

# EPHS104/156

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



## 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

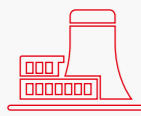
- IP55/ C4 rating for dust and water resistance
- Wide operating temperature range: -20°C to 55°C
- UL9540A certification

**NEW**



\*Specifications may be changed without prior notice due to continuous product improvement.

## 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

# EPHS104/156

Hybrid ESS Liquid Cooled Cabinet

Model	EPHS104	EPHS156
<b>PV Input</b>		
Max. PV Input Power	100 kW	
Max. Input Voltage	1,000 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	
<b>Battery Parameters</b>		
Cell Specification	314 Ah	
Pack Configuration	1P52S	
Rated Current	160 A	
Battery Pack Weight / Quantity	350 kg/unit, total 2 units	350 kg/unit, total 3 units
System Capacity	104 kWh	156 kWh
<b>AC Input / Output (Grid)</b>		
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 %	
<b>AC Output (Back-up)</b>		
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 %	
<b>AC Input (Generator)</b>		
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	
<b>General Data</b>		
Dimensions (WxDxH)	1,305 × 1,766 × 1,388 mm	
Weight	~1,500 kg (With Inverter)	~1,850 kg (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	≤ 2,000 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	