



SUMMIT
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"ARANET: A WIRELESS IOT SENSOR PLATFORM"

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ARANET, LATVIA





Contents

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2. Use Case: Retail
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A company with 20+ years of
microwave radio manufacturing
and a certified partner of Zabbix

is manufactured by



Microwave
radio



Test and
Measurement



Internet of
Things





Aranet: a wireless sensor network

Base Station



 868 MHz
or
920 MHz

Sensor

868 MHz
or
920 MHz





Aranet: a wireless sensor network

Base Station



868 MHz
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up to **3 km** line of sight range
Several hundreds of meters indoors



Sensor

868 MHz
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Aranet: a wireless sensor network

Base Station



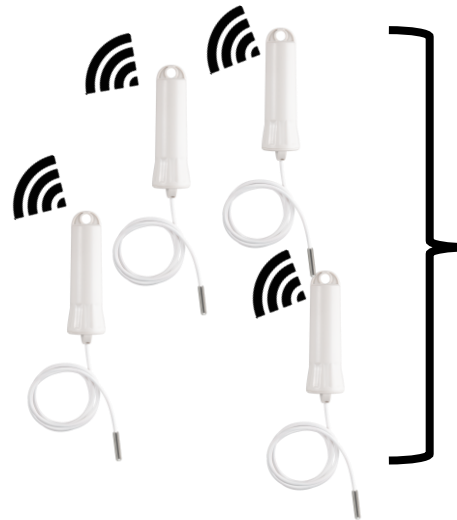
868 MHz
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920 MHz



up to **3 km** line of sight range
Several hundreds of meters in hospital setting

Sensor

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x**100 sensors**
per Base
Station



Aranet: a wireless sensor network

Base Station



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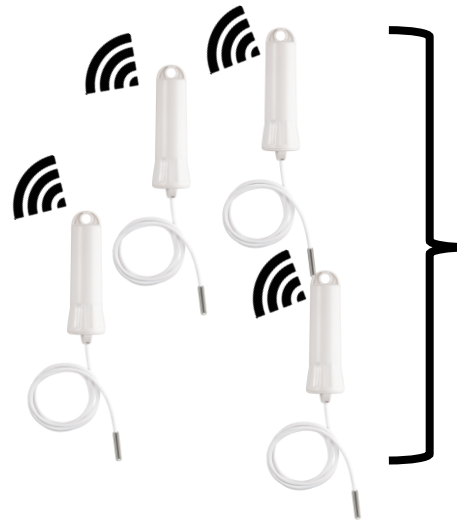
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1; 2; 5 or 10 minute
transmission intervals



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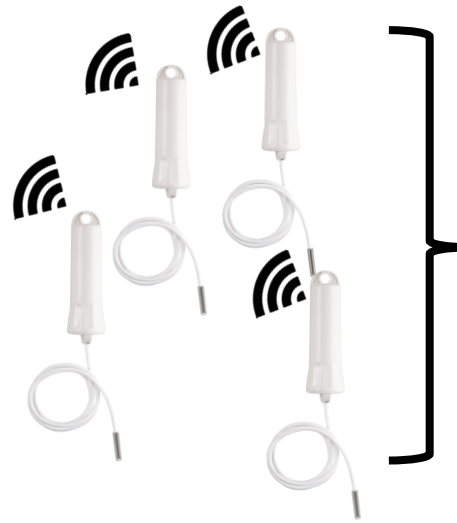
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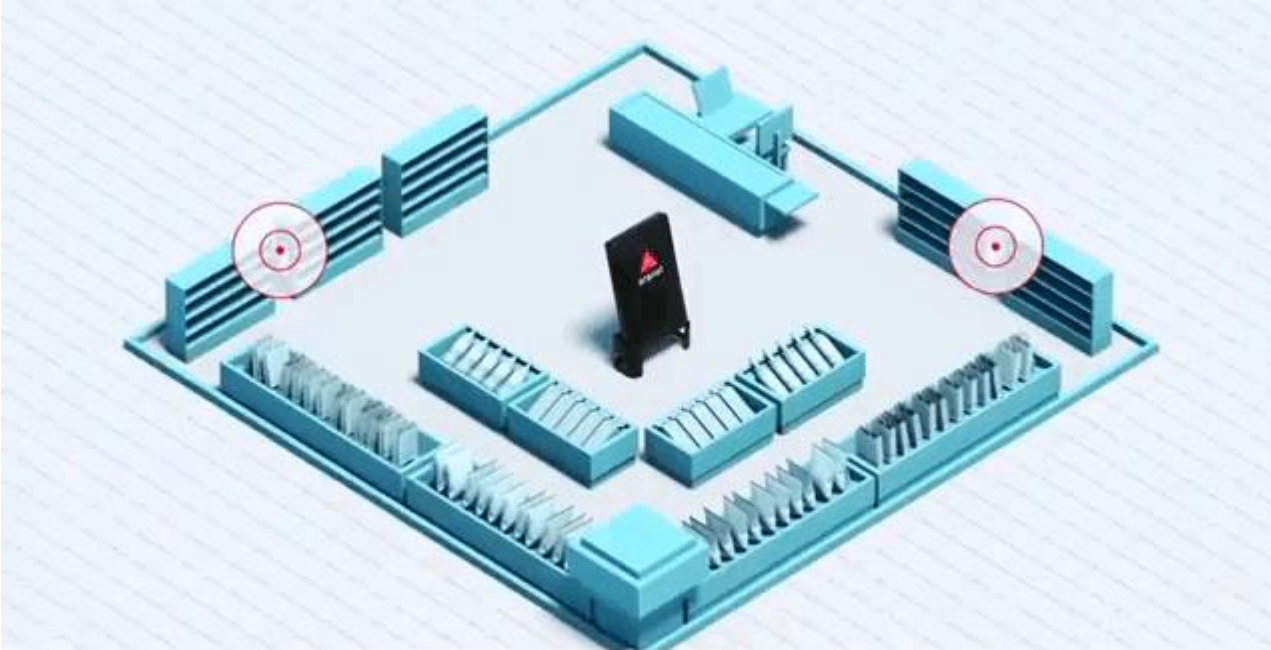
x**100 sensors**
per Base
Station



Up to
10 year
battery
life



Aranet Technology

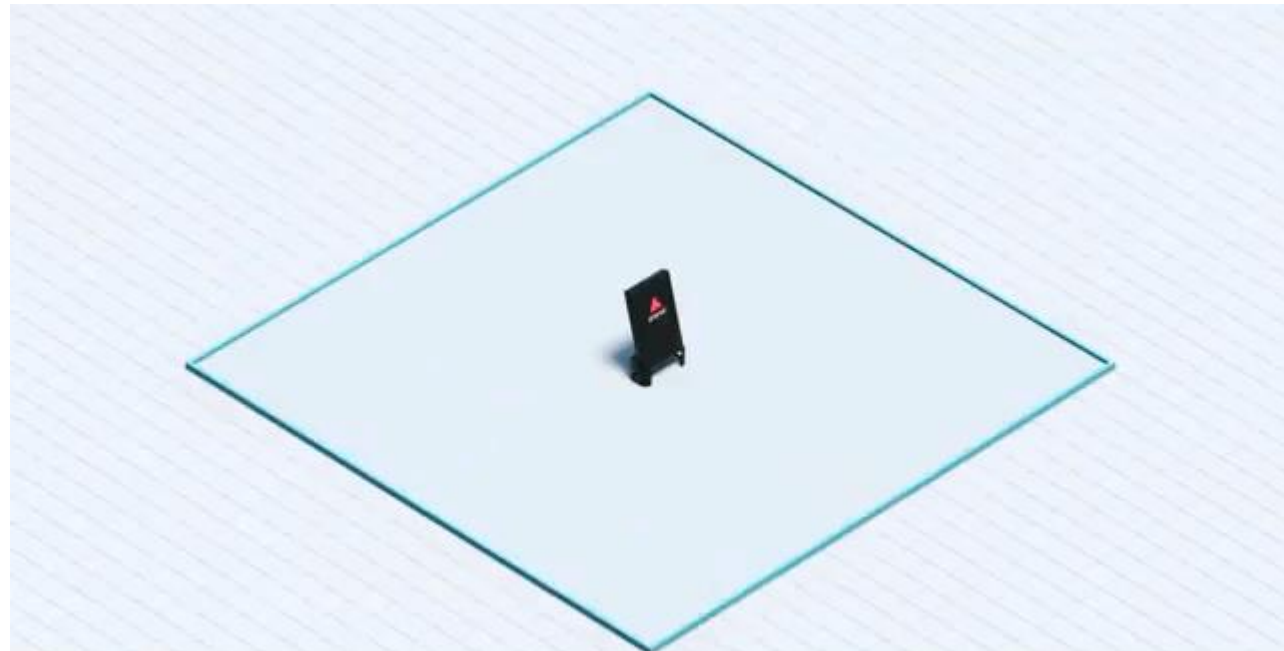
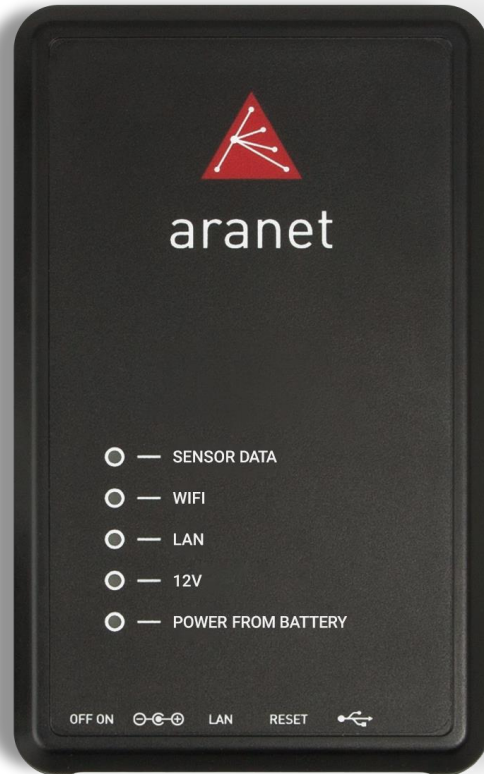


- Physical Layer: LoRa
- Proprietary LPWAN protocol with XXTEA encryption



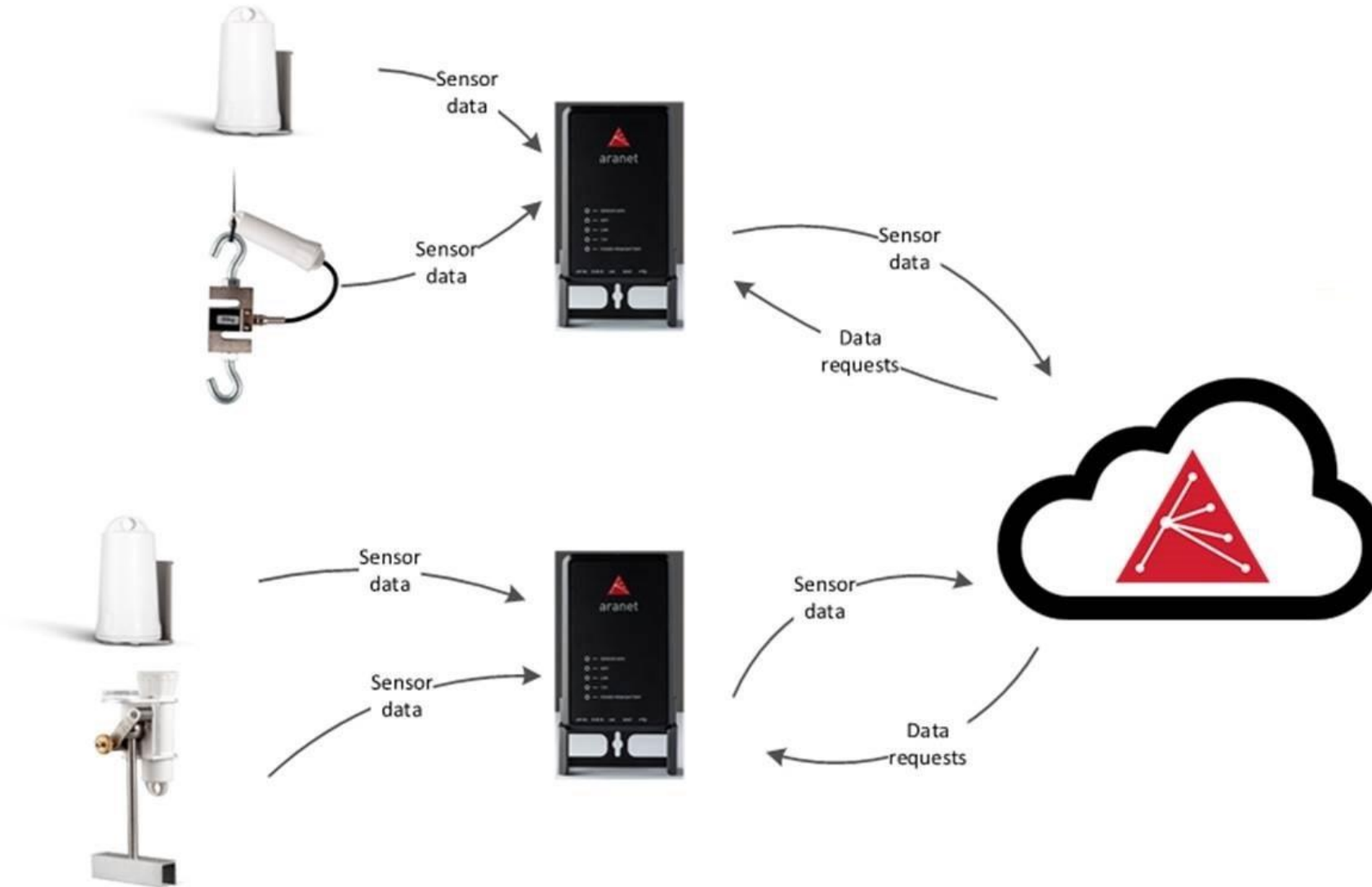
Aranet PRO base

- Internal memory: 10 years of readings – data available even if internet goes down
- Ethernet and Wifi connections to PC, tablet, phone
- Built-in server with SensorHUB software



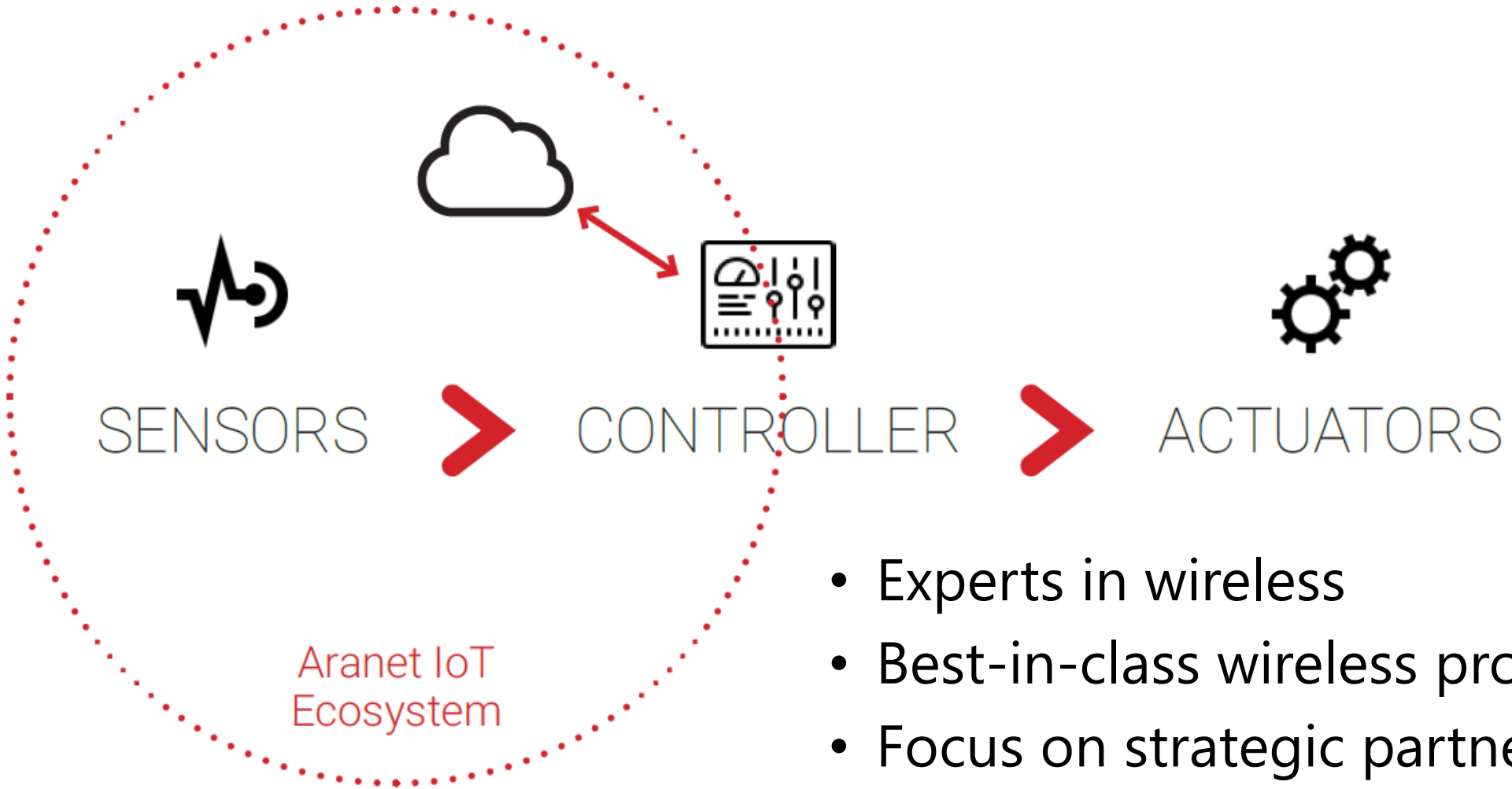


Aranet architecture





Aranet philosophy



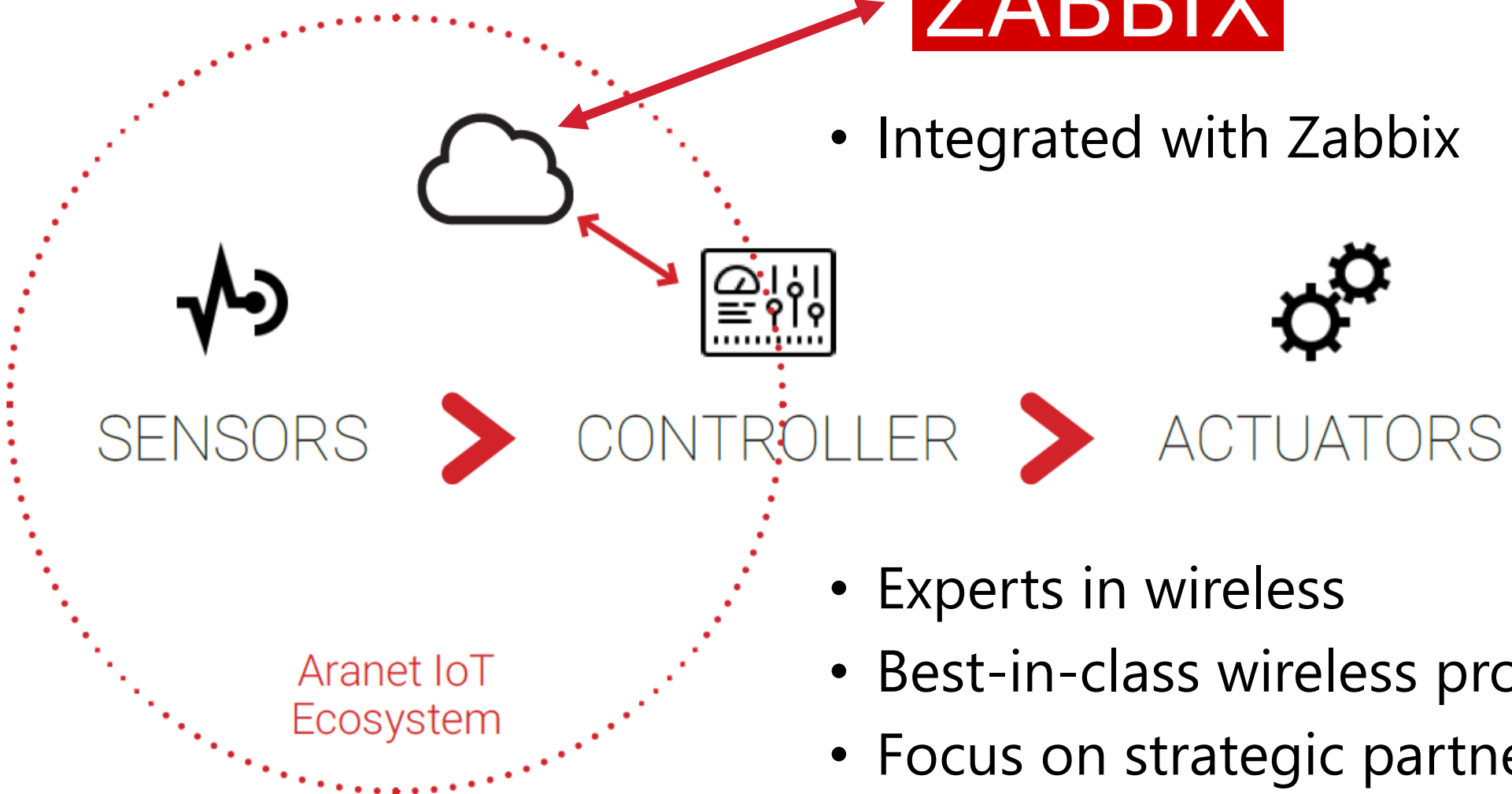
- Experts in wireless
- Best-in-class wireless products
- Focus on strategic partnerships



Aranet philosophy

ZABBIX

- Integrated with Zabbix



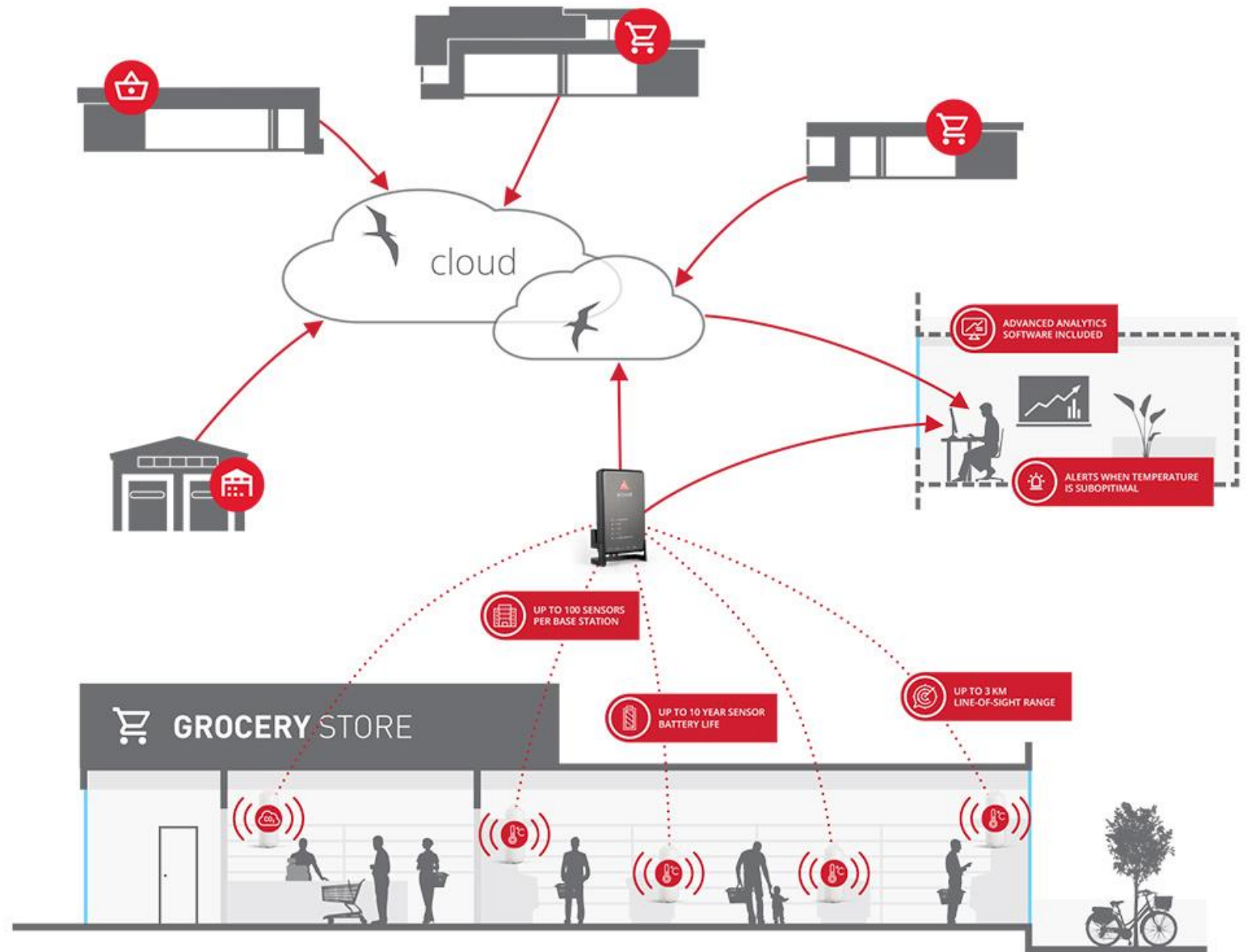
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Rimi Case

- 6500 temperature sensors
- 125 shops



- Monitoring of Freezer Temperature
- Alarms in Case of Malfunction
- Working on Predictive Maintenance



Benefits

- Even the largest supermarkets (8800 m²/94 000 ft²) can be covered with a single base station
- Manual data collection can be avoided
- Freezer temperature can be optimized (20% reduction in energy costs)
- Product spoilages can be avoided
- Litigation/fines for slip and fall accidents can be avoided

Indoor Air Quality and Covid19



- Covid19 can be spread through aerosols (CDC new guidelines)
- Proper ventilation can decrease x10 the time aerosol particles stay in the air

CO₂ as an air quality measure



- Recommended 60m³/h air circulation per person
- This equates to approximately 800ppm CO₂ concentration





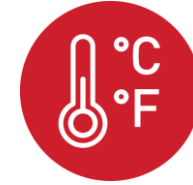
Aranet4 PRO – A Wireless COVID19 Safety Network



- Simple plug-and-play setup
- Updates information available locally on each sensor as well as centrally on base station
- Free software – graphs, reports, centralised alarms
- Perfect for controlling airborne COVID19 spread in schools, offices and other indoor facilities

Other industries

- Horticulture
- Livestock
- Building Management
- Warehousing
- Data Centres
- Pharma
- Medical
- Retail



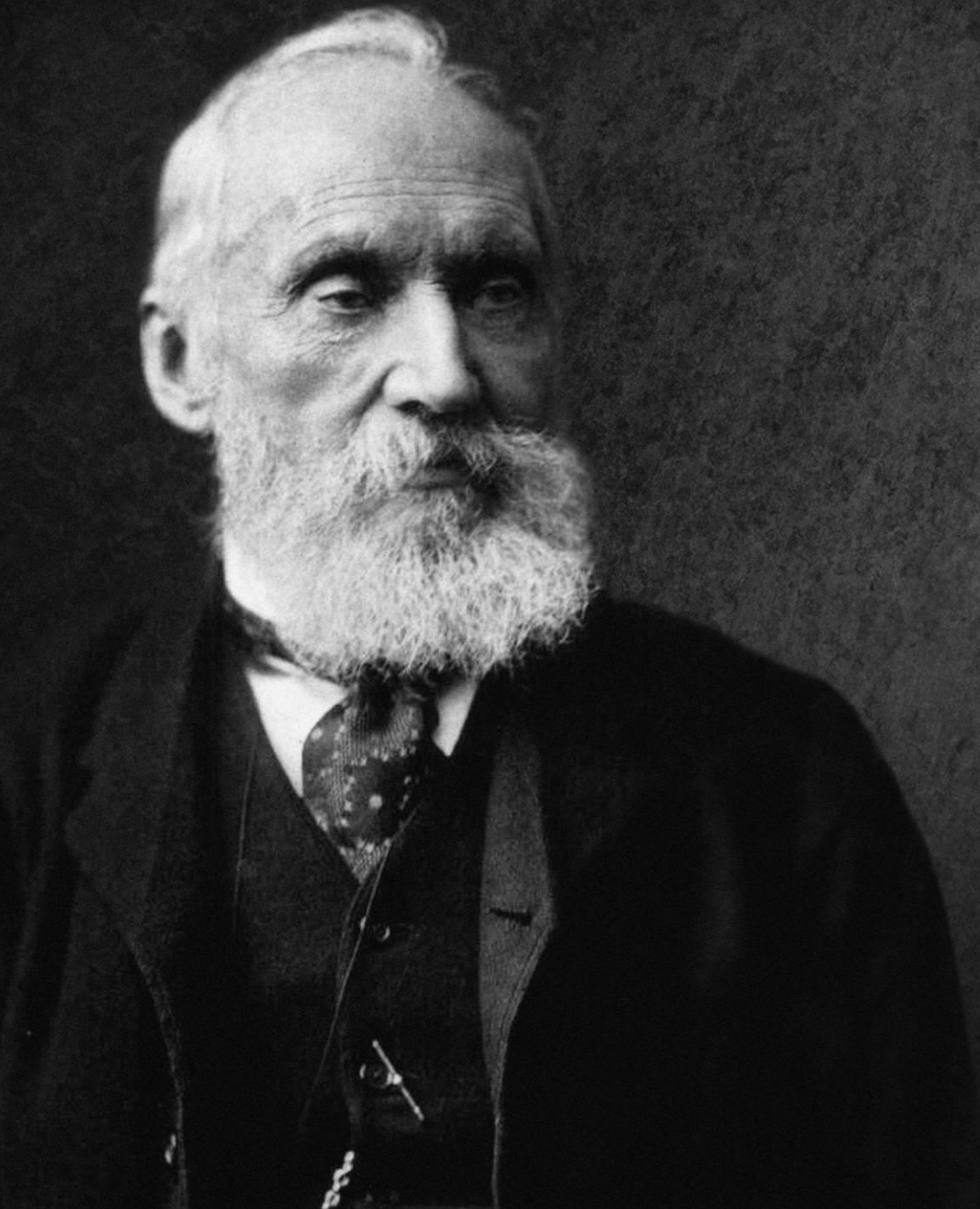


Aranet is looking for integration/distribution partners



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aranet.com



YOU CAN ONLY
IMPROVE WHAT YOU
CAN MEASURE.

- LORD KELVIN

Thank you!

