

Petit Caisson

Integrated Building Management System (iBMS)

Connect assets. Understand operations. Act with confidence.



IoT Platform



Digital Twin



BMS / HMI



Analytics



Predictive Maintenance



ESG Data



A single operating layer for connected buildings and facilities

From field devices and industrial protocols to dashboards, automation, alarms, remote control and 2D/3D digital twin views.

PEOPLE + PLACES + PERFORMANCE + A SUSTAINABLE FUTURE

SMART BUILDINGS
A MORE SUSTAINABLE TOMORROW

What is Petit Caisson?

A management-friendly IoT platform that turns operational data into visibility, action and measurable outcomes.

One platform for many building systems

Petit Caisson brings data from different devices, sensors and systems into one common platform. Management can see what is happening, receive alerts, compare performance and act faster without switching between multiple standalone systems.

Typical management questions it answers:

- ✓ What equipment is running, stopped or in alarm?
- ✓ Where are energy, water or indoor-air issues occurring?
- ✓ Which asset needs attention before it fails?
- ✓ Can the building be viewed and controlled from one interface?



Real-time Visibility

Live dashboards, trends and status views provide a current operational picture across devices, floors and sites.



Automation & Control

Rules, alarms and remote commands allow the platform to respond to events and support faster operational decisions.



Digital Twin Experience

2D/3D views, floor plans, equipment schematics and BMS/HMI screens make complex systems easier for users to understand.



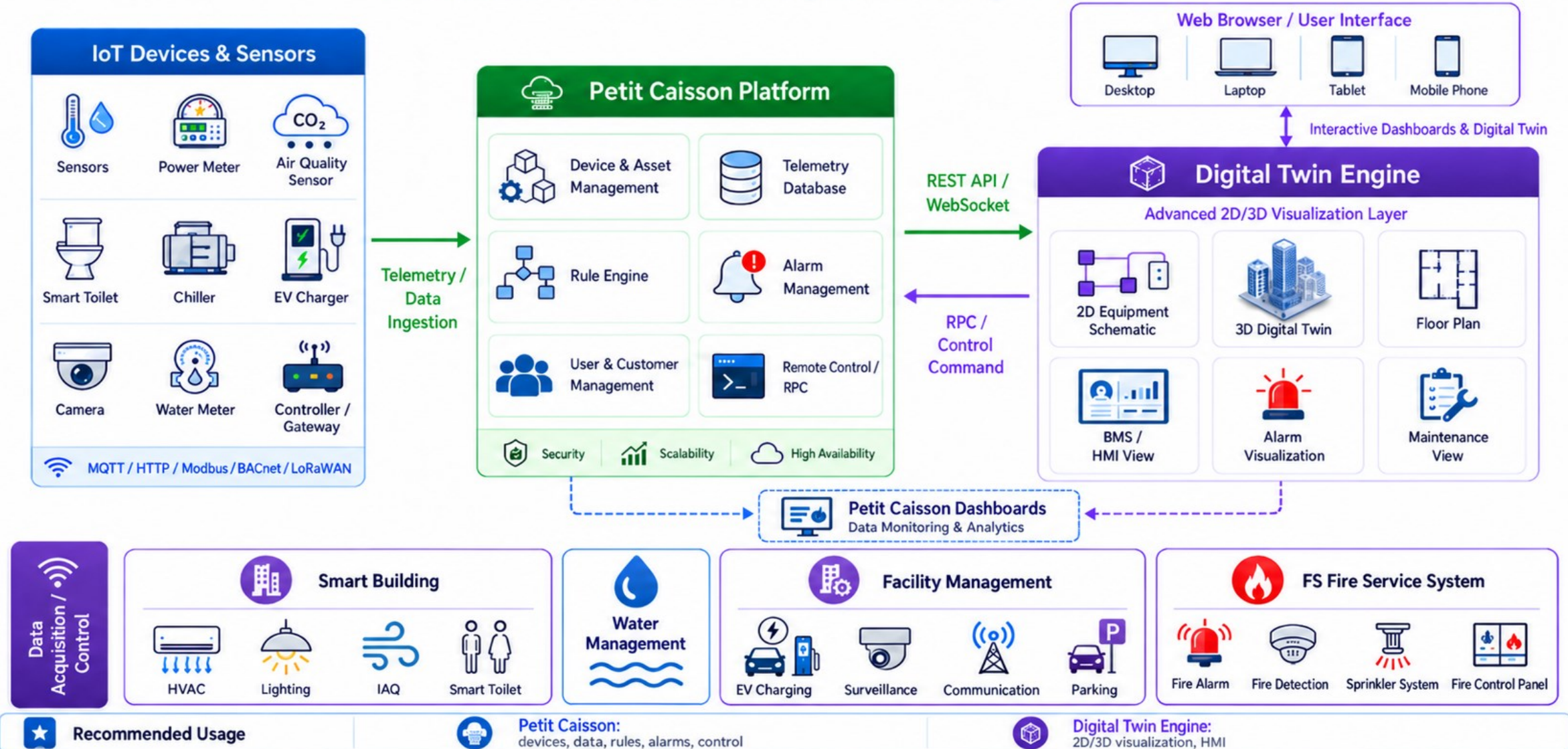
Energy, Carbon & ESG Data

Operational data can be used to identify inefficiencies, support performance improvement and strengthen carbon/ESG reporting.



Recommended System Architecture

Petit Caisson IoT Platform + Digital Twin Engine for Web



Core Platform Capabilities

The platform combines connectivity, data, automation, user management and integration in one reusable foundation.

01 Device & Asset Management

Provision, group and manage devices, equipment, locations and customer assets in a structured hierarchy.

02 Telemetry & Data

Collect, store and visualize live and historical telemetry for dashboards, trends and analysis.

03 Rule Engine & Automation

Define event logic, thresholds and actions so operational responses can be automated consistently.

04 Alarm & Workflow

Create alerts for abnormal conditions, route notifications and provide a clear operational response path.

05 Remote Control & APIs

Support RPC/control commands and integrate with other systems through REST API and WebSocket interfaces.

06 Security & Scalability

Support controlled user access, secure communication, scalable deployment and high-availability architecture.

BACnet • Modbus • OPC-UA • MQTT • SNMP • RESTful API • WebSocket • GraphQL

Solution Coverage

A common platform can be reused across building, facility, water and fire-service applications.



Smart Building



HVAC / MVAC



Lighting



IAQ



Smart Toilet

Operational visibility and control for comfort, indoor environment and shared facilities.



Water Management



Water Metering



Leak Detection



Tank / Pump Status



Valve Monitoring

Monitor usage, abnormal flow and critical equipment to reduce water loss and response time.



Facility Management



EV Charging



Surveillance



Communication



Parking

Bring diverse facility services into one dashboard and shared alarm/workflow environment.



FS Fire Service System



Fire Alarm



Fire Detection



Sprinkler System



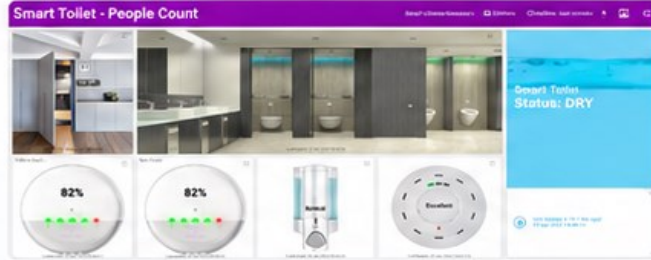
Fire Control Panel

Digitize fire-service status and event visibility while keeping life-safety control within approved fire systems.

One data model • Shared dashboards • Common alarm logic • Reusable digital twin components

From Live Data to Management Outcomes

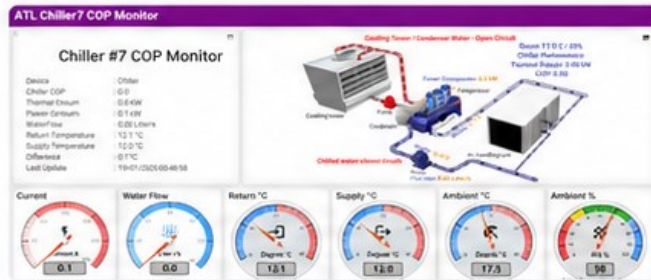
Petit Caisson provides operational dashboards for different use cases while giving management a consistent view of performance.



Smart Toilet

Occupancy, status, consumables and environment monitoring

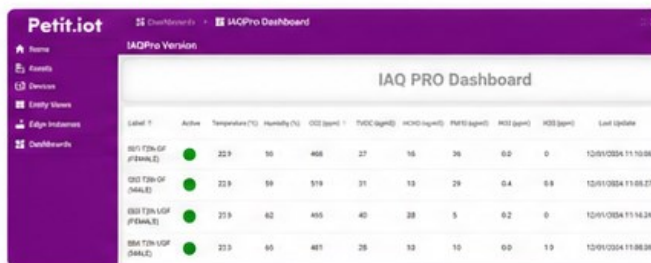
[Live Dashboard →](#)



Chiller COP

Energy and thermal performance monitoring

[Live Dashboard →](#)



Indoor Air Quality

Multi-point IAQ status and trend visibility

[Live Dashboard →](#)

Management Outcomes



Faster Response

See alarms and abnormal conditions earlier and route attention to the right team.



Lower Operating Cost

Use energy, water and equipment data to identify waste and improve operating efficiency.



Predictive Maintenance

Use trends and condition data to plan service before failure disrupts operations.



Better Management Visibility

Provide a single view across assets, floors, buildings and multiple solution domains.



Digital Twin & ESG Readiness

Create a foundation for 2D/3D visualization, carbon data and future analytics use cases.