

ADVANCED BMS & ENERGY SYSTEMS

FOR CRITICAL INFRASTRUCTURE

Four product platforms for storage, charging and resilient power.

SODIUM HUB · CHARGE HUB · FAST HUB

European engineering · project-specific compliance · lifecycle support

ACTIVE BALANCING IS THE OPERATING INTELLIGENCE.

CELL-LEVEL INTELLIGENCE. SYSTEM-LEVEL CONFIDENCE.

BMSer applies active balancing, real-time monitoring and protection logic as part of the BMS architecture — improving consistency, usable capacity and lifecycle confidence.

01

CELL VARIANCE IS INHERENT

State-of-charge and operating differences can affect system consistency.

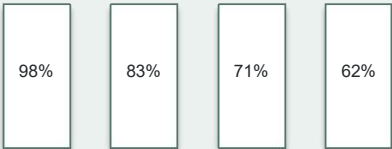
02

PASSIVE DISSIPATION IS LIMITED

Conventional balancing can dissipate surplus energy as heat.

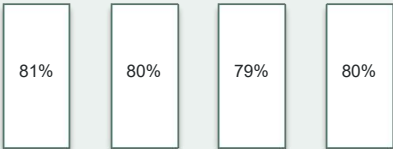
ACTIVE BALANCING EFFECT — ILLUSTRATIVE

BEFORE



CONTROLLED ENERGY TRANSFER

AFTER



CURRENT PRODUCT PORTFOLIO

SODIUM HUB	SODIUM HUB	CHARGE HUB	FAST HUB
DC CORE 1100	DC CORE 1400	CUBE 1200	F300 / F500
1.1 MWh sodium-ion DC storage	1.4 MWh sodium-ion DC storage	1.2 MWh LFP + up to 600 kW DC charging	252–505 kWh · 260–520 kW hybrid power

EUROPEAN COMPLIANCE PRINCIPLE

Validated cell and subsystem foundations are combined with BMSer system engineering and a configuration-specific conformity pathway. Final requirements are defined against the ordered system and destination market.

SODIUM HUB

Modular sodium-ion DC energy storage for AIDC, industrial and project-specific energy architectures.



CORE CONFIGURATION

ENERGY	1.1 MWh
CHEMISTRY	Sodium-ion
FORM	10-foot
ROLE	DC storage

WHERE IT FITS

Designed for modular deployment where long-life DC storage, cold-climate capability and system-level BMS intelligence are required.

SYSTEM ARCHITECTURE

BMSer BMS, balancing, monitoring and protection logic.

PROJECT INTEGRATION

Interfaces and configuration defined against the application.

DELIVERY PATH

European engineering, commissioning and Active Care support.

Technical information is indicative. Final configuration, interfaces and project compliance are defined against the ordered system and destination market.

SODIUM HUB

Higher-energy sodium-ion DC storage for utility, AIDC and large-scale energy architectures.



CORE CONFIGURATION

ENERGY	1.4 MWh
CHEMISTRY	Sodium-ion
FORM	10-foot
ROLE	DC storage

WHERE IT FITS

Built for denser project layouts and larger energy blocks while preserving a modular 10-foot deployment philosophy.

SYSTEM ARCHITECTURE

BMSer BMS, balancing, monitoring and protection logic.

PROJECT INTEGRATION

Interfaces and configuration defined against the application.

DELIVERY PATH

European engineering, commissioning and Active Care support.

Technical information is indicative. Final configuration, interfaces and project compliance are defined against the ordered system and destination market.

CHARGE HUB

Integrated LiFePO4 storage and high-power DC charging for demanding mobility and temporary-power operations.



CORE CONFIGURATION

ENERGY	1.2 MWh
CHEMISTRY	LiFePO4
DC CHARGE	Up to 600 kW
FORM	10-foot

WHERE IT FITS

Suitable for heavy equipment charging, commercial fleets, Alpine operations and sites where grid capacity is constrained.

SYSTEM ARCHITECTURE

BMSer BMS, balancing, monitoring and protection logic.

PROJECT INTEGRATION

Interfaces and configuration defined against the application.

DELIVERY PATH

European engineering, commissioning and Active Care support.

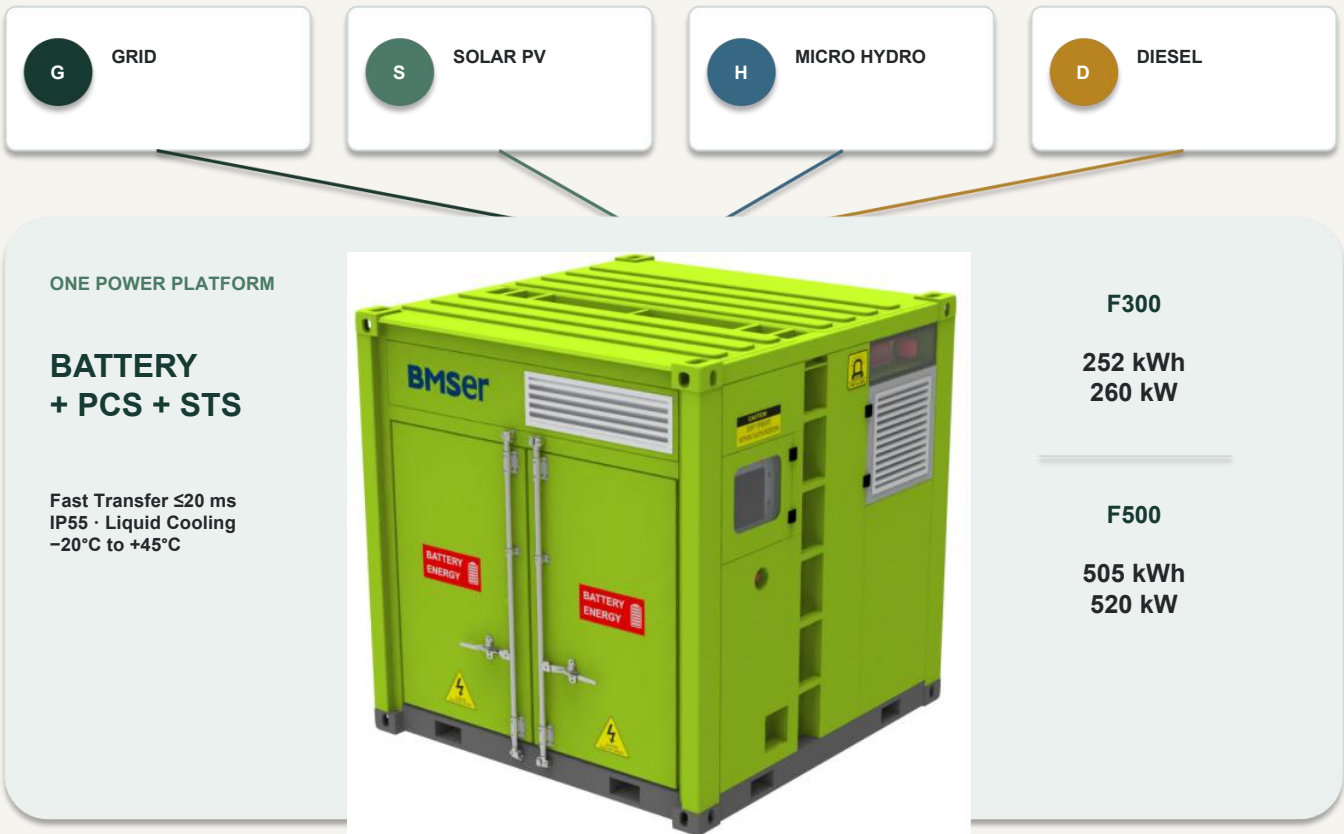
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FAST HUB

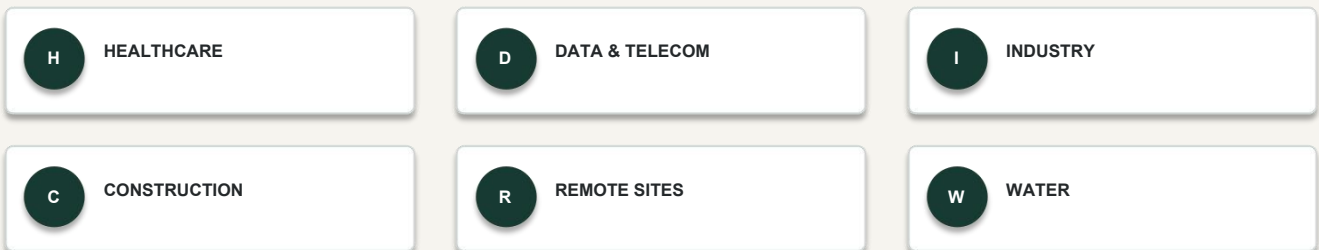
ANY SOURCE. FAST RESPONSE. RELIABLE POWER.

Multi-Source Hybrid Power System

A compact integrated platform combining battery storage, PCS, fast transfer and intelligent control for grid, renewable and backup generation.



POWER WHERE CONTINUITY MATTERS



MULTIPLE ENERGY SOURCES. ONE RESILIENT POWER PLATFORM.

TWO POWER CLASSES. ONE SYSTEM ARCHITECTURE.

FAST HUB F300

252 kWh260 kW

FAST HUB F500

505 kWh520 kW

AC SYSTEM	380 Vac ±15% · 50/60 Hz · 3L+N+PE
BATTERY	LFP · 728–949 VDC · 832 VDC rated
TRANSFER	Fast Transfer ≤20 ms
ENVIRONMENT	IP55 · -20°C to +45°C · ≤95% RH · ≤3,000 m
THERMAL	Liquid cooling · HVAC heating capability
COMMS	LAN · 4G · RS485 · CAN
PROTOCOLS	Modbus · IEC 60870-5-104 · IEC 61850
CORROSION	C3 standard · C4 / C5 optional

OPERATING LOGIC

- 01

GRID AVAILABLE

Grid and available generation support the load.
- 02

GRID INTERRUPTION

Battery + PCS + STS provide fast transition.
- 03

EXTENDED OUTAGE

Continuous generation provides duration; battery buffers response.
- 04

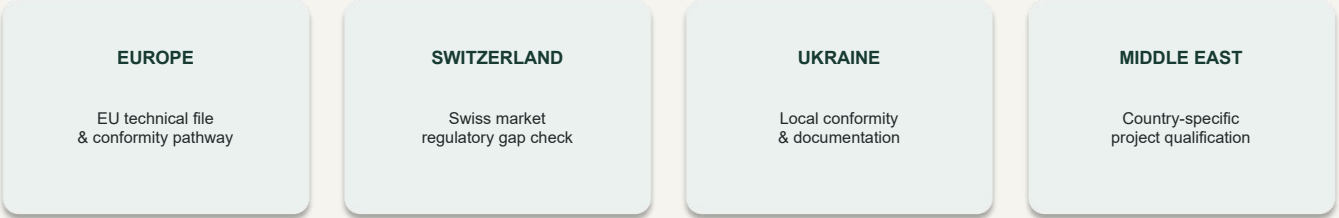
HYBRID OPERATION

Grid / PV / hydro / diesel combine by project architecture.

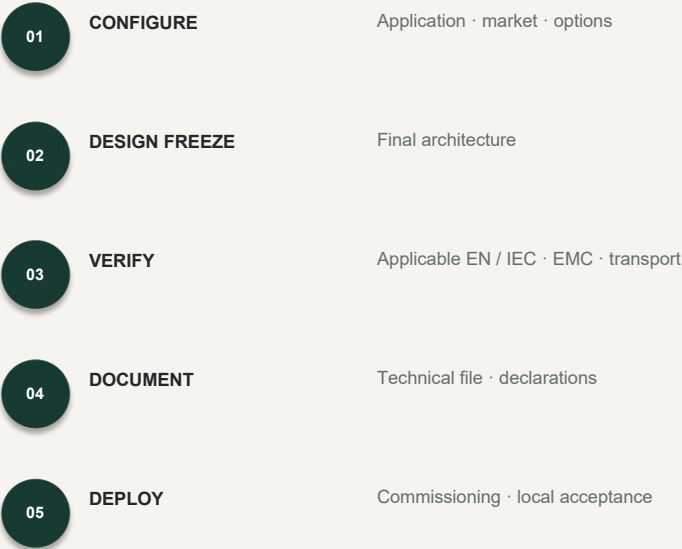
BATTERY FOR RESPONSE. GENERATION FOR DURATION.

ENGINEERED FOR THE MARKET WHERE THE SYSTEM WILL OPERATE.

Validated technology foundations are combined with a project-specific conformity pathway defined by configuration, application and destination market.



PROJECT-SPECIFIC COMPLIANCE



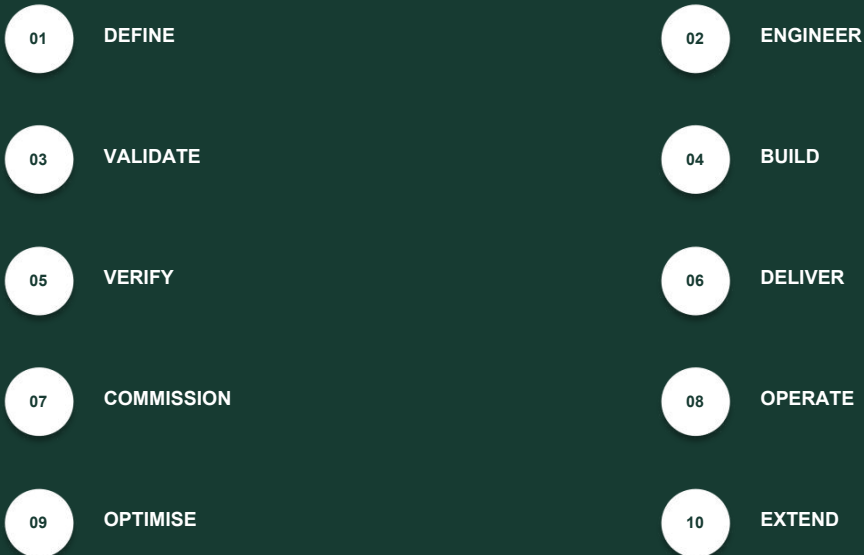
FAST HUB — CURRENT REFERENCES

IEC / EN 62619	Industrial battery safety reference
IEC / EN 61000	EMC family — exact parts by configuration
UN 38.3	Battery transport test reference

Final certification and conformity scope is determined by the ordered configuration, application and destination market.

BEYOND THE HARDWARE. DELIVERED WITH ACTIVE CARE.

From project definition and system engineering to commissioning, monitoring and lifecycle support.



DIGITAL FIRST. EXPERT BACKED. LOCALLY DEPLOYABLE.

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