Aimagin IoT Solution

Which problems does Aimagin solve?

1. You want to make your products smarter.
- To securely monitor, configure, update, and control devices from anywhere in the world.
- To offer additional value-added services to end customers, such as predictive maintenance or energy usage monitoring.

2. You want to go to market as soon as possible.
- With well-proven and reliable solution

3. But you do not have an in-house development team.
  IoT requires a broad range of expertises.
- Electronics system design
- Firmware development
- Servers configuration and backup
- Database, network & security setup
- Web app development
- AI model development

Aimagin offers a complete IoT solution.
- Data collection
    - Electronics hardware interface board
    - Firmware development
    - AI model development
- Industry standard secure connectivity
- Data analytics platform
    - True big data
    - Data analysis
    - AI model training, selection and verification
    - Dashbaord & report generation
- Device management and backup system

What are customer benefits?

Wifi edge device
- Internal data storage (SD card)
- Interface with industry standard UPS and Wifi router

Data Collection
- RS485
- 4-20mA
- PT-100
- Digital IO
- I2C
- CT Interface

Ultra low power (Thread border router/Thread node)
- Internal data storage (SD card)
- Built-in battery management system

Data transfer
- MQTT (2ways communication)
- VPN
- HTTPS
- LAN [1]
- Lora [1]
- Satellite (Iridium) [1]

Server
- No missing data
- High/normal speed acquisition
- Flexible alert
- AI computation
- Remote/Onsite configuration/firmware update
- Customizable web application

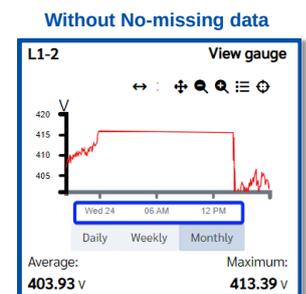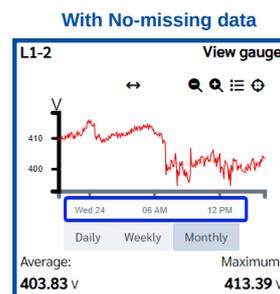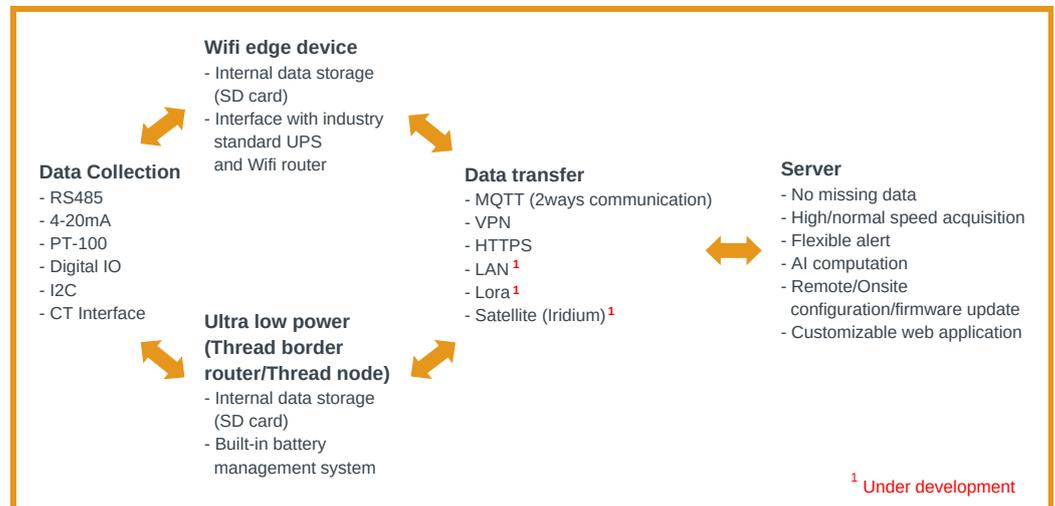[1] Under development

1. Lowest risk offers
- **We can start with NO initial costs.***

2. Key features
- Complete data
    - No-missing data
        - Data can be stored on-devices and automatically re-sent to server in case of unexpected network failures
    - Maximum base sampling rate of 1 Hz
        - To acquire as complete data as possible.
    - High sampling rate (25Hz) can be triggered.
        - On data changes only, enabling detailed transient response analysis while minimizing the amount of data.
- Every node is on-site and online firmware updatable
    - Easily uploading of new features, parameters, or a new AI model.
- Every node is on-site and online configurable
    - Easily manage and maintain system.
- Comprehensive alert settings
    - Multi-channel costomizable condition alert setting.
- Optional ultra low power wireless connectivity (Thread) available
- Security
    - Support HTTPS and VPN

3. Customizable
- High level of customization to fulfill most user needs.

With No-missing data

L1-2 — View gauge
410
400
Wed 24 | 06 AM | 12 PM
Daily | Weekly | Monthly
Average: 403.83 v   Maximum: 413.39 v

Without No-missing data

L1-2 — View gauge
420
415
410
405
Wed 24 | 06 AM | 12 PM
Daily | Weekly | Monthly
Average: 403.93 v   Maximum: 413.39 v
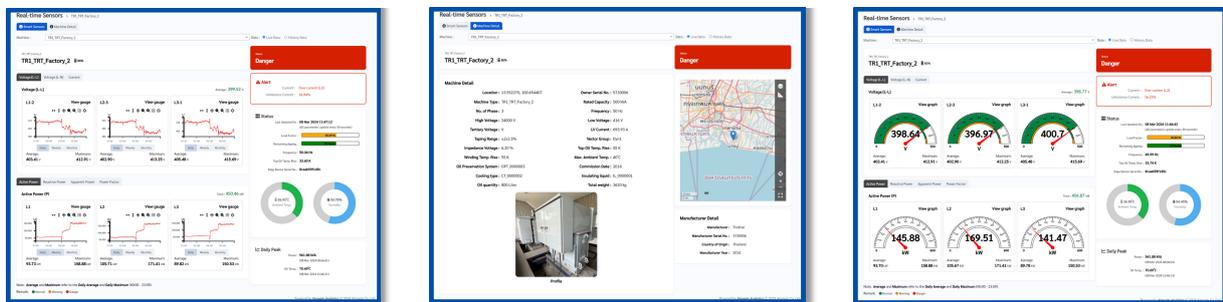
* Ask for more details.

Aimagin

Proof points

Our expertise

- Aimagin is a Mathworks 3rd party developer.
- Aimagin is a Value Added Developer for Iridium.
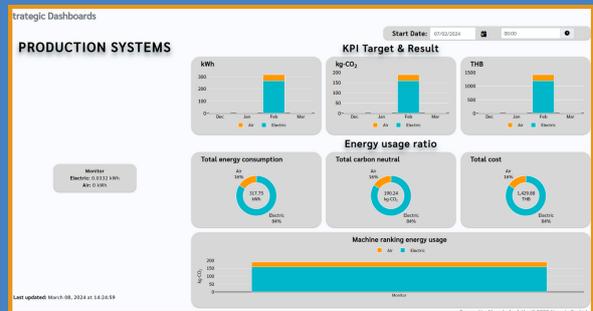- Our big data analytics platform, "Aimagin Analytics", is on the Thailand Innovation List.

What have we done for a distributed transformer manufacturer?

- **What:** Develop hardware gateway and data analytics platform for their products.
- **Objective:** Monitor distributed transformer status and provide necessary alert.
- **Status/Results:** Getting ready to market.

What have we done for an automotive parts manufacturer?

- **What:** Develop both fixed and mobile systems to monitor energy usage in production lines.
- **Objective:** Monitor energy usages, analyse and suggest energy reduction strategy.
- **Results:** Policy developed which resulted in unexpected power saving (on average 70 systems could be switched off instead of running idle)

What to do next?

- Visit www.aimagin.com
- Contact us at Email: support@aimagin.com
- Schedule a call https://calendly.com/aimagin/30-minutes-discovery-call

Schedule a call

PMUC Aimagin