

Intensium Sight®

Control and supervision platform for your Energy storage systems

Intensium Sight® is Saft cloud-based data management platform which embeds all information services needed for your battery storage assets operation and maintenance. Intensium Sight® is connected to Saft's CUBE, a monitoring device qualified hardware and software controller for Saft Intensium® batteries containers.

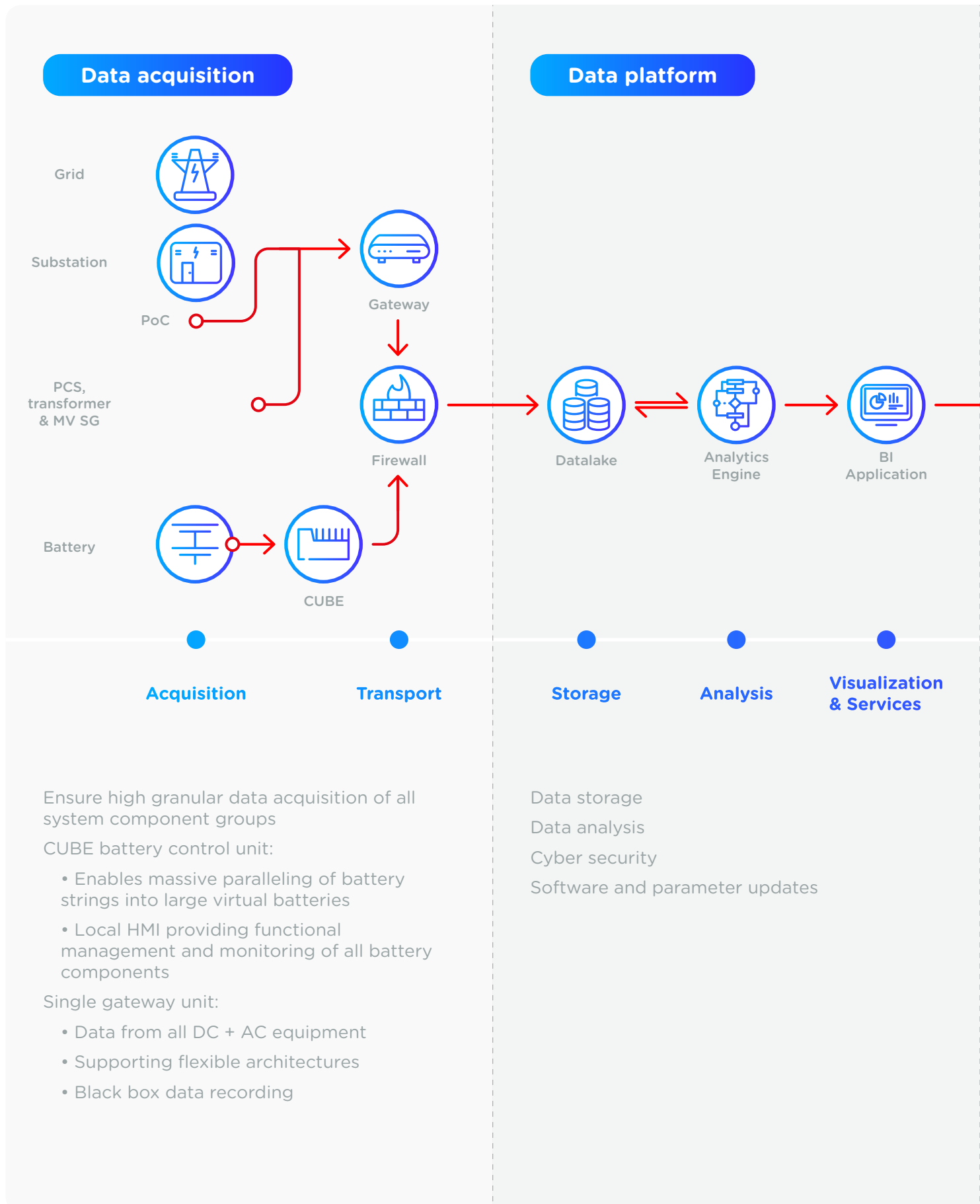
Benefits

- 1. Fast response time and increased system availability**
 - 24/7 remote monitoring and alarming
 - Optimized system operation
- 2. Safeguard system performances ensuring storage asset economics**
 - Automated and remote performance guarantee management
 - Access to highly granular system data in real time at all system levels
 - Ageing prediction and anticipation of changing operation patterns
- 3. Easy system integration and optimized architectures for large-scale ESS**
 - Straightforward interaction with Saft Intensium® Max battery containers and most PCS brands through a single gateway
 - Native interoperability in energy markets
- 4. Cybersecurity driven design**
 - Ensures data confidentiality, product integrity, availability and safety
 - Protects data, assets, people and revenue
- 5. Future proof technological platform**
 - Enables digital twin for prediction and optimization of performances, operation and maintenance of a single system or across a complete fleet



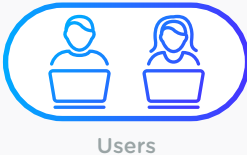
TotalEnergies

Components & architecture of the supervision platform



Functional modules of the user interfaces

User interfaces



Utilization

Viewer, Tracker, Fixer

Enabling status monitoring, diagnostic, State of Charge balancing

Future proof functions including updates, upgrades and new services

1

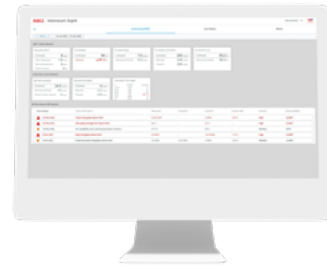
Viewer



- **Live data:** metrics of battery banks to evaluate and control the system and the operations
- **Historical data:** specific data collected during battery operation
- **Historical faults:** historic of enabled and disabled battery fault codes
- **Live auxiliary status:** status of auxiliary equipment such as fire safety system, HVAC, etc

2

Tracker

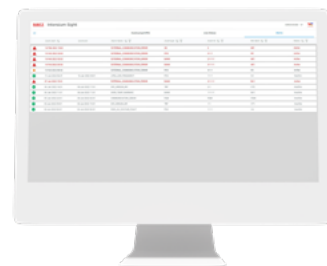


Automated performance guarantee management:

- Digital data crunching
- Optimized field service travel to customer site
- Remote and automatized diagnosis
- Monitoring of sub-systems performances guarantees
- Remote battery storage performances testing:
 - Energy capacity (State of Health)
 - System efficiency (Round-Trip Efficiency)

3

Fixer



- Alerts & alarms
- Trouble shooting
- Optimized maintenance planning
- Software and parameters updates

Key technical specifications

System data	Structured and granular data acquisition <ul style="list-style-type: none">▶ Setable granularity according to project requirements▶ Typically, 4,000 data points collected for a 10 MWh lineup▶ Data model structured along MESA standard
	Flexible and secured data storage <ul style="list-style-type: none">▶ Data storage duration in line with project lifetime up to 20 years▶ Local data storage possible▶ Redundant data storage possible▶ Data sharable with customer/asset owner on demand
Architecture	Architecture compatible with multiple project configurations <ul style="list-style-type: none">▶ Size from 1 MW up to several hundreds of MW▶ Discharge duration from 1 to 8 hours▶ Unlimited number of lineups
	Simple integration adapted to project scope of supply <ul style="list-style-type: none">▶ Compatible with most Power Conversion Systems and Power Management Systems▶ Ability to integrate data from battery containers to grid connection point
Users	Dedicated interfaces for defined user groups <ul style="list-style-type: none">▶ Contract administrator▶ Site operator▶ Services team
Key metrics	Customizable metrics based on project contract <ul style="list-style-type: none">▶ System availability▶ Energy throughput▶ Round trip efficiency▶ Ageing▶ Auxiliary consumptions▶ State of Charge
Notifications	Real-time alerts and faults Daily usage and performances metrics Notifications via email
Reporting	Yearly (monthly optional) reports Customizable structure and content
Fleet	Aggregation of multiple sites in different locations



26, quai Charles Pasqua
92300 Levallois-Perret - France
T. : +33 (0)1 58 63 16 00
F. : +33 (0)1 58 63 16 18

Saft une société de TotalEnergies
S.A.S. au capital de 26 724 876 €
R.C.S. Nanterre 481 480 465
Numéro de TVA FR 51 481 480 465
www.saftbatteries.com

Document N°23000-0522-2
Edition: May 2022
Data in this document is subject to change without
notice and becomes contractual only after written
confirmation.
Photo credits: © Saft

