

HoyUltra 2000M C&I All-in-One MWh-Level BESS

The HoyUltra 2000M is an C&I all-in-one, liquid-cooled container designed for smart grid solutions. It features six levels of safety protection and supports Time-of-Use, PV self-consumption, peak shaving, and backup power. With built-in AI, it enables real-time adjustments to improve energy efficiency and maximize operating revenue.



Features

- 01

On/Off-Grid Transferring: Optional built-in STS, switching time less than 20 ms.
- 02

Black Start and Grid-Forming: Capable of supporting critical load withgrid support, seamless transferring between grid-forming and on-gridoperation.
- 03

Powerful EMS: Capable of connecting multi-source, with optionalPV inverter and generator integration ports and management,optimizing energy usage, boosting solar generation and reducingenergy bill.
- 04

Multiple Revenue: Supports various EMS modes, VPP aggregation, and peak-valley arbitrage, helping you maximize asset value andachieve higher economic returns.
- 05

Flexible and Scalable: 2~2.61 MWh selectable capacity, supports multi-cabinet parallel connection, easily adapting to your commercial,industrial, and grid-scale energy needs.
- 06

6-in-1 Integration: BESS, BMS, PCS, STS* thermal management, andfire protection integrated in one container, greatly reducing your footprint,installation complexity, and commissioning time.

* For "-S" models only.

Technical Specifications

Model	HESS-P999B2000-2h-S	HESS-P999B2000-2h	HESS-P1000B2088-2h-S	HESS-P1000B2088-2h	HESS-P1250B2610-2h
DC Side					
Cell Type	LFP / 314 Ah				
Rated Battery Voltage	832 V				
Battery Voltage Range	650 Vdc - 949 Vdc				
Nominal Battery Energy	2000 kWh		2088 kWh		2610 kWh
AC Side (On-Grid)					
Rated AC Output Power	999.2 kW		1 MW		1.25 MW
Max. Output Apparent Power	999.2 kVA		1.1 MVA		1.37 MVA
Rated AC Current	1442.3 A @230V 1518.2 A @220V		1443.5 A @230V 1519.4 A @220V		1804.3 A @230V 1899.3 A @220V
Max. Output Continuous Current	1442.3 A @230V 1518.2 A @220V		1587.8 A @230V 1671.3 A @220V		1984.7 A @230V 2089.2 A @220V
Rated AC Voltage	3 / N / PE, 230/400V 3 / N / PE, 220/380V				
AC Voltage Range	340 Vac - 440 Vac				
Adjustable Power Factor Range	1 leading - 1 lagging				
THDi (Rated Power)	< 3% (@Rated power)				
DC Component	< 0.5% (@Rated power)				
AC Side (Off-Grid)					
Rated AC Output Power	3 / N / PE, 230/400V 3 / N / PE, 220/380V				
Rated AC Frequency	50 Hz / 60 Hz				
THDv	< 3% (Linear load)				
Unbalance Load Capacity	100%				
Max. Output Continuous Current	1442.3 A @230V 1518.2 A @220V		1443.5 A @230V 1519.4 A @220V		1804.3 A @230V 1899.3 A @220V
General Data					
Dimensions (W×H×D)	6058 mm × 2591 mm × 2438 mm				
Weight	23700 ± 500 kg	22700 ± 500 kg	23700 ± 500 kg	22700 ± 500 kg	26000 ± 500 kg
Operating Temperature	-30°C to +55°C (> 50°C, Derating operation)				
Operating Humidity	0 - 100%RH (non-condensing)				
Altitude	≤ 2000 m				
IP Rating	IP55				
Anti-Corrosion Class	C5				
Noise	< 75 dB				
Built-in Static Transfer Switch (STS)	YES Switching Time < 20 ms	No	YES Switching Time < 20 ms	No	No
PV Inverter Circuit Breaker Current	2500 A	/	2500 A	/	/
Diesel Generator Circuit Breaker Current	2000 A	/	2000 A	/	/
Rated Charge/Discharge Rate	≤ 0.5P				
Topology	Non-isolated				
Cooling Method	Liquid Cooling				
Configuration of safety	Gas fire suppression + Water-based fire suppression + Ventilation + (Optional Explosion-proof plates)				
Communication and Standard					
Communication Interface	Ethernet				
Communication Protocol	Modbus-TCP				
Standard	IEC 62619, IEC 63056, IEC 62040, IEC 62477, IEC 61000, IEC 62933, UN 38.3, UL9540A				

* Subject to change without notice.

Technical Specifications

Model	HESS-P500B2000-4h-S	HESS-P500B2000-4h	HESS-P680B2088-3h-S	HESS-P680B2088-3h	HESS-P850B2610-3h	HESS-P650B2610-4h
DC Side						
Cell Type	LFP / 314 Ah					
Rated Battery Voltage	832 V					
Battery Voltage Range	650 Vdc - 949 Vdc					
Nominal Battery Energy	2000 kWh		2088 kWh		2610 kWh	
AC Side (On-Grid)						
Rated AC Output Power	500 kW		680 kW		850 kW	650 kW
Max. Output Apparent Power	500 kVA		748 kVA		935 kVA	715 kVA
Rated AC Current	721.8 A @230V 759.7 A @220V		981.5 A @230V 1033.2 A @220V		1226.9 A @230V 1226.9 A @220V	938.2 A @230V 987.6 A @220V
Max. Output Continuous Current	721.8 A @230V 759.7 A @220V		1079.7 A @230V 1136.5 A @220V		1349.6 A @230V 1420.6 A @220V	1032.1 A @230V 1086.4 A @220V
Rated AC Voltage	3 / N / PE, 230/400V 3 / N / PE, 220/380V					
AC Voltage Range	340 Vac - 440 Vac					
Adjustable Power Factor Range	1 leading - 1 lagging					
THDi (Rated Power)	< 3% (@Rated power)					
DC Component	< 0.5% (@Rated power)					
AC Side (Off-Grid)						
Rated AC Output Power	3 / N / PE, 230/400V 3 / N / PE, 220/380V					
Rated AC Frequency	50 Hz / 60 Hz					
THDv	< 3% (Linear load)					
Unbalance Load Capacity	100%					
Max. Output Continuous Current	721.8 A @230V 759.7 A @220V		981.5 A @230V 1033.2 A @220V		1226.9 A @230V 1226.9 A @220V	938.2 A @230V 987.6 A @220V
General Data						
Dimensions (W×H×D)	6058 mm × 2591 mm × 2438 mm					
Weight	23700 ± 500 kg	22700 ± 500 kg	23700 ± 500 kg	22700 ± 500 kg	26000 ± 500 kg	26000 ± 500 kg
Operating Temperature	-30°C to +55°C (> 50°C, Derating operation)					
Operating Humidity	0 - 100%RH (non-condensing)					
Altitude	≤ 2000 m					
IP Rating	IP55					
Anti-Corrosion Class	C5					
Noise	< 75 dB					
Built-in Static Transfer Switch (STS)	YES Switching Time < 20 ms	No	YES Switching Time < 20 ms	No	No	No
PV Inverter Circuit Breaker Current	2500 A	/	2500 A	/	/	/
Diesel Generator Circuit Breaker Current	2000 A	/	2000 A	/	/	/
Rated Charge/Discharge Rate	≤ 0.5P					
Topology	Non-isolated					
Cooling Method	Liquid Cooling					
Configuration of safety	Gas fire suppression + Water-based fire suppression + Ventilation + (Optional Explosion-proof plates)					
Communication and Standard						
Communication Interface	Ethernet					
Communication Protocol	Modbus-TCP					
Standard	IEC 62619, IEC 63056, IEC 62040, IEC 62477, IEC 61000, IEC 62933, UN 38.3, UL9540A					

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Technical Specifications

Model	HESS-P999B2000-2h	HESS-P1200B2505-2h	HESS-P834B2505-3h	HESS-P624B2505-4h
DC Side				
Cell Type	LFP / 314 Ah			
Battery Voltage Range	800 Vdc - 1600 Vdc			
Nominal Battery Energy	2000 kWh	2505 kWh		
AC Side (On-Grid)				
Rated AC Output Power	999.9 kW	1.2 MW	834 kW	624 kW
Max. Output Apparent Power	999.9 kVA	1.32 MVA	917.4 kVA	686.4 kVA
Rated AC Current	836.6 A @690V 721.6 A @800V	1004.1 A @690V 866.1 A @800V	697.9 A @690V 601.9 A @800V	522.1 A @690V 450.3 A @800V
Max. Output Continuous Current	836.6 A @690V 721.6 A @800V	1104.5 A @690V 952.7 A @800V	767.6 A @690V 662.1 A @800V	574.4 A @690V 495.4 A @800V
Rated AC Voltage	3 / PE, 690 V 3 / PE, 800 V			
AC Voltage Range	586 Vac - 759 Vac @690V 680 Vac - 880 Vac @800V			
Adjustable Power Factor Range	1 leading - 1 lagging			
THDi (Rated Power)	< 3% (@Rated power)			
DC Component	< 0.5% (@Rated power)			
AC Side (Off-Grid)				
Rated AC Output Power	3 / PE, 690 V 3 / PE, 800 V			
Rated AC Frequency	50 Hz / 60 Hz			
THDv	< 3% (Linear load)			
Unbalance Load Capacity	100%			
Max. Output Continuous Current	836.6 A @690V 721.6 A @800V	1004.1 A @690V 866.1 A @800V	697.9 A @690V 601.9 A @800V	522.1 A @690V 450.3 A @800V
General Data				
Dimensions (W×H×D)	6058 mm × 2591 mm × 2438 mm			
Weight	22700 ± 500 kg	26000 ± 500 kg	26000 ± 500 kg	26000 ± 500 kg
Operating Temperature	-30°C to +55°C (> 50°C, Derating operation)			
Operating Humidity	0 - 100%RH (non-condensing)			
Altitude	≤ 2000 m			
IP Rating	IP55			
Anti-Corrosion Class	C5			
Noise	< 75 dB			
Rated Charge/Discharge Rate	≤ 0.5P			
Topology	Non-isolated			
Cooling Method	Liquid Cooling			
Configuration of safety	Gas fire suppression + Water-based fire suppression + Ventilation + (Optional Explosion-proof plates)			
Communication and Standard				
Communication Interface	Ethernet			
Communication Protocol	Modbus-TCP			
Standard	IEC 62619, IEC 63056, IEC 62040, IEC 62477, IEC 61000, IEC 62933, UN 38.3			

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