HS104/156

Hybrid ESS Liquid Cooling Cabinet
50kW/104kWh | 50kW/156kWh

Efficiency

- All-in-one design, space-saving
- 314 Ah cells for higher energy density
- Max. 20 A PV input current, perfectly matched with high-power PV modules
- 200% PV oversizing ensures maximum utilization of solar energy
- Smart Load / GEN / INV ports–flexible connection to multiple energy sources such as grid-tied inverters, diesel generators, wind turbines, etc.

Flexible

- Scalable up to 10 units in parallel
- Seamless on-grid / off-grid switching time <10 ms
- Supports 100% unbalanced output, half-wave and surge loads

User-Friendly

- 3 in 1 integrated, factory-configured & tested
- No foundation required, simplifying installation
- <65 dB operation, suitable for diverse environments

Safe

- IP55/C4 rating for dust and water resistance
- Wide operating temperature range: -20°C to 55°C
- UL9540A certification

NEW

*As new products, specifications are subject to change without notice.

Application Scenarios

Factory

Shopping Mall

Farm

Community

Hospital

Education

200% PV Oversizing

314Ah Battery Cells

Up to **10 Units** in On/Off -Grid Parallel Operation

Max. **20A** PV Input Current Per String

<65dB, Suitable for Diverse Environments

<10ms EPS Switching Time

100% Unbalanced Loads Supported

UL9540A Certified for Enhanced Safety

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Hybrid ESS Liquid Cooling Cabinet

Model	EPHS104	EPHS156
PV Input		
Max. PV Input Power	100 kW	
Max. Input Voltage	1000 V	
Rated Operating Voltage	600 V	
Start-Up Voltage	180 V	
MPPT Voltage Range	150 – 850 V	
Max. Input Current	4 × 40 A	
Max. Short-Circuit Current	4 × 60 A	
No. of MPPTs / Max. Input Strings	4/8	
Battery Parameters		
Cell Specification	314 Ah	
Pack Configuration	1P52S	
Rated Current	160 A	
Pack Number	2	3
System Capacity	104 kWh	156 kWh
AC Input / Output (Grid)		
Rated Output Power	50 kW	
Max. Apparent Output Power	50 kVA	
Rated Grid Voltage	3/N/PE 220/380 V · 230/400 V	
Grid Voltage Range	304 – 460 V	
Rated Grid Frequency	50/60 Hz	
AC Grid Frequency Range	45 – 55 / 55 – 65 Hz	
Rated Grid Output Current	76.0 / 72.2 A	
Max. Output Current	76.0 / 72.2 A	
Max. AC Input Current	152 / 144.4 A	
Power Factor	> 0.99 (0.8 leading … 0.8 lagging)	
THD	< 3 %	
AC Output (Back-up)		
Rated Output Power	50 kW	
Max. Apparent Output Power	1.6 times of rated power, 2 s	
Back-up Switch Time	< 10 ms	
Rated Output Voltage	3/N/PE 220/380 V · 230/400 V	
Rated Frequency	50/60 Hz	
Rated Output Current	76.0 / 72.2 A	
Max. Imbalance Power Per Phase	33 % rated power	
THDv (@ Linear Load)	< 2 %	
AC Input (Generator)		
Max. Input Power	50 kW	
Rated Input Current	76.0 / 72.2 A	
Rated Input Voltage	3/N/PE 220/380 V · 230/400 V	
Rated Input Frequency	50/60 Hz	
General Data		
Dimensions (W×H×D)	<1068 × 1550× 1276 mm	
Weight	< 1.0 t (With Inverter)	< 1.2 t (with inverter)
Protection Level	Battery Cabinet IP55 · Inverter IP66	
Operating Temperature Range	−25 °C ~ 55 °C	
Cooling Method	Liquid-cooling	
Fire Suppression System	Smoke detector, Heat detector, Alarm sounder, Aerosol, Sprinkler (Optional: Gas detector + exhaust, Vent plate)	
Communication	LAN/RS485	
Altitude	≤ 2000 m	
Standards	IEC 62109, IEC 61000, IEC 62619, IEC 63056, IEC 62040, IEC 62477, IEC 62933, UN 38.3, UL9540A, EN 50549-1/-10, G99, VDE-AR-N 4105, CEI 0-21	

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