# All-in-one Liquid-cooled ESS Cabinet

ECO-E233LS

## Brief

The all-in-one liquid-cooled ESS cabinet adopts advanced cabinet-level liquid cooling and temperature balancing strategy. The cell temperature difference is less than 3°C, which further improves the consistency of cell temperature and extends the battery life. The modular design makes the parallel solution more flexible and has higher energy density, which significantly improves the economy, safety and construction convenience of ESS projects.

### Features



#### Compact

1.4m<sup>2</sup> footprint only, save 35% space compared with air-cooled.



#### **High Power Density**

233kWh energy in one cabinet and ensure long-term endurance.



#### Efficient

Optimal in-PACK duct design, achieve high-efficient cooling and low energy consumption.



#### **Long Cycle Life**

Over 8,000 times cycle life, excellent performance of battery system.



#### Flexible Expansion

Elecnova

#### ECO-Energy Storage System 
####

Modular design, simplified parallel expansion.



#### **Ultimate Safety**

In-PACK and triple-level fire safety, prevent heat runaway.



# Specifications

DC Part	
Cell Type	LFP 3.2V/280Ah
PACK	46.6kWh/1P52S
Battery System	233kWh/1P260S
Voltage Range	728~936Vdc
PACK Ingress Rating	IP65
AC Part	
Rated Power	100kW
Max. Power	110kW
THDi	< 3%
DC Ratio	<0.5%lpn
Nominal Voltage	400Vac
Power Factor	-1 lagging~1 leading
Nominal Frequency	50/60 Hz
General	
System Efficiency	≥91%
Charge/Discharge Rate	≤0.5P
DoD	95%
SOC Accuracy	< 3%
Cycle Life	≥8,000 times
Switching Time	<100ms
Connectivity	Ethernet /RS485
Ingress Rating	IP55
Cooling	Liquid Cooling
Operating Temperature	-25°C~55°C
Humidity	5-95%RH, non-condensing
Noise	≤75dB
Altitude	≤2,000m (derating above 2,000m)
Fire Safety	Combustible gas detection/smoke detection/temperature detection + active warning + module-level fire suppression (Perfluoro)
Dimensions (W*D*H)	1,050*1,350*2,400 (mm)
Weight	2800kg
Compliance	UN38.3, IEC61619, UL1973, UL9540 and CE-EMC