All-in-one Liquid-cooled ESS Cabinet

ECO-E418LP-A40/69/80

Brief

The E418LP series includes models with 400V, 690V, and 800V output options, suitable for different application scenarios and requirements. They feature advanced pack - level liquid cooling and temperature balancing, maintaining cell temperature differences within 3℃. This enhances cell temperature consistency and extends battery life. Its modular design enables flexible parallel configurations and higher energy density, significantly improving the cost - effectiveness, safety, and installation convenience of ESS projects.



Features

Compact
2㎡ footprint only, easy transportation & fast installation.

High Integration
418kWh energy in one cabinet with remarkable endurance.

Efficient Cooling
Optimized in-PACK duct design ensures high-efficiency cooling with reduced energy consumption.

Flexible Expansion
Modular design, simplified parallel expansion.

Long Cycle Life
Over 8,000 cycles, providing excellent long-term battery performance.

Ultimate Safety
In-PACK fire warning and protection with aerosol, prevent heat diffusion and runaway.

Specifications

DC Side	ECO-E418LP-A40	ECO-E418LP-A69	ECO-E418LP-A80
Cell Type		LFP / 314 Ah	
Pack Configuration		52.248 kWh / 1P52S	
System Configuration		418 kWh / 1P416S	
Rated DC Voltage		1331.2 V	
DC Voltage Range		1164.8 ~ 1497.6 V	
Max. Charge/Discharge Rate	0.25 P	0.5 P	0.5 P
Max. Depth of Discharge		100% (25 ± 2 ℃)	
AC Side			
Rated Output Power	100 kW	210 kW	210 kW
Rated AC Voltage	400 V	690 V	800 V
AC Voltage Range		-15%~+10%	
Grid Type		3W+PE	
Rated Frequency		50 Hz / 60 Hz	
Power Factor		0.99/ -1 ~ +1	
THDi		≤3%	
DC Ratio		＜0.5% Ipn	
General			
Max. Round Trip Efficiency		89%	
Cycle Life		≥ 8,000 cycles	
Communication		Modbus TCP/IP	
Fire Suppression System		Aerosol	
Ingress Rating		IP55	
Cooling		Liquid cooling+Forced air cooling	
Operating Temperature		-25℃~55℃ (Derating after 45℃)	
Anticorrosion Rating		C4 (C5 optional)	
Humidity		0~95% RH (non-condensing)	
Noise		≤ 80 dB	
Altitude		3000m (Derating above 2000m)	
Dimensions (W*D*H)		1,500*1,350*2,400 mm	
Weight		3,800 kg	
Safety/EMC		UN38.3, IEC62619, IEC63056, IEC62477-1, IEC61000-6-2/4	
Grid code		EN50549-1/-10, EN50549-2/-10, PN-EN-50549-1/-2	