

Ampaura Power Plant Energy Storage System



DRM	Dry contact			
Mounting	Ground			
Weight	3100kg	3050kg	3050kg	3000kg
Dimension (W*H*D)	1600 mm * 2300 mm * 1400 mm			
Warranty	5-year product warranty			
Battery Parameters				
Battery type	LFP (LiFePO4)			
Cell capacity	280 Ah			
Rated capacity	233 kWh			
Nominal battery voltage	832 V			
Battery voltage range	728 V to 936 V			
Rated charging/Discharging current	140 A			
Depth of discharge (DOD)	0% to 95% adjustable			
Cooling method	Liquid cooling			
Battery life cycle	≥ 6000 times@25°C±2°C 100%DOD 80% SOH EOL			
Inverter Parameters				
Nominal AC output power	100 kW			
Max AC output power	110 kW			
Operating voltage range	650 V to 950 V			
Rated DC current	190 A			
Rated grid voltage	400 V, 50 Hz			
Rated AC current	145 A			
Grid voltage range	400 Vac±15% (according to local standard)			
Rated frequency range	50±5Hz (according to local standard)			
THDI	<3%			
PF	-0.99 to 0.99			
AC grid connection type	3L/N/PE			
PV Input Parameters				
Max number of MPPTs	2	/	2	/
MPPT operating voltage range	200 Vdc to 950 Vdc	/	200 Vdc to 950 Vdc	/
Max current per MPPT	80 A	/	80 A	/
Max power	100 kW	/	100 kW	/
Backup Output Parameters				
Nominal output power	100 kW			
Nominal output voltage	400 V			
Nominal output frequency	50 Hz			
THDU	<3%@100% R load			
STS Parameters				
Grid port rated power	200 kW		/	
Grid port rated current	290A		/	
Transfer time	< 20ms		/	
Safety features				
PV reverse-polarity protection	Yes			
Insulation resistance monitoring	Yes			
DC/AC surge protection	DC Type II AC Type II			
AC short-circuit protection	Yes			
Leakage current protection	Yes			
Anti-islanding protection	Yes			
Smoke detection	Yes			
Temperature detection	Yes			
Aerosol fire extinguish	Yes			
Emergency stop button	Yes			
Dry pipe and sprinkle	Yes			
Siren and strobe alarm	Yes			
Certification				
Certification & standard	IEC/EN 62109-1 IEC/EN 62109-2 IEC62040 AS/NZS 4777.2:2020 CEC IEC/EN 62477 IEC/EN 62477 IEC/EN 62619;UN38.3			

Product Features

Enhanced Safety

- Fire protection includes pack-level and compartment-level aerosol systems, active smoke and temperature monitoring. The system features compartmentalized isolation to progressively minimize the effects of thermal runaway, ensuring the safety of equipment, assets, and personnel.

Versatile Applications and Modes

- Multi-mode: Supports Dynamic Expansion, T.O.U, Backup Power, and Anti-flow protection.
- All-scenario: Suitable for small to medium-sized commercial and industrial applications up to 10MWh, with seamless transition between on-grid and off-grid modes, ensuring stable power supply.

Efficient Thermal Management

- dissipation efficiency, maintaining battery cell temperature variation within 3°C.

EMS Intelligent Scheduling

- Based on the dynamic electricity pricing of the local grid, the dispatching plan is updated every 5-15 minutes to ensure optimal profits for each charge and discharge cycle, increasing opportunities for peak-valley arbitrage and reducing demand charges.

Product Specifications

Product Model	POWERPLANT-100-233-A	POWERPLANT-100-233-B	POWERPLANT-100-233-C	POWERPLANT-100-233-D
System Parameters				
Rated output power	100 kW			
Qty of batteries	5			
Battery total energy	233 kWh			
Usable energy	221.3 kWh			
Operating temperature	-25 °C to +55°C (derating above 45°C)			
Storage temperature	-30 °C to +60 °C			
Allowable relative humidity	0% to 95%			
IP rating	IP54			
Anti-corrosion grade	C4			
Thermal management	PCS, STS,DCDC: forced air cooling. Battery: liquid cooling	PCS, STS: forced air cooling. Battery: liquid cooling	PCS,DCDC: forced air cooling. Battery: liquid cooling	PCS: forced air cooling. Battery: liquid cooling
Noise	< 70 dB			
Altitude	≤ 3000m			
Display	Indicator light + Touch screen + Cloud platform			
Communication	RS485/4G/LAN			