

PRODUCT SPECIFICATION DOCUMENT

AP500 Module

Rugged, high-output battery storage for industrial power applications.



Power without compromise.

The AP500 delivers silent, emission-free energy for heavy-duty applications – replacing multiple diesel gensets on construction sites, mining operations, and remote infrastructure projects.

Built tough and smart, it smooths peak loads, supports hybrid integration, and delivers over 500 kWh of clean, high-performance power wherever you need it.

Applications

- Construction (cranes, hoists, site power)
- Remote/off-grid energy
- Events and emergency power backup
- Generator hybridisation

Performance Highlights

- **564 kWh nominal capacity** with 625 kVA peak power
- Recharges in just **2 hours**
- Up to **96.6% efficiency**
- Silent, zero-emissions operation
- Built-in BMS and liquid thermal control
- Suitable for hybrid grid/genset integration

Technical Specifications

Performance	
Nominal rated power	500 kVA
Overload power (60s)	625 kVA
Nominal peak power (10s)	625 kVA
Electrical	
Rated voltage	415 VAC
Output voltage range	400 (-10%~+15%) VAC
Frequency	50/60 Hz
Power factor range	0 ind. ... 1 ... 0 cap
Nominal rated AC current	696 A
Max AC current (10s)	870 A
Energy	
Cell chemistry	LiFePO4
Nominal capacity	564 kWh
Effective capacity	507.6 kWh
Recharging time	2h@282kW Hours
Discharging time	1h@508kW Hours
System round trip efficiency	up to 96.6%
DoD% (depth of discharge)	90%
Lifetime (80% DoD)	7000 cycles
Battery management system	Automotive grade BMS
Battery balanced (recharge up to 100%)	4 weeks
Temperature control	Liquid cooling / PI heating film

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Technical Specifications

Environmental

Protection class	IP54
Corrosion protection	C3 (C5M)
Operating temperature	-20 to +50 °C
Humidity	0-95% (no condensation)
Maximum operating altitude	3000 m
Sound power level	<50 dB(A)@1m

Mechanical

Dimensions (L x W x H)	2950*2300*2500 mm
Weight	8800 kg

Scope Of Supply

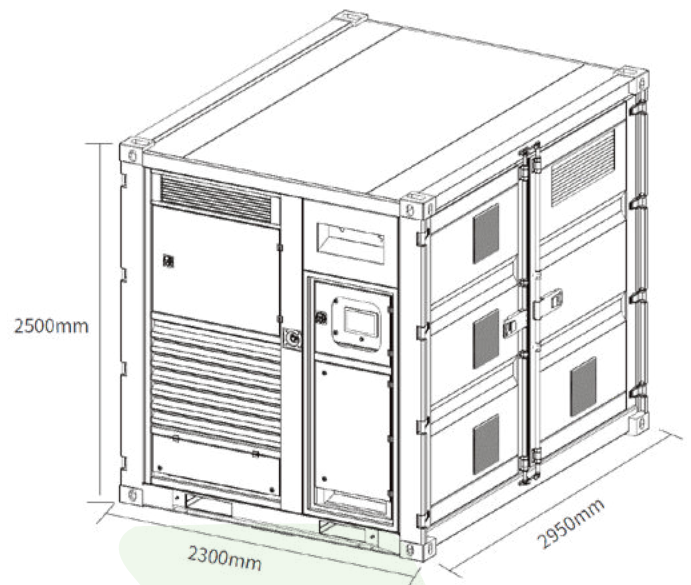
Canopy
High strength structure,
High IP protection
container.

Security
Internal locker for batteries,
Anti-theft hinges and door
lockers, Earth pin without
grounding rod.

Transport Efficiency
Lifting eye,
Skid frame with forklift
pockets, Anti-theft features.

Options

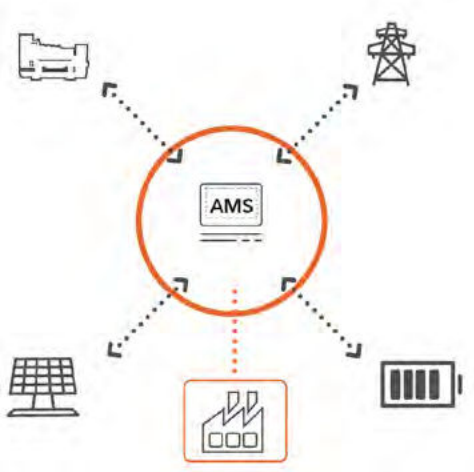
Custom colours,
Custom sockets
distribution
(input and
output),
Extended galvanized
baseframe, Grid
synchronisation panel,
Integrated PV inverter,
EV charge point,
Trailer.



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Control	
Control Panel	Industrial-grade rugged 10" HMI with configurable presets, data visualisation and logs
Protection	Overload, Overhead, Short Circuit, Earth Fault
Temperature control	Active forced air cooling
Remote generator start	Dry contact relay / MODBUS
Remote connectivity	Data-efficient M2M communications via mobile and user notifications to internet connected devices

Atlas Management System

With the Atlas Management System, you can effortlessly check the performance of your systems in real-time, identify and troubleshoot any issues, and even remotely commission new units. The system also offers remote access to the HMI, enabling you to control and adjust settings from anywhere. Additionally, you can assign contracts to specific systems, ensuring they are operating according to your needs, and track their exact location using integrated GPS technology.



Multiple Working Mode

Provides multiple operating modes selection for different working scenarios. The full functions AMS supports Island mode, Hybrid mode, Microgrid mode etc.



Integration Capability

AMS can automatically integrate various energy sources of generator, battery storage, PV, mains and provide seamless power switch.



Scalability

The power and capacity can be expanded by parallelling with multiple EnergyPack BESS and generators.