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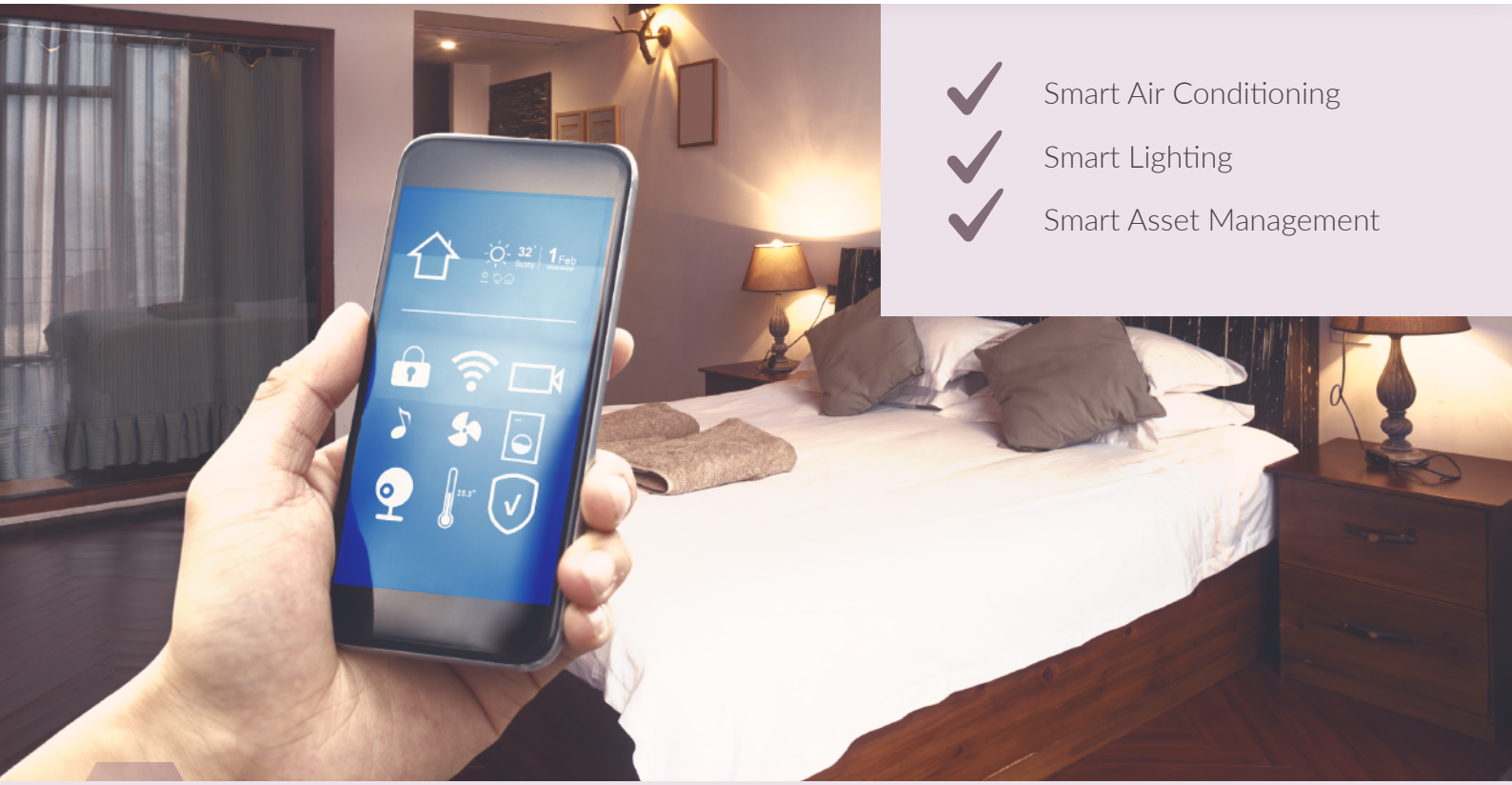
DATASHEET

Kaa for Smart Hotel

Capabilities and Case Studies



- Smart Air Conditioning
- Smart Lighting
- Smart Asset Management

Strengthen your key competition points with Kaa

- Drive down service-related costs by resolving issues faster
- Increase asset lifetime
- Eliminate additional maintenance activity
- Meet the demand of guests for faster, personalized service

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Kaa for Smart Air Conditioning

- ✓ Customize air conditioning to the needs of the guests
- ✓ Optimized cooling and ventilation equipment
- ✓ Predetermine Stand-by HVAC mode for an unoccupied guestroom
  Smart HVAC learns patterns and automates accordingly
- ✓ Refresh air in closed window facilities
- ✓ Track and manage humidity

Kaa for Smart Lighting

- ✓ Switch lights on and off at optimal times and vary light levels
- ✓ Adjust the level of lighting in accordance to the sun activity
- ✓ Switch off the lights when the room is not occupied
- ✓ Matching occupancy patterns to energy use – A smart building will run leaner (and save money) when there are less people inside
- ✓ Lighting usage patterns analysis

Kaa for Smart Asset Management

Studies estimate that of the total time spent fixing a system issue, **76 percent of the time** is spent before the fixing even begins.

- ✓ Real-time unified view of the equipment
- ✓ Optimizing equipment setpoints and setting timers
- ✓ Efficient alert management by prioritizing and structuring the numerous notifications generated by building systems
- ✓ Centralize and correlate data from building systems, corporate data warehouses, and external sources

What you can do with Kaa IoT Platform

- Real-time event processing
- User alerting via email, SMS, voice call
- Data visualization on a secure multi-tenant cloud portal
- Anomaly detection with a flexible and user-friendly rule engine
- User customizable dashboards
- BI integration

Kaa ecosystem

Data ingestion

mongoDB, ParStream, cassandra, Storm, hadoop, CASK, ORACLE, Spark, Couchbase, kafka

Cloud support

rackspace, Azure, AWS, openstack

DB support

cassandra, MySQL, mongoDB

Kaa is compatible with virtually **any type of connected device or microchip** on the market and supports a number of popular data processing and warehousing systems out of the box.

Hardware

Intel Edison, ARTIK, BROADCOM, Texas Instruments

UDP | TCP | CoAP | HTTP | SSL | MQTT | Web sockets | Custom

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PlumTech Engineering Services

- ✓ Developing the product end-to-end
- ✓ Developing particular features or modules
- ✓ Hardware integration
- ✓ Firmware OS development
- ✓ Custom data processing and analytics
- ✓ Third-party software integration
- ✓ DSP algorithms
- ✓ Machine learning
- ✓ Quality assurance
- ✓ System deployment
- ✓ System upgrades

We manage **the entire engineering cycle** - from the initial design to ground-up implementation, testing automation, and production rollout.

Drawbacks of using PaaS-type IoT platforms

- ✗ Rely on someone else's cloud
- ✗ Lack of control over data security
- ✗ Renting the technology, not owning it
- ✗ Inefficient interoperability of the systems (HVAC with lighting) due to proprietary firmwares and protocols
- ✗ New features, customization and new hardware integration are expensive and require involvement of the platform's vendor

Get full ownership over your IoT solution's source code with PlumTech.

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