

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°C. 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

2m² 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.



Long Cycle Life

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



Flexible Expansion

Modular design, simplified parallel expansion.



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	0.3 P	0.5 P	0.5 P
Max. Depth of Discharge	100% (25 ± 2 °C)		
AC Side			
Rated Output Power	125 kW	215 kW	210 kW
Rated AC Voltage	400 V	690 V	800 V
AC Voltage Range	-15% ~ +10%		
Grid Type	3W+N+PE/3W+PE	3W+PE	3W+PE
Rated Frequency	50 Hz / 60 Hz		
Power Factor	0.99/ -1 ~ +1		
THDi	≤3%		
DC Ratio	<0.5% I _{pn}		
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°C ~ 55°C (Derating after 45°C)		
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		