Door count and sensing

LoRa enabled smart building management solutions by FactoryLab help businesses and individuals measure and analyse various aspects in commercial and industrial buildings.

Why?
Checking if a door is opened or counting the times a door is opened can enable predictive maintenance and raise alarms for security reasons.

How?
FactoryLab's Door checking and counting solution allows you to simply place sensors on doors or cabinets and start detecting opening and closing of doors. This can help raise alarms when a door is opened or accessed for a defined time. Counting the amount of times a door is opened can also predict maintenance schedules in rooms, eg: toilets.

Applications
- Access alerts
- Predictive maintenance
- Smart security

LoRa based sensing and management.
The "Long Range Wide Area Network" (LoRaWan) is a specification for a telecom network and is suitable for long-range communication with low power. With LoRa, all kinds of things can talk to the Internet without having to use 3G or Wi-Fi. The major advantages of LoRa are the low power consumption and low costs. It is most suitable for simple and event triggered data exchange data exchange.
Door count and sensing

**General**
Processor: 32-Bit ARM Cortex M0
LoRa Radio: SX1272
On-board internal antenna

**Dimensions**
Including sensor - 36 x 23 x 115 mm

**Environment**
Temperature: -25 to +70 °C
Humidity: 5 to 95%
Housing: Plastic
Ingress Protection: IP65

**Communication**
LoRaWAN: 868 / 915 MHz

**Power Requirements**
Internal: Non-rechargeable 3.0V
Battery type: Coin cell - CR2450
(Battery lifetime - 3 years)*
Optional 5V external power supply

**Power Consumption**
Deep sleep mode: < 4μA
0.1 sec transmission mode 20mA

**Connections**
Thermistor 1x (temperature sensor)
Digital inputs: 1x
Analog Inputs: 1x 4-20mA + 1x 0-10V

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**Plug and Play LoRa solution**
Ready to use LoRa enabled door sensing solution. Can be installed on any door and start counting and checking

**Advanced Data collection and analysis**
View, save and analyse all the data in form of graphs and tables to perform predictive maintenance and alerts.

**Compact and easy to set up**
The built in battery and antenna make it an ideal solution to install in many spaces and locations. 4 screws to install on any door.

**Ultra Low power**
LoRa based long range solution with an ultra low power system which can function seamlessly for over 3 years on a single coin cell battery with a sleep current < 4μA.

*At default transmission interval = 1 message/hour