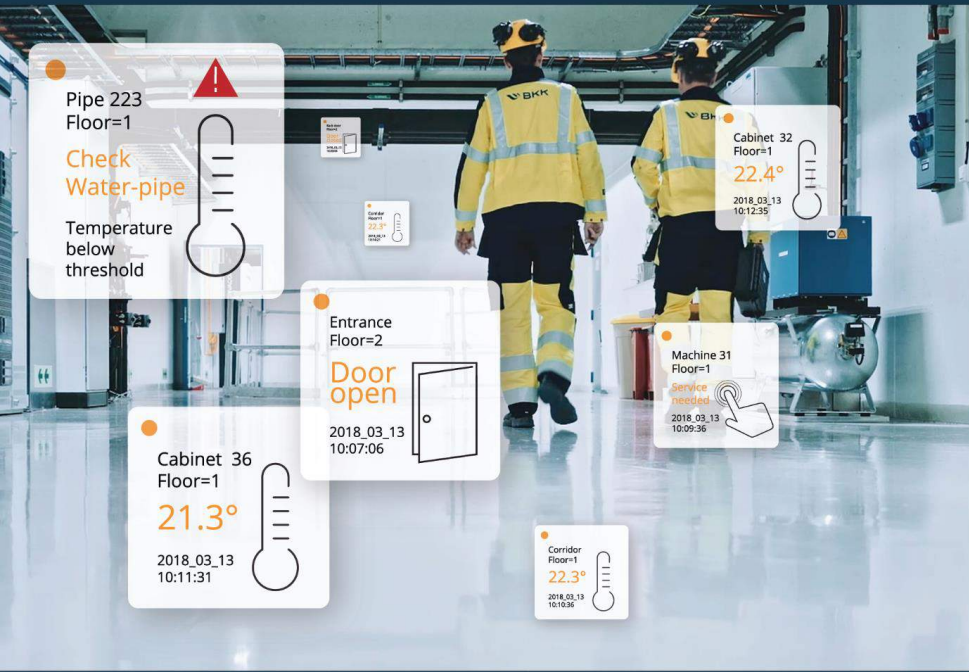


Siemens MindSphere





Machine 3
Floor=1
26.3°
2018_03_13
10:10:41



Pipe 223
Floor=1
Check Water-pipe
Temperature below threshold

Cabinet 32
Floor=1
22.4°
2018_03_13
10:12:55

Entrance
Floor=2
Door open
2018_03_13
10:07:06

Machine 31
Floor=1
Service needed
2018_03_13
10:09:36

Cabinet 36
Floor=1
21.3°
2018_03_13
10:11:31

Corridor
Floor=1
22.3°
2018_03_13
10:10:36

Sensors anywhere delivers insights everywhere

15 Years

With 100 data transactions a day

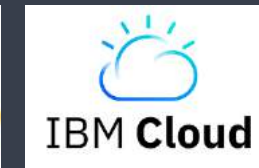
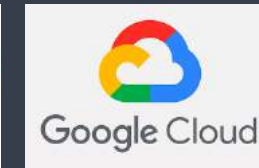
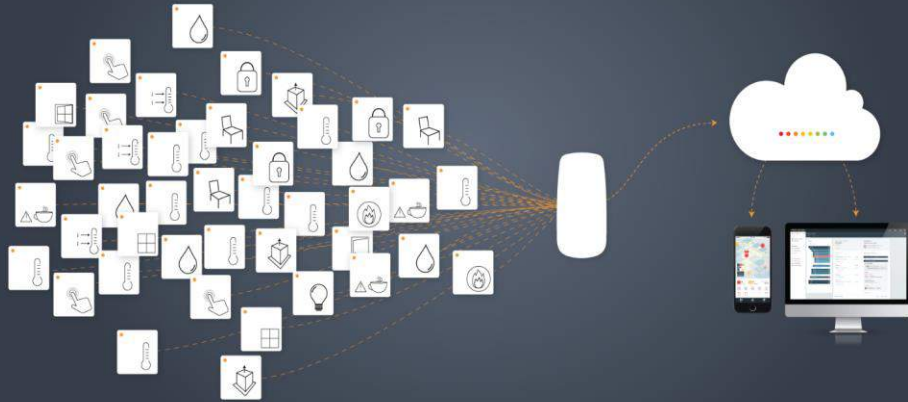


Real Estate Industry 4.0 Healthcare Retail

- Cost savings
- Compliance
- Predictive Maintenance
- People Interaction

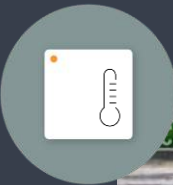
15 Years
With 100 data transactions a day

Open System = Future Proof



... and many more

Water Distribution Maintenance - Compliance



Electrical Bus Bar Monitoring - Predictive Maintenance

Smart Sensor Solution for busbar temperature monitoring

Background

- In January 2018 during a regular visual inspection followed by a thermography investigation, significant high temperatures (about 100 °C) have been detected at a busbar within the electrical power station ELZ-001.

Solution

- Implement Wireless Temperature Sensor which measures surface temperature of busbar and wirelessly transmits result to a Cloud Connector (Gateway) via SecureDataShot™ technology
- Cloud Connector relays temperature reading to a Cloud service
- readings are performed at 15 minute heartbeat intervals
- Wireless Temperature Sensor has touch functionality for utmost simplicity of installation and use
- The Sensor Solution - simple, robust, flexible, scalable
- Further Smart sensors for Proximity and Touch available

Benefits

- Easy monitoring of critical point of failures which scalable mini sensors at minimal installation cost
- Integrated circuit of sensors is designed for unique battery life, hence less maintenance costs
- Fast notification by Email or SMS when critical temperature is reached
- Overheating detection results in predictive maintenance and preventing of outages
- Avoidance of a fire during peak load can reduce operational damage costs



Wireless Temperature Sensor



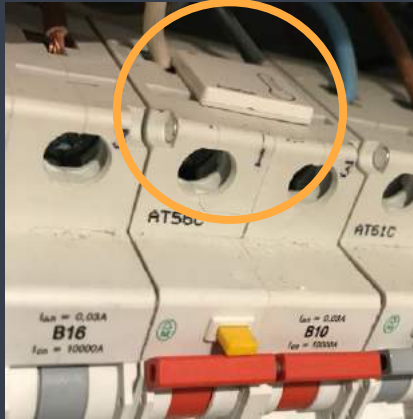
Cloud Connector (Gateway)



DT Studio Web App for Sensor & Cloud Connector Admin



Asset Utilization - Energy Profiling Predictive Maintenance



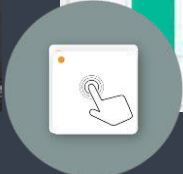
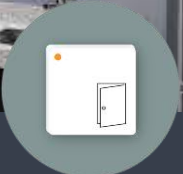
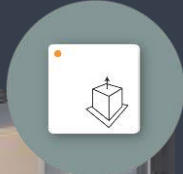
kW Charging Profile:



DT Temp Sensor:



Facility Management 4.0



Space Utilization and Occupancy



MCS
RESERVATION KIOSK
FRIDAY, JANUARY 6
13:33
7th Floor
8 available rooms
Tap a room to book

- Available
- Available, occupied
- Available for 7 minutes
- Booked, unoccupied
- Booked, occupied
- Booked for 7 minutes more



Get Your Pilot Kit!



Pilot Kit:

100 sensors
5 Cloud Connectors
full access to APIs
12 months
5000 EURO