



iQunet.®

Asset & Condition Monitoring Solutions

iQunet offers ready-to-use products and software for digitalization projects, ensuring a quick rollout of on-premises monitoring solutions.

iQunet also supports custom engineering requests to meet specific needs.

iQunet.[®]
Asset & Condition Monitoring Solutions



on-premises

MQTT **OPC UA** GraphQL API

iQunet.[®] **Edge**



AI

IO-Link 4-20mA / 0-10V Analog

iQunet.[®] **LoRaWAN**[®] **Modbus**
Wireless FSK



iQunet.[®] **IO-Link** **LoRaWAN**[®] 4-20mA Analog 0-10V Analog **Modbus**

Vibration Current Signature Wireless Plant Monitoring Drive-as-a-Sensor Metering

Sensors

iQunet.[®]

increases Industrial OEE
(Overall Equipment Efficiency)

through

on-premises

Data Acquisition (DAQ) & Analytics

from a versatile network of

(wireless) iQunet Sensors

and powered by

embedded Edge (AI) Software

enabling

continuous

Asset & Condition Monitoring

iQunet.[®] Asset & Condition Monitoring Solutions


on-premises

 **MQTT**  **OPC UA**  **GraphQL API**

iQunet.[®] Edge  **AI**

 **IO-Link** 4-20mA / 0-10V Analog

iQunet.[®] Wireless FSK  **LoRaWAN[®]**  **Modbus**



iQunet.[®] IO-Link  **LoRaWAN[®]** 4-20mA Analog 0-10V Analog  **Modbus**

Vibration Current Signature Wireless Plant Monitoring Drive-as-a-Sensor Metering

Sensors

iQunet.[®] In a nutshell

- The iQunet solution is a unique **on-premises** platform for **continuous Asset and Condition Monitoring**.
- It connects both **wireless and wired sensors and devices** to the **iQunet Edge** using a variety of industrial protocols—entirely without relying on the cloud.
- All monitoring **data is stored locally** and made instantly accessible via **OPC UA, MQTT, or a GraphQL API**, enabling **seamless integration** with existing plant systems.
- A **comprehensive embedded software suite** supports sensor and device management, Time Waveform (TWF) analytics, interactive graphing, dashboards, and more.
- Complemented by **built-in Edge AI services** for advanced local processing, **on-premises**.

iQunet.® : End-to-End Edge Solution for Remote Monitoring

GraphQL-API

MQTT

OPC UA



Edge Gateway M4

Data Storage in the Edge

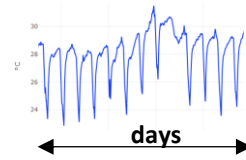
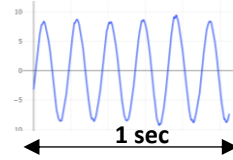
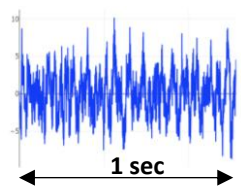
← iQunet.® or LoRaWAN wireless communication / Modbus communication

iQunet embedded OPC UA server MQTT client

Data Storage in the Edge

Condition Monitoring + AI = Predictive Maintenance

Asset Monitoring



Wireless Vibration Monitoring

Wireless Elec. Signature Monitoring (ESA)

Wireless & Modbus Metrics Monitoring

“Fast” High Frequency data [kHz] full spectrum information

“Fast” High Frequency data [kHz] full spectrum information

Lower Frequency data [Hz]

Rotating Equipment

Electric Motors

Operations



MEMS iQunet.®



IEPE iQunet.®



IO-Link iQunet.®



Modbus iQunet.®



IE-Current Transformer (IEPE compatible) iQunet.®



e-Drives (VSD) / Metering Modbus

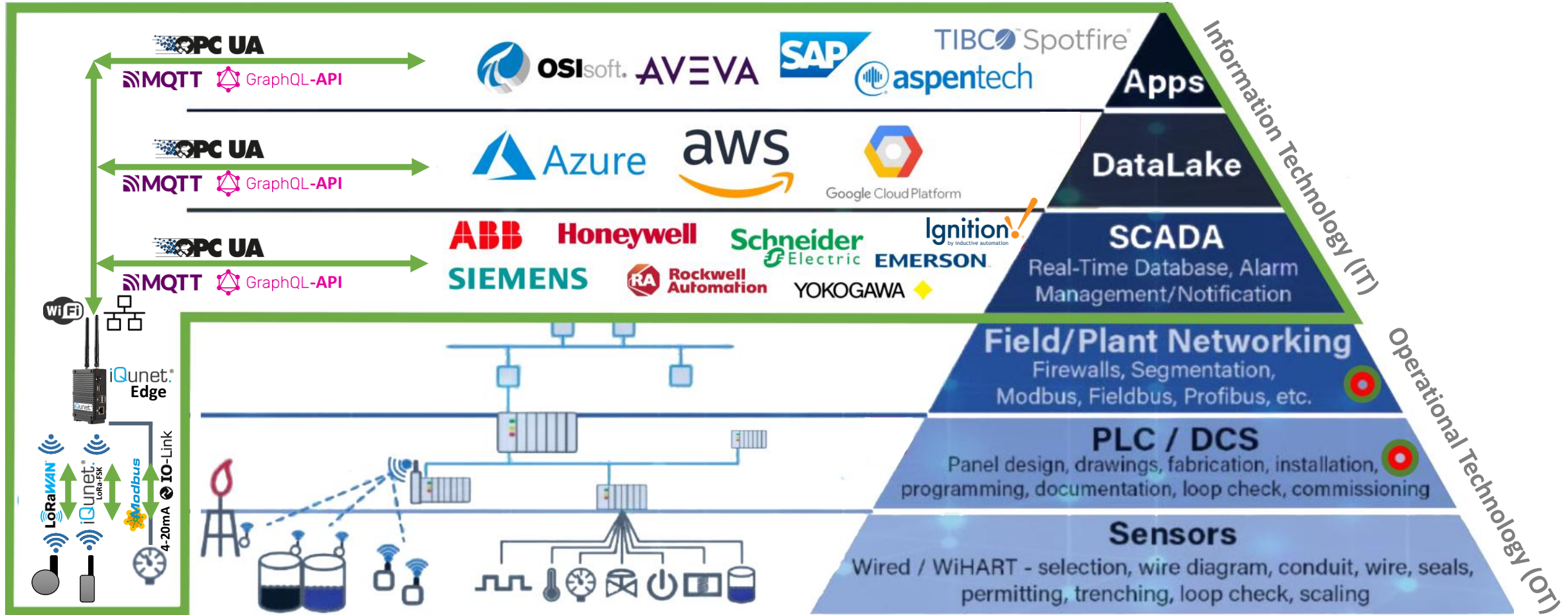


Wireless Sensors LoRaWAN

← iQunet.® or LoRaWAN wireless communication / Modbus communication

iQunet[®]: Smart IIoT for Seamless Interoperability

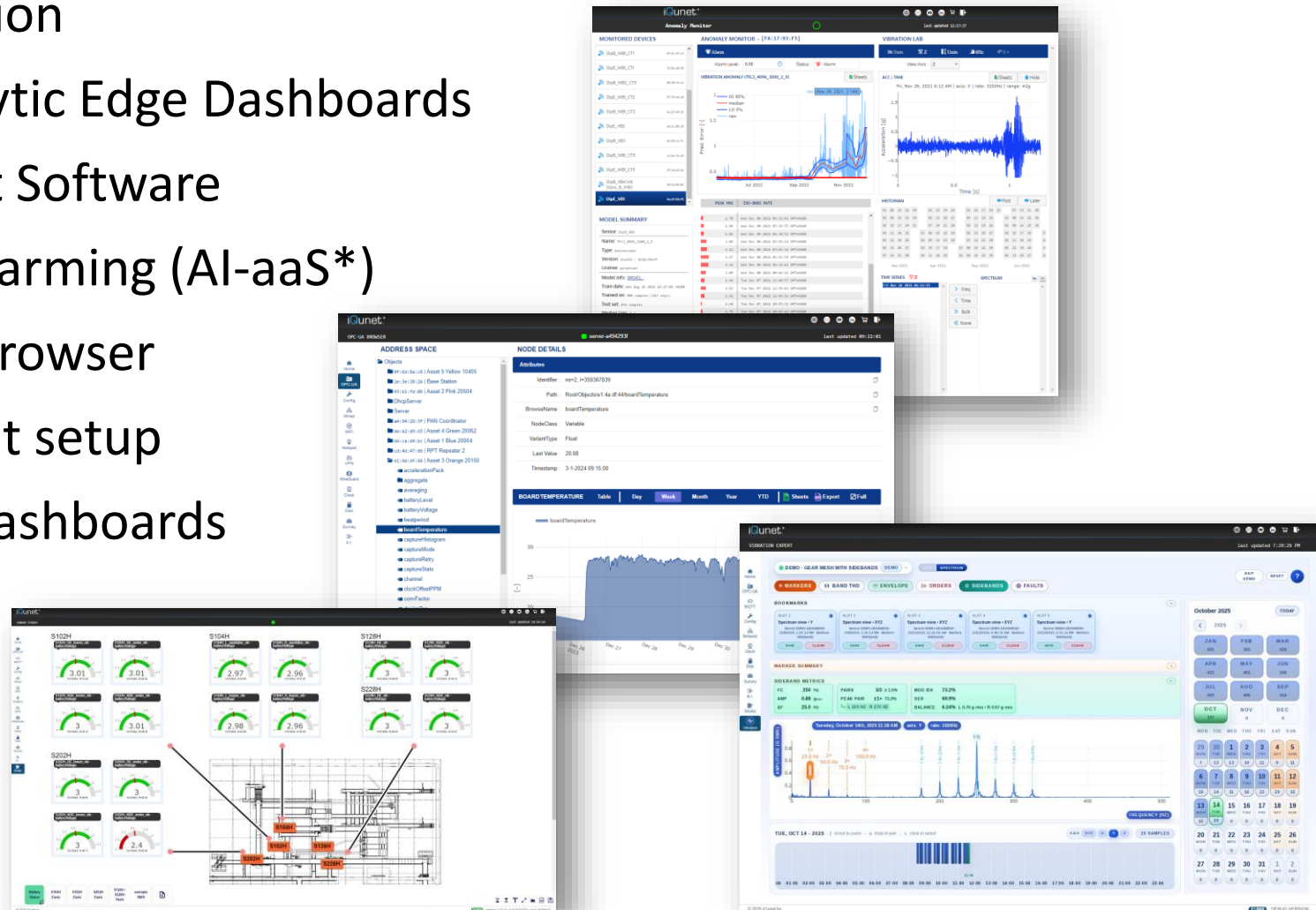
iQunet[®] Asset & Condition Monitoring



Traditional Process Monitoring & Control

iQunet.[®] Software: Embedded (Edge) Web-Interfaces

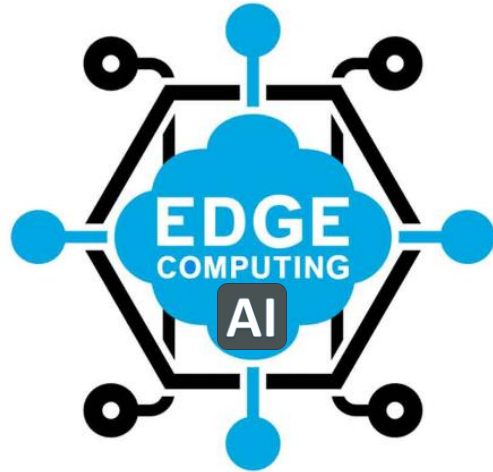
- No software installation
- Comprehensive analytic Edge Dashboards
- Free Vibration Expert Software
- Accurate Edge AI – alarming (AI-aaS*)
- Embedded OPC UA browser
- One-click MQTT client setup
- Embedded Widget Dashboards



*AI-aaS is provided as an optional Service

iQunet.® Key Benefits

Edge (AI) Computing / Data Ownership / Interoperability



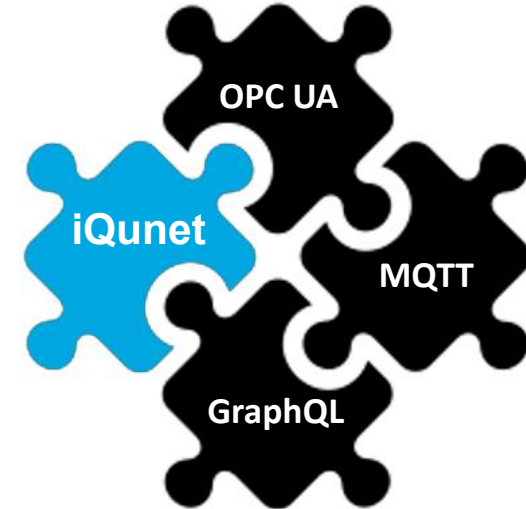
**Edge Analytics &
On-Premises Data Storage**

Real Time Processing,
incl. Embedded AI



**Free Sensor Data &
Data Ownership**

No Vendor Lock-in
Mainly CAPEX



**Seamless Interoperability
& Connectivity**

End-to-End Solution
with High ROI