

PowerStation™ AP Series

Smart Lithium BESS Solutions for Utility, Commercial & Industrial Applications

PART 1 Product Overview

The PowerStation™ AP Series delivers containerized high-density lithium iron phosphate (LFP) energy storage, featuring integrated liquid or HVAC cooling, smart BMS, and highly efficient PCS systems for scalable deployments.

PART 2 Key Applications

- Frequency and Voltage Regulation
- Peak Shaving and Load Shifting
- Demand Charge Reduction
- Microgrid Stabilization and Islanding
- Backup Power for Critical Loads
- Solar + Storage Integration

PART 3 Product Models

Model	kW	kWh	Cooling	Application
AP-1600KW/3008kWh	1600	3008	Liquid Cooling	Gird/Utility
AP-1200KW/2064kWh	1200	2064	HVAC Cooling	Utility/C&I

PART 4 Technical Highlights

- LiFePO₄ Cells, UL1973 / UL9540A Tested
- High Efficiency Liquid or HVAC Cooling
- Smart Active Balancing BMS
- Scalable Modular PCS
- Remote Monitoring and Firmware OTA Ready
- RS485, Modbus RTU/TCP, optional IEC61850
- GPC+EMS Control Integration

PART 5 Certifications

- UL9540 / UL9540A Tested, CEC listed
- IEC 62619 / 61000-6-2 / 61000-6-4
- CE
- IP54/IP65

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| AP-1600KW/3008kWh



Item	Description	
DC data		
Cell type	EVE© LF306K, 3.2V/306Ah Lifepo4, UL1642	
Cell cut-off voltage	Discharge 2.5V, Charge 3.65V	
Battery pack configure	48s1p, 47kWh, 153.6V/306Ah, UL1973/IEC62619	
Pack cut-off voltage	Discharge 120V, Charge 175.2V	
Battery rack configure	384s1p, 376kWh, 1,228.8V/306Ah, UL1973/IEC62619	
Pack#/rack	1 column x8 rows	
Rack#/system	8 in parallel	
System nominal voltage	1228.8[Vdc]	
DC busbar voltage range	1075.2~1363.2[Vdc]	
Rated current	8×162.7A	
System nominal energy	3008kWh	
BMS communication	RS485/Ethernet, Modbus RTU/TCP protocol	
Balance	Active balance BMS	
AC data		
PCS model	[EH-0200-HA-M] ×8	
Rated AC power	1,600KW	
Max. AC power	1,760KW	
Rated output voltage	690Vac, 50/60Hz	
Output voltage range	586.5~759[Vac]	



Rated output current	8×167.3[Aac]
Output THDi	<1.5%
AC PF	0.1~1 leading or lagging (Controllable)
Output wiring	3Ø/3W+PE
Max efficiency	99%
Electric protection	Anti-Islanding and over-voltage/current protection etc.
BESS General data	
BESS Container	L6,058xW2,438xH2,896mm / L20 xW8 x H9.50 ft /20'HC
BESS weight	~28.5Tons / 62,831.67lb
BESS cycles	>6,000cycles
IP protection	IP54
Operating temperature	-20~40°C
Relative humidity	0~95% (non-condensing)
Max working altitude	1,000m/3,280ft
FSS	FK-5-1-12, UL Listed
Gas release	Gas detection and release system for CO/H2
Control system	GPC/HMI
EMS	Optional
Transformer suggestion	≥2000KVA
BESS warranty	6,000cycles/5yrs which is first, design life 20yrs.
Thermal Management	Liquid-cooled cabinet and HVAC
Certifications	UL9540, IEC62619, EN 50549-2, IEC 61000-2&-4, IEC 62477, UL 1973, EN50549-2, IEEE 1547, FCC, UN3536



| AP-1200KW/2064kWh



Item	Description
DC data	
Cell type	EVE© LF280K, 3.2V/280Ah Lifepo4, UL1642
Cell cut-off voltage	Discharge 2.5V, Charge 3.65V
Battery pack configure	16s1p, 14.336kWh, 51.2V/280Ah, UL1973/IEC62619
Pack cut-off voltage	Discharge 44.8V, Charge 56.8V
Battery rack configure	384s1p/344.064kWh, 1,228.8V/280Ah, UL1973/IEC62619
Pack#/rack	24, 3 columns ×8 rows
Rack#/system	6 in parallel
System nominal voltage	1228.8[Vdc]
DC busbar voltage range	1075.2~1363.2[Vdc]
System nominal energy	2,064.384kWh
BMS communication	RS485/Ethernet, Modbus RTU/TCP protocol
Balance	Active balance BMS
AC data	
PCS model	[EH-0200-HA-M] ×6
Rated AC power	1,200KW
Max. AC power	1,320KW



Rated output voltage	690Vac, 50/60Hz
Output voltage range	586.5~759[Vac]
Rated output current	6×167.3[Aac]
Output THDi	<1.5%
AC PF	0.1~1 leading or lagging (Controllable)
Output wiring	3Ø/3W+PE
Max efficiency	99%
Electric protection	Anti-Islanding and over-voltage/current protection etc.
BESS General data	
BESS Container	L6,058xW2,438xH2,896mm / L20 xW8 x H9.50 ft /20'HC
BESS weight	~24 Tons/ 52,910lb
BESS cycles	>5,000cycles 80% EOL @25℃
IP protection	IP54
Operating temperature	-20~40°C
Relative humidity	0~95% (non-condensing)
Max working altitude	4,000m / 13,123ft
FSS	FK-5-1-12, UL Listed
Gas release	Gas detection and release system for CO/H2
Control system	GPC/HMI
EMS	Optional
Transformer suggestion	≥2000KVA
BESS warranty	6,000cycles / 5yrs which is first, design life 20yrs.
Thermal Management	HVAC
Certifications	UL9540, IEC62619, EN 50549-2, IEC 61000-2&-4, IEC 62477, UL 1973, EN50549-2, IEEE 1547, FCC, UN3536