

Energy Storage Product Brochure

About Hopewind

Shenzhen Hopewind Electric Co., Ltd. (Stock Code: 603063) focuses on the R&D, manufacturing, sales and services of renewable energy & variable frequency drive products, including products for wind power generation, photovoltaic generation, energy storage, hydrogen production power supply, power quality and variable frequency drive. Furthermore, Hopewind owns integrated independent R&D and testing platforms of high-power power electrical equipment and monitoring systems. Through innovation in technology and service, Hopewind continuously creates value for customers, and has become one of the most competitive enterprises in the renewable energy field.

In the field of power conversion system, Hopewind provides competitive AC/DC energy storage overall solutions, includes string/central power conversion system, string/central PCS turnkey station, energy management system (EMS), energy storage systems and other products.















O4 String PCS

ESHV Series 145~250kW String PCS
ESHV Series 186~290kW 800Vac String PCS
ESHV Series 215kW Liquid-cooling HV-box Integrated String PCS
ESNV Series 130kW C&I PCS

String PCS Turnkey Station
HPPS Series 1.25~7.5MW String PCS Turnkey Station

Central PCS
hopePCSHV Series 1.25~2.75MW Liquid-cooling Central PCS

Central PCS Turnkey Station
HPPS Series 5MW Central PCS Turnkey Station
HPPS Series 10MW Central PCS Turnkey Station

24 EMS

26 Cases



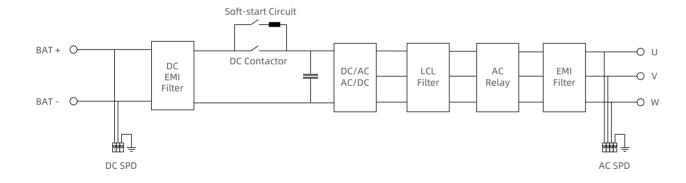
ESHV Series 145~250kW String PCS

Features

- Small size & high power densityModular design enables accurate management of battery
- IP66 & optional C4~C5 anti-corrosion degree for harsh environment
- Support up to 24 units in parallel connection
- Equipped with grid-forming function
- Variable-speed fans for quiet operation



Product Principle





Model	ESHV145K-A-G01	ESHV186K-A-G01	ESHV200K-A-G01	ESHV215K-A-G01	ESHV250K-A-G01
DC Input					
DC Voltage Range	580~1500V	1000~1500V			
Max. DC Current	281A	209A	225A	242A	281A
AC Output					
Rated Power	145kW	186kW	200kW	215kW	250kW
Max. Output Power	160kW	205kW	220kW	237kW	275kW
AC Connection			3W+PE		
Isolation			Non-isolated		
Grid-forming Function			Support		
On-grid					
Rated Grid Voltage	400V		69	OV	
Voltage Range	340~440V		586.5	~759V	
Rated Grid Frequency			50Hz / 60Hz		
Frequency Range			45~55Hz / 55~65Hz		
THDi			<3% (at rated power)		
Power Factor			-1~1		
Charge/Discharge Switchover Time			<20ms		
Off-grid					
Rated Output Voltage	400V 690V				
Voltage Imbalance	<2% (steady-state), ≤4% (transient)				
THDu		<3% (no	o load or rated resistiv	re load)	
Overvoltage Protection			Settable		
Undervoltage Protection			Settable		
General Data					
Grounding System			IT		
Operating Ambient Temperature Range		-40~+	-60°C (derating above	45°C)	
Allowable Relative Humidity Range	0~100%				
Allowable Altitude Range	<4000m (derating above 3000m)				
DI Port	4				
DO Port			2		
Anti-corrosion Class			C4 (C5 optional)		
Surge Protection			DC Type II / AC Type II		
Wiring Method	Bottom in and bottom out (via quick plug terminals)				
Protection Degree	IP66				
Cooling Method	Smart air-cooling				
Indicator	LED indicator				
Communication Interface	Ethernet / RS485 / CAN / Local debugging WiFi (optional)				
Communication Protocol	Modbus TCP / Modbus RTU / CAN 2.0				
Dimensions (W*H*D)	795*915*294mm (excludes hanging board)				
Weight	≤100kg (net weight)				
Standard Compliance	ESHV250K-A-G01: GB/T 34120-2023, IEC 62477-1, IEC 61000, EN 50549-1/-2/-10, IEC60068-2, G99, VDE 4110/4120, NTS 2.1, IEC TS 62910, etc. ESHV186K~215K-A-G01: IEC 62477-1, IEC 61000, IEC62920, NTS 2.1. (Please contact Hopewind team for latest certifications)				

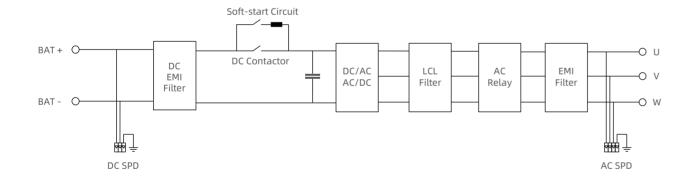
ESHV Series 186~290kW 800Vac String PCS

Features

- Small size & high power density
- Modular design enables accurate management of battery
- IP66 & optional C4~C5 anti-corrosion degree for harsh environment
- Support up to 24 units in parallel connection
- Equipped with grid-forming function
- Variable-speed fans for quiet operation



Product Principle





Model	ESHV186K80 -A-G01	ESHV200K80 -A-G01	ESHV215K80 -A-G01	ESHV250K80 -A-G01	ESHV290K80 -A-G01	
DC Input						
DC Voltage Range	1160~1500V					
Max. DC Current	180A	194A	208A	242A	281A	
AC Output						
Rated Power	186kW	200kW	215kW	250kW	290kW	
Max. Output Power	205kW	220kW	237kW	275kW	319kW	
AC Connection			3W+PE			
Isolation			Non-isolated			
Grid-forming Function			Support			
On-grid						
Rated Grid Voltage			800V			
Voltage Range			680~880V			
Rated Grid Frequency			50Hz / 60Hz			
Frequency Range			45~55Hz / 55~65Hz			
THDi			<3% (at rated power))		
Power Factor			-1~1			
Charge/Discharge Switchover Time	<20ms					
Off-grid	Off-grid					
Rated Output Voltage	800V					
Voltage Imbalance	<2% (steady-state), ≤4% (transient)					
THDu		<3% (n	o load or rated resisti	ve load)		
Overvoltage Protection			Settable			
Undervoltage Protection	Settable					
General Data						
Grounding System	ІТ					
Operating Ambient Temperature Range	-40~+60°C (derating above 45°C)					
Allowable Relative Humidity Range	0~95%					
Allowable Altitude Range	<4000m (derating above 3000m)					
DI Port			4			
DO Port	2					
Anti-corrosion Class			C4 (C5 optional)			
Surge Protection	DC Type II / AC Type II					
Wiring Method	Bottom in and bottom out (via quick plug terminals)					
Protection Degree	IP66					
Cooling Method	Smart air-cooling					
Indicator	LED indicator					
Communication Interface	Ethernet / RS485 / CAN / Local debugging WiFi (optional)					
Communication Protocol	Modbus TCP / Modbus RTU / CAN 2.0					
Dimensions (W*H*D)	795*915*294mm (excludes hanging board)					
Weight	≤100kg (net weight)					
Standard Compliance	IEC 61000, IEC 62920. (Please contact Hopewind team for latest certifications)					

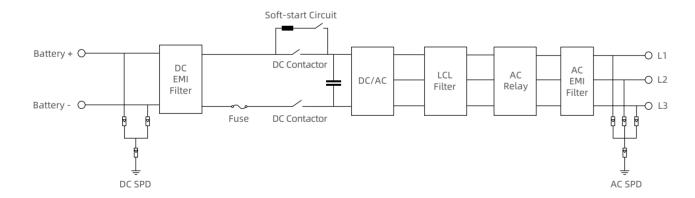
ESHV Series 215kW Liquid-cooling HV-box Integrated String PCS

Features

- Highly Integrated design with battery rack high voltage box and BCU
- Liquid-cooling, ultra-low noise level (<65dB)
- Small size & high power density
- IP66 protection degree for harsh environment
- Supports multi-module parallel connection,
- PQ, VF, VSG operating modes with gridforming function



Product Principle





Model	ESHV215K-LI-G01				
DC Input					
DC Voltage Range	1000~1500V				
Max. DC Current	209A				
AC Output					
Rated Power	215kW				
Max. Output Power	236.5kW (10min @ liquid temperature below 58℃)				
Reactive Power Range	0~236.5kvar (10min @ liquid temperature below 58℃)				
AC Connection	3W+PE				
Isolation	Non-isolated				
On-grid					
Rated Grid Voltage	690V				
Voltage Range	586~759V				
Rated Grid Frequency	50Hz / 60Hz				
Frequency Range	45~55Hz / 55~65Hz				
THDi	<3% (at rated power)				
Power Factor	-1~1				
Charge/Discharge Switchover Time	<20ms				
Off-grid					
Rated Output Voltage	690V				
Voltage Imbalance	<2% (steady-state), ≤4% (transient)				
THDu	<3% (no load or rated resistive load)				
Overvoltage Protection	Settable				
Undervoltage Protection	Settable				
General Data					
Grounding System	ΙΤ				
Operating Ambient Temperature Range	-40~+60°C				
Allowable Relative Humidity Range	0~95%				
Allowable Altitude Range	<4000m (derating above 3000m)				
Anti-corrosion Class	C4 (C5 optional)				
Cooling Method	Liquid-cooling				
Maximum Coolant Temperature	Max. Coolant Temperature: 58°C Recommended Coolant Temperature: <40°C				
Wiring Method	Quick plug terminals				
Protection Degree	IP66				
Indicator	LED indicator				
Communication Interface	Ethernet / RS485 / CAN / Local debugging WiFi (optional)				
Communication Protocol	Modbus TCP / Modbus RTU / CAN 2.0				
Dimensions (W*H*D)	745*820*180mm (excludes hanging board) 785*820*180mm (includes hanging board)				
Weight	≤80kg (net weight)				
Standard Compliance	IEC 62477 and IEC 61000 (In progress) (Please contact Hopewind team for latest certifications)				

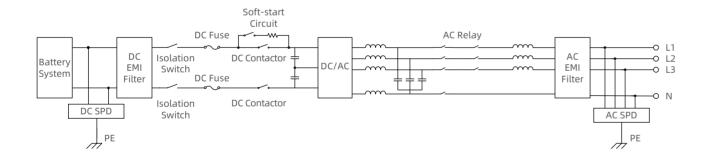
ESNV Series 130kW C&I PCS

Features

- C&I product with battery rack DC-switches
- Modular design, easy to maintain
- Three-phase four-leg topology supports
 100% unbalanced load
- IP66 protection degree for harsh environment
- PQ, VSG operating mode



Product Principle





Specifications

Model	ESNV130K-AI-G01	
DC Input		
DC Voltage Range	650~950V	
Max. DC Current	230A	
AC Output		
Rated Power	130kW	
Max. Output Power	143kW	
Reactive Power Range	0~136.5kvar	
AC Connection	3W+N+PE	
Isolation	Non-isolated	
On-grid		
Rated Grid Voltage	400V	
Voltage Range	340~440V	
Rated Grid Frequency	50Hz / 60Hz	
Frequency Range	45~55Hz / 55~65Hz	
THDi	<3% (at rated power)	
Power Factor	-1~1	
Charge/Discharge Switchover Time	<100ms	
Off-grid		
Rated Output Voltage	400V	
Voltage Imbalance	<2% (steady-state), ≤4% (transient)	
THDu	<3% (no load or rated resistive load)	
Overvoltage Protection	Settable	
Undervoltage Protection	Settable	
General Data		
Grounding System	IT / TT / TN	
Operating Ambient Temperature Range	-40~+60℃ (derating above 45℃)	
Allowable Relative Humidity Range	0~95%	
Allowable Altitude Range	<4000m (derating above 3000m)	
Anti-corrosion Class	C4 (C5 optional)	
Surge Protection	Type II surge protective device (8 / 20μs)	
Wiring Method	Quick plug terminals	
Protection Degree	IP66	
Indicator	LED indicator	
Communication Interface	Ethernet / RS485 / CAN	
Communication Protocol	Modbus TCP / Modbus RTU / CAN 2.0	
Dimensions (W*H*D)	811*643*263mm (excludes hanging board)	
Weight	≤85kg (net weight)	
Standard Compliance	IEC 62477 and IEC 61000 (In progress) (Please contact Hopewind team for latest certifications)	

Note: The parameters depicted in the ESNV130K-AI-G01 datasheet are preliminary version and shall not serve as a binding reference for product performance compliance. The final product specifications shall prevail per the actual shipped products.

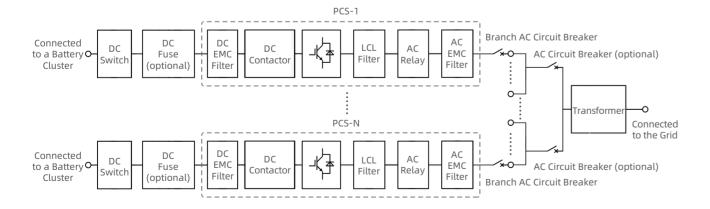
HPPS Series 1.25~3MW String PCS Turnkey Station

Features

- Rack-level management for batteries to address the issue of circulating current in parallel connections
- Modular design to prevent single point of failure
- Strong environmental adaptability with C4~C5 anti-corrosion degree available, and no derating at 45°C ambient temperature
- Flexible capacity configuration and customizable MV voltage level of 6~35kV
- PQ, VF, VSG operating modes with grid-forming function



Product Principle



Model	HPPS-1250B	HPPS-2500B	HPPS-3000B		
DC Parameters					
Number of DC Input Channels	6	12	14		
Max. DC Current	281A*6	281A*12	281A*14		
DC Voltage Operating Range		1000~1500V			
AC Parameters					
Total Rated Power	1250kW	2500kW	3000kW		
Max. Output Power	1375kVA	2750kVA	3300kVA		
Rated Voltage		690Vac			
Isolation Mode		Transformer Isolation			
Reactive Power Range	0~1313kvar	0~2625kvar	0~3150kvar		
On-grid Mode					
Rated Grid Voltage	6~35kV (customizable)				
Rated Grid Frequency	50Hz / 60Hz				
THDi	<3%				
Power Factor	-1~1				
Transformer Parameters					
Rated Capacity	1250kVA	2500kVA	3000kVA		
Transformer Type	Oil-immersed Transformer				
LV/MV Voltage	0.69 / (6~35) kV				
System Parameters					
Dimensions (W*H*D)	6058*2896*2438mm				
Weight	≈12.5t	≈14t	≈18t		
Operating Temperature	-40~+60°C (derating above 45°C)				
Operating Humidity	0~100%				
Operating Altitude	≤4000m (no derating within 3000m)				
Protection Degree	IP54 (PCS IP66)				
BMS Communication	RS485 / CAN				
EMS Communication	Ethernet				
Communication Protocol	Modbus TCP / IEC 61850 / IEC 104 / Modbus RTU / CAN 2.0				
Standard Compliance	PCS: GB/T 34120-2023, IEC 62477-1, IEC 61000-3/-6, EN 50549-1/-2/-10, IEC60068-2, G99, VDE 4110/4120, NTS 2.1, IEC TS 62910, etc. MV Transformer: IEC 60076 (Please contact Hopewind team for latest certifications)				
Grid Support	H/LVRT, frequency adjustment function, voltage adjustment function, inertia response, etc.				

^{*}The table only lists some models. Products can be customized for projects.

^{*}Please refer to the latest physical product for any changes in specifications.

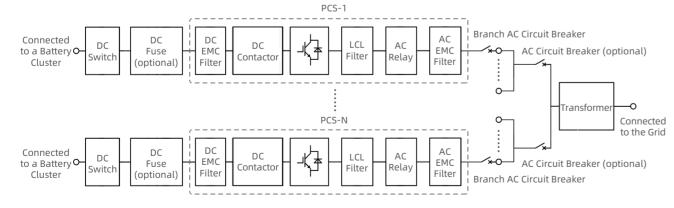
HPPS Series 5MW String PCS Turnkey Station

Features

- Rack-level management for batteries to address the issue of circulating current in parallel connections
- Modular design to prevent single point of failure, easy maintenance
- Use of the three-level technology
- Strong environmental adaptability with C4~C5 anti-corrosion degree available, and no derating at 45°C
- Flexible capacity configuration and customizable MV voltage level of 6~35kV
- PQ, VF, VSG working modes with grid-forming function



Product Principle



N≤24: Double-winding Transformer

Model	HPPS-5000B	
DC Parameters		
Number of DC Input Channels	24	
Max. DC Current	281A*24	
DC Voltage Operating Range	1000~1500V	
AC Parameters		
Total Rated Power	5000kW	
Max. Output Power	5500kVA	
Rated Voltage	690Vac	
Isolation Mode	Transformer Isolation	
Reactive Power Range	0~5250kvar	
On-grid Mode		
Rated Grid Voltage	6~35kV (customizable)	
Rated Grid Frequency	50Hz / 60Hz	
THDi	<3%	
Power Factor	-1~1	
Transformer Parameters		
Rated Capacity	5000kVA	
Transformer Type	Oil-immersed Transformer	
LV/MV Voltage	0.69 / (6~35) kV	
System Parameters		
Dimensions (W*H*D)	12192*2896*2438mm	
Weight	≈24t	
Operating Temperature	-40~+60°C (derating above 45°C)	
Operating Humidity	0~100%	
Operating Altitude	≤4000m (no derating within 3000m)	
Protection Degree	IP54 (PCS IP66)	
BMS Communication	RS485 / CAN	
EMS Communication	Ethernet	
Communication Protocol	Modbus TCP / IEC 61850 / IEC 104 / Modbus RTU / CAN 2.0	
Standard Compliance	PCS: GB/T 34120-2023, IEC 62477-1, IEC 61000-3/-6, EN 50549-1/-2/-10, IEC60068-2, G99, VDE 4110/4120, NT: 2.1, IEC TS 62910, etc. MV Transformer: IEC 60076 (Please contact Hopewind team for latest certifications)	
Grid Support	H/LVRT, frequency adjustment function, voltage adjustment function, inertia response, etc.	

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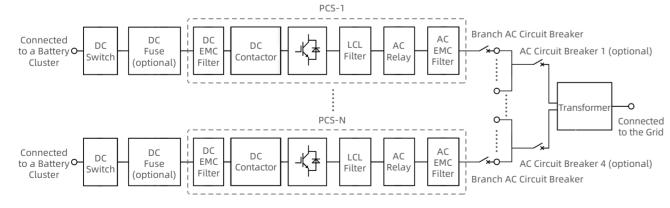
HPPS Series 7.5MW String PCS Turnkey Station

Features

- 7.5MW within Standard 40ft container to reduce floor space
- Rack-level management for batteries to address the issue of circulating current in parallel connections
- Modular design to prevent single point of failure, easy maintenance
- Strong environmental adaptability with C4~C5 anti-corrosion degree available, and no derating at 45°C
- Flexible capacity configuration and customizable MV voltage level of 6~35kV
- PQ, VF, VSG operating modes with grid-forming function



Product Principle



24≤N≤36: Double-split Transformer

Model	HPPS-7500B		
DC Parameters			
Number of DC Input Channels	36		
Max. DC Current	281A*36		
DC Voltage Operating Range	1000~1500V		
AC Parameters			
Total Rated Power	7500kW		
Max. Output Power	8250kVA		
Rated Voltage	690Vac		
Isolation Mode	Transformer Isolation		
Reactive Power Range	0~7875kvar		
On-grid Mode			
Rated Grid Voltage	6~35kV (customizable)		
Rated Grid Frequency	50Hz / 60Hz		
THDi	<3%		
Power Factor	-1~1		
Transformer Parameters			
Rated Capacity	7700kVA		
Transformer Type	Oil-immersed Transformer		
LV/MV Voltage	0.69 / 0.69 / (6~35) kV		
System Parameters			
Dimensions (W*H*D)	12192*2896*2438mm		
Weight	≈34t		
Operating Temperature	-40~+60℃ (derating above 45℃)		
Operating Humidity	0~100%		
Operating Altitude	≤4000m (no derating within 3000m)		
Protection Degree	IP54 (PCS IP66)		
BMS Communication	RS485 / CAN		
EMS Communication	Ethernet		
Communication Protocol	Modbus TCP / IEC 61850 / IEC 104 / Modbus RTU / CAN 2.0		
Standard Compliance	PCS: GB/T 34120-2023, IEC 62477-1, IEC 61000-3/-6, EN 50549-1/-2/-10, IEC60068-2, G99, VDE 4110/4120, NTS 2.1, IEC TS 62910, etc. MV Transformer: IEC 60076 (Please contact Hopewind team for latest certifications)		
Grid Support	H/LVRT, frequency adjustment function, voltage adjustment function, inertia response, etc.		

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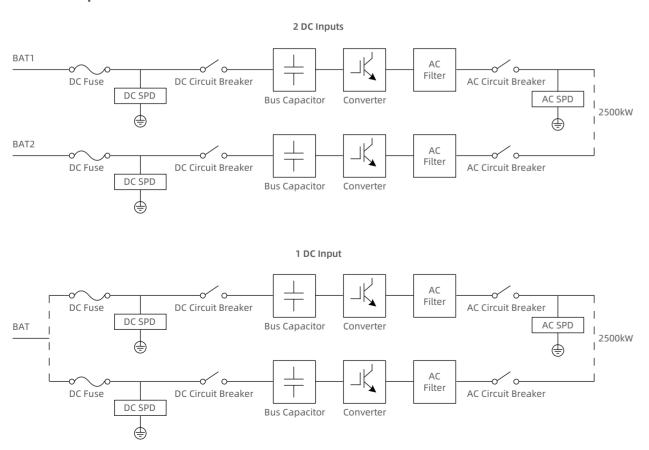
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hopePCSHV Series 1.25~2.75MW Liquid-cooling Central PCS

Features



Product Principle



Specifications

Model	hopePCSHV 1250	hopePCSHV 1500	hopePCSHV 1750	hopePCSHV 2000	hopePCSHV 2250	hopePCSHV 2500	hopePCSHV 2750
DC Input							
DC Voltage Range	1000~1500V						
Max. DC Current	703A*2	844A*2	984A*2	1125A*2	1265A*2	1406A*2	1406A*2
Number of DC Input Channels				1 / 2			
AC Input							
Rated Power	1250kW	1500kW	1750kW	2000kW	2250kW	2500kW	2750kW
Max. Output Power	1376kW	1650kW	1925kW	2200kW	2475kW	2750kW	2750kW
Reactive Power Range	0~1312.5kVA	0~1575kVA	0~1837.5kVA	0~2100kVA	0~2363kVA	0~2625kVA	0~2750kVA
Rated Current	1004A	1255A	1464A	1673A	1883A	2092A	2301A
AC Connection				3W+PE			
Isolation				Non-isolation			
On-grid							
Rated Grid Voltage				690V			
Voltage Range				586.5~759V			
Rated Grid Frequency				50Hz / 60Hz			
Frequency Range			4	7~53Hz / 57~63h	łz		
Power Factor				-1~+1			
THDi	3% (at rated power)						
Charge/Discharge Switchover Time	70ms						
Off-grid							
Rated Output Voltage	690V						
Voltage Imbalance	<2% (steady-state), ≤4% (transient)						
THDu	<3% (No load or rated resistive load)						
Overvoltage Protection	Settable						
Undervoltage Protection							
General Data							
Grounding System	ІТ						
Operating Ambient Temperature Range	-40~+60℃ (derating above 51℃)						
Allowable Relative Humidity Range	4%~100%, no condensation allowed inside						
Allowable Altitude Range	≤4000m (no derating within 3000m)						
Anti-corrosion Class	C5						
Protection Degree	IP66						
Cooling Method	Liquid-cooling						
Human-machine Interface (HMI)	Touch Screen						
Communication Protocol	Modbus TCP / IEC 61850 / IEC 104 / Modbus RTU / CAN 2.0						
Dimensions (W*H*D)	1000*2428*1500mm						
Weight	1800kg						
Standard Compliance	IEC62477-1, IEC-61000-2/-4, IEC 61683, IEC 60068, IEC 62116, IEC TS 62910, CEA, etc. (Please contact Hopewind team for latest certifications)						

Note: The hopePCSHV2750 model has no overload capacity beyond its rated power.

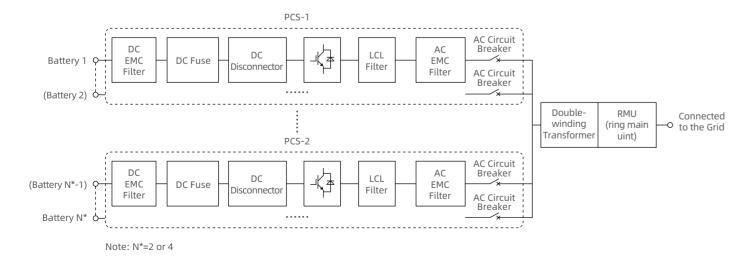
HPPS Series 5MW Central PCS Turnkey Station

Features

- 2 sets of 2.5MW central PCS integrated into a 20 feet container to reduce floor space
- Strong environmental adaptability with C4~C5 anti-corrosion degree available
- PCS liquid cooling, no derating up to 51°C
- Multiple operating modes supported such as PQ and VSG. Satisfy grid-forming functions
- Flexible capacity configuration and customizable MV voltage level of 6~35kV



Product Principle



Specifications

		HPPS-5000A				
OC Parameters						
Number of DC Input Channels	4	2				
Max. DC Current	1406A*4	2812A*2				
OC Voltage Operating Range	1000-	~1500V				
AC Parameters						
Total Rated Power	500	00kW				
Max. Output Power	550	0kVA				
Rated Voltage	690	OVac				
solation Mode	Transform	er Isolation				
Reactive Power Range	0~52:	50kvar				
On-grid Mode						
Rated Grid Voltage	6~35kV (cu	istomizable)				
Rated Grid Frequency	50Hz	/ 60Hz				
THDi	<3%					
Power Factor	-1~1					
ransformer Parameters						
Rated Capacity	525	0kVA				
ransformer Type	Oil-immerse	d Transformer				
.V/MV Voltage	0.69 / (6~35) kV				
System Parameters						
Dimensions (W*H*D)	6058*2896*2438mm					
Operating Temperature	-40~+60°C (PCS derating above 51°C, transformer derating is optional for 40°C to 51°C)					
Operating Humidity	4%~100% (non-condensing)					
Operating Altitude	≤4000m (no derating within 3000m)					
Protection Degree	IP54 (PCS IP66)					
BMS Communication	RS485 / CAN					
EMS Communication	Ethernet					
Communication Protocol	Modbus TCP / IEC 61850 / IEC 104 / Modbus RTU / CAN 2.0					
Standard Compliance	PCS: IEC 61683, IEC 60068, IEC 62116, IEC TS 62910, etc. MV Transformer: IEC 60076 (Please contact Hopewind team for latest certifications)					
Grid Support	H/LVRT, frequency adjustment function, voltage adjustment function, inertia response, etc.					

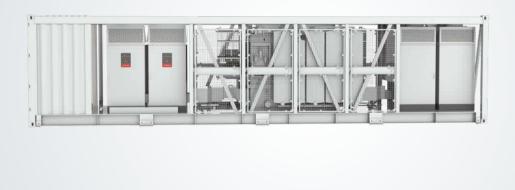
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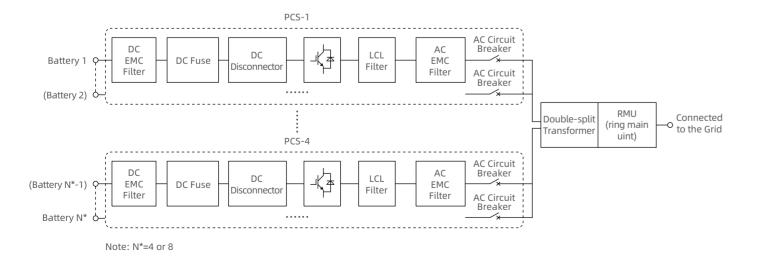
HPPS Series 10MW Central PCS Turnkey Station

Features

- 4 sets of 2.5MW central PCS integrated into a 40 feet container to reduce floor space
- Strong environmental adaptability with C4~C5 anti-corrosion degree available
- PCS liquid cooling, no derating up to 51°C
- Multiple operating modes supported such as PQ and VSG. Satisfy grid-forming functions
- High efficiency and low self-Consumption



Product Principle



Specifications

Model	HPPS-10000	HPPS-10000A		
DC Parameters				
Number of DC Input Channels	8	4		
Max. DC Current	1406A*8	2812A*4		
DC Voltage Operating Range	1000~	~1500V		
AC Parameters				
Total Rated Power	1000	00kW		
Max. Output Power	1100	00kVA		
Rated Voltage	690	OVac		
Isolation Mode	Transform	er Isolation		
Reactive Power Range	0~105	500kvar		
On-grid Mode				
Rated Grid Voltage	33 / 35kV (c	ustomizable)		
Rated Grid Frequency	50Hz	/ 60Hz		
THDi	<3%			
Power Factor	-1~1			
Transformer Parameters				
Rated Capacity	1050	00kVA		
Transformer Type	Oil-immersed	d Transformer		
LV/MV Voltage	0.69 / 0.69 / (33 / 35) kV			
System Parameters				
Dimensions (W*H*D)	12192*2896*2438mm			
Operating Temperature	-40~+60°C (PCS derating above 51°C, transformer derating is optional for 40°C to 51°C)			
Operating Humidity	4%~100% (non-condensing)			
Operating Altitude	≤4000m (no derating within 3000m)			
Protection Degree	IP54 (PCS IP66)			
BMS Communication	RS485 / CAN			
EMS Communication	Ethernet			
Communication Protocol	Modbus TCP / IEC 61850 / IEC 104 / Modbus RTU / CAN 2.0			
Standard Compliance	PCS: IEC 61683, IEC 60068, IEC 62116, IEC TS 62910, etc. MV Transformer: IEC 60076 (Please contact Hopewind team for latest certifications)			
Grid Support	H/LVRT, frequency adjustment function, voltage adjustment function, inertia response, etc.			

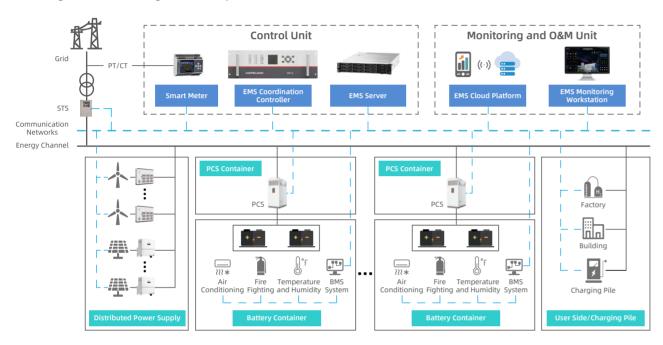
*The table only lists some models. Products can be customized for projects.

^{*}Please refer to the latest physical product for any changes in specifications.

Overview of Storage EMS

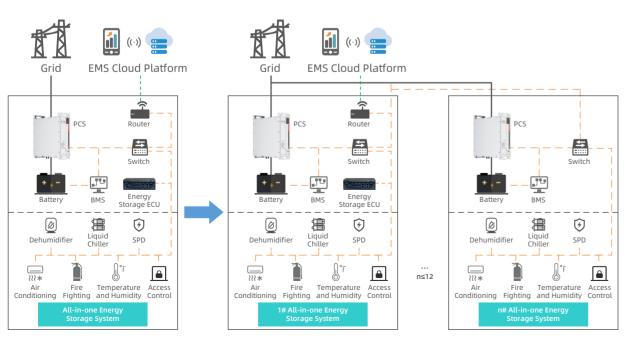
Topology of the Energy Storage/Micro-grid EMS

Hopewind EMS works in various scenarios like energy storage, distribution, and mirco-grid. It supports energy dispatching of multiple sources such as power supplies, grids, loads, and storage, and coordinated control of multiple equipment. In addition, the EMS provides comprehensive operation and maintenance solutions including local monitoring and cloud platform.



Topology of the All-in-one Energy Storage EMS

The all-in-one solution integrates batteries, energy storage converters, auxiliary control devices, BMS, and EMS into a single cabinet. The energy of the energy storage unit can be controlled by configuring the ECU. The solution supports parallel connection and coordinated control of multiple units.



Hopewind Cloud Platform

Big Data Center

By establishing "analysis models" and "intelligent decision-making algorithms" for energy big data, the big data center deeply optimizes the accuracy and performance of algorithms through long-term mass data computation and training, providing precise decision-making support for energy operation enterprises.

Energy IoT Platform

The energy IoT platform supports fast connection with self-developed and third-party devices, implementing status perception, remote control, and data collection of energy equipment in areas such as wind, solar, storage, hydrogen, and energy consumption.

Energy PaaS Management Platform

Implementing functions such as platform application management, tenant management, system management, equipment management, and statistical analysis of data.



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Energy SaaS Application Platform

Building energy solutions in niche areas such as distributed energy management, household energy consumption, micro-grid, and zero-carbon parks to meet users' energy operation needs.

Monitoring by Hopewind Energy Storage EMS Cloud Platform









Project Cases



> 250MW/1000MWh (Aral, Xinjiang, China)



> 180MW/360MWh (Jiuquan, Gansu, China)



> 100MW/200MWh (Luodian, Guizhou, China)



> 100MW/200MWh (Weng'an, Guizhou, China)



> 154MW/308MWh (Jiayuguan, Gansu, China)



> 150MW/300MWh (Yinchuan, Ningxia, China)



> 100MW/200MWh (Jining, Shandong, China)



> 100MW/200MWh (Dongming, Shandong, China)



> 120MW/240MWh (Alashan, Inner Mongolia, China)



> 100MW/400MWh (Burqin, Xinjiang, China)



> 100MW/200MWh (Zhucheng, Shandong, China)



> 100MW/200MWh (Qiannan, Guizhou, China)



> 100MW/200MWh (Turpan, Xinjiang, China)



> 100MW/200MWh (Anshun, Guizhou, China)



> 100MW/200MWh (Jiuquan, Gansu, China)



> 60MW/120MWh (Alxa, Inner Mongolia, China)

Project Cases



> 57.5MW/115MWh (Xiantao, Hubei, China)



> 52.5MW/105MWh (Yueqing, Zhejiang, China)



> 50MW/100MWh grid-forming (Kashgar, Xinjiang, China)



> 50MW/100MWh (Jiangyin, Jiangsu, China)



> 50MW/100MWh (Wuzhong, Ningxia, China)



> 50MW/100MWh (Hulunbuir, Inner Mongolia, China)



> 40MW/80MWh (Jiuquan, Gansu, China)



> 25MW/50MWh (Ledong, Hainan, China)



> 25MW/50MWh (Ledong, Hainan, China)



> 23MW/46MWh (Lianshui, Jiangsu, China)



> 15MW/7.5MWh thermal power plant ESS (Shanxi, China)



> 10MW (Xinyu, Jiangxi, China)



> 25MW/50MWh (Fuyang, Anhui, China)



> 20MW/40MWh grid-forming (Wenshan, Yunnan, China)



> South korea 12MW/36MWh PV ESS (South Korea)



> C&l energy storage project in (Karamay, Xinjiang, China)

Project Cases



> 3MW/6MWh (Huizhou, Guangdong, China)



> 2MW PCS Skid (Qingyuan, Guangdong, China)



> Yunnan microgrid project



> User-side energy storage + UPS project



> 3MW/31MWh lead-carbon battery project (Changxing, Zhejiang, China)



> Dagang oilfield 1MW/1MWh sodium-ion battery (Tianjin, China)



> Supercapacitor energy storage



> 1MW flywheel system integration



> Energy storage EMS project in Jiangyin, Jiangsu province



> All-in-one C&I energy storage project in Cangzhou, Hebei province



> All-in-one C&I ESS (Brazil)



> Energy storage EMS project in Tianjin



> Wind power distribution and storage EMS project in Luohe, Henan province



> High-power backup power system EMS project in Gansu province



> 2.5MW/5MWh PCS Turnkey Station (Latvia)



> 11.5MW/50MWh PCS Turnkey Station (Spain)

180 GW ⁺ SHIPMENTS WORLDWIDE



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