

Elecnova



EN.E.2601

Disclaimers  
This document may contain forecast information, including but not limited to information related to future finance, operation, product series, new technologies, etc.  
Due to many uncertainties in practice, actual results may differ significantly from forecasts. Therefore, the information in this document is for reference only and does not constitute any offer or commitment. Shanghai Elecnova Energy Storage Co., Ltd. may modify the above information, and no further notice will be made.



ELECNova ENERGY STORAGE CO., LTD.

Add: 3F - T1, Hongqiaohui, Shanghai  
Tel: (+86-021) 54396121-8082, 199 0616 5605  
E-mail: sales@elecnova-ess.com

Built on quality • Powered by innovation • Delivered locally

# ENERGY STORAGE SYSTEM

Elecnova



[www.elecnova-ess.com](http://www.elecnova-ess.com)



# ABOUT US

Elecnova delivers smart and reliable energy storage solutions that empower businesses and communities to achieve energy independence and sustainability.

Leveraging advanced R&D and integrated manufacturing capabilities, Elecnova offers complete ESS solution packages – including PACK, PCS, BMS, and EMS – ensuring high performance, flexibility, and long-term reliability.



## Core Values

- Create value for customers
- Share value with employees
- Contribute value to community



## Corporate Vision

- Elecnova is committed to shaping a smarter, greener, and more reliable energy world.





Elecnova ESG  
Recognition  
and Honors  
in 2025

Awarded Ecovadis Silver  
for sustainability excellence.

"Ranked among the **Top 15%** of responsible  
and future-driven companies worldwide.



Achieved the prestigious **D&B 4A1 rating**  
— one of the highest levels of financial strength  
and credit reliability.

A top-tier global rating that reflects Elecnova's solid stability  
and trusted corporate performance.



All Elecnova energy storage products are  
fully certified by **TÜV SÜD**,  
meeting Europe's strictest safety and quality standards.

A comprehensive TÜV certification that reinforces our commitment  
to reliable, safe, and globally trusted ESS solutions.



Certified to **UL9540A**, demonstrating  
Elecnova's uncompromising commitment  
to battery safety.

A rigorous fire-safety evaluation that validates the stability  
and reliability of our ESS under extreme conditions.



Fully **CE-certified** to meet essential EU safety,  
health, and environmental protection standards.

Ensuring our energy storage solutions comply with Europe's  
stringent regulatory requirements for safe market entry.





# Global Layout

10%

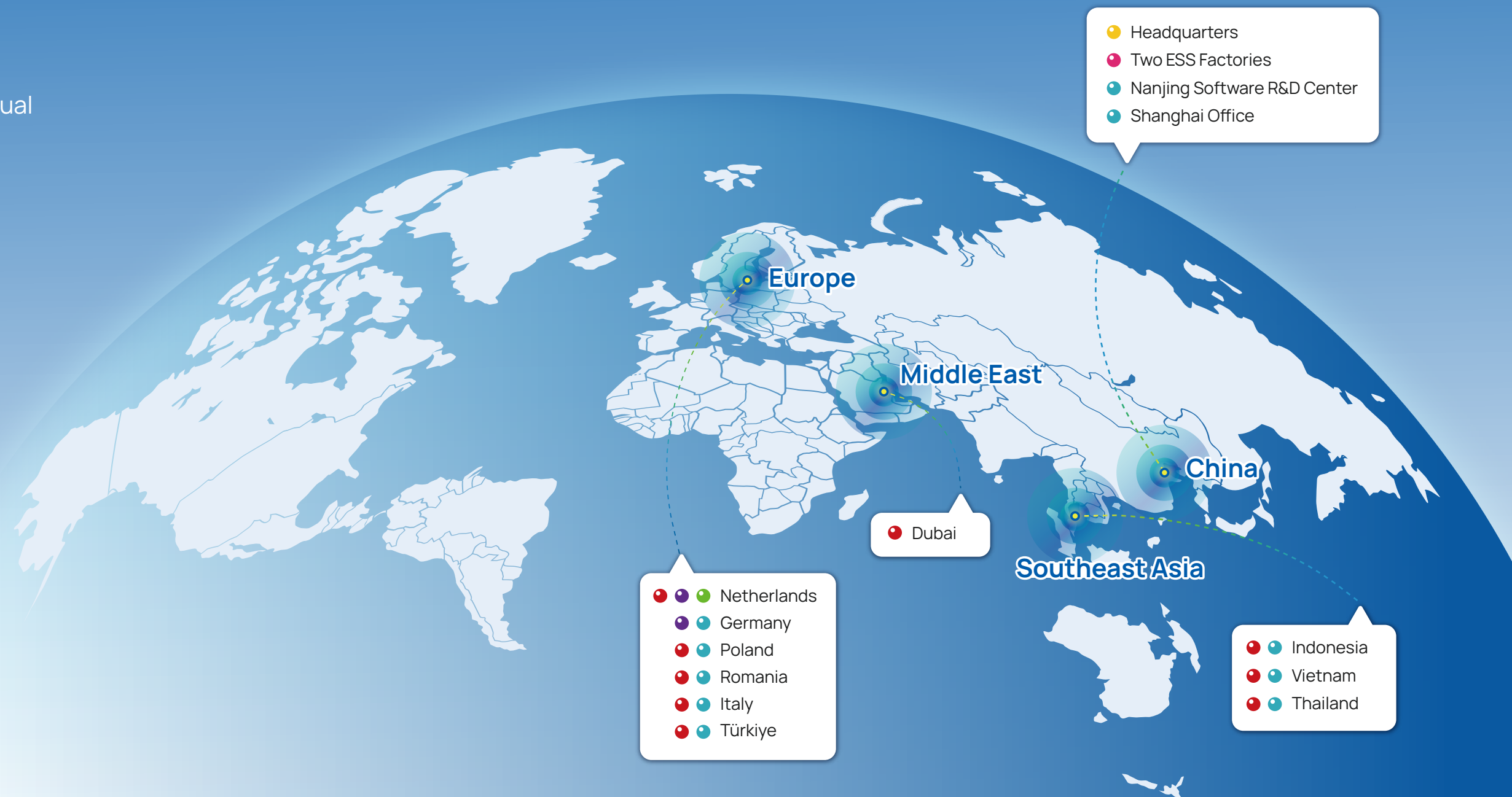
R&D investment

7GWh

Production capacity Annual

“ Strategic Partner of Schneider Electric ”  
“ Excellent Partner of ABB Electric(China) ”

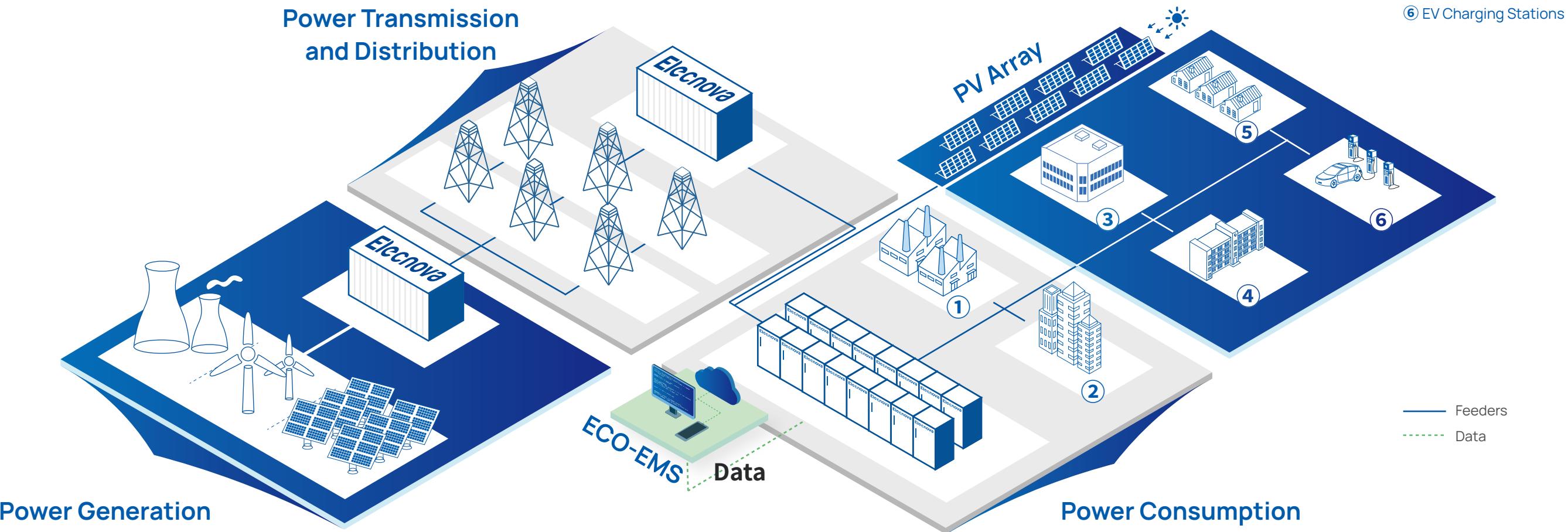
- Technical Support
- Headquarter
- Warehouse
- Branch Company
- ESS Factory
- Office





# ESS Scenarios

Provide one-stop industrial and commercial distributed energy storage battery system solutions with high safety, high reliability, high efficiency and long cycle life.



Elecnova



Energy Arbitrage



Power Quality Optimisation



Power Market Ancillary Services



Backup Power Supply



Microgrid



VPP



# Contents

## 01

### C&I Ultra

ECO-E101WX	01-02
ECO-E241WP-2A	03-04
ECO-E261LP-2A	05-06
ECO-E418LP-A40/69/80	07-08
ECO-B418LP-2N	09-10

## 02

### Solar Pro

ECO-E64WX	11-12
ECO-B100/120WP-2H	13-14

## 03

### NovaStack

ECO-E20FT2170LP-2	15-16
ECO-B20FT5015LP-2	17-18

## 04

### Smart Aux

STS Cabinet	19-20
EPS Cabinet	21-22



# All-in-one Air-cooled ESS Cabinet

ECO-E101WX

## Brief

The all-in-one air-cooled ESS cabinet integrates long-life battery, efficient balancing BMS, high-performance PCS, active safety system, smart distribution and HVAC into one cabinet, enabling long-term operation with safety, stability and reliability. Through AC side parallel connection, it achieves agile deployment of ESS power station with flexible capacity expansion.



## Features



**Fast response**  
1P fast charge/discharge rate.



**Energy Saving**  
Achieve utilization of new energy via energy storing & releasing of renewables.



**Economical & Efficient**  
RTE up to 87%, DOD up to 100%.



**Smart O&M**  
Diversified access of monitoring by HMI (local), APP/web (remote).



**Flexible Expansion**  
Modular design, simplified parallel expansion, fast expansion.



**Safe & Reliable**  
IP55, fully tested and optimized thermal management, cell difference  $\leq 6^{\circ}\text{C}$ .



## Specifications

DC Side	
Cell Type	LFP / 120 Ah
Pack Configuration	9.2 kWh / 1P24S
System Configuration	101 kWh / 1P264S
Rated DC Voltage	844.8 V
DC Voltage Range	739.2 ~ 950.4 V
Max. Charge/Discharge Rate	1 P
Max. Depth of Discharge	100% (25 $\pm$ 2 $^{\circ}\text{C}$ )
AC Side	
Rated Output Power	100 kW
Rated AC Voltage	400V
AC Voltage Range	$\pm 15\%$
Grid Type	3W+N+PE
Rated Frequency	50 Hz / 60 Hz
Power Factor	0.99/ -1 ~ +1
THDi	$\leq 3\%$
DC Ratio	$< 0.5\%$ Ipn
General	
Max. Round Trip Efficiency	87%
Cycle Life	$\geq 5,500$ cycles
Communication	Modbus TCP/IP
Fire Suppression System	Aerosol
Ingress Rating	IP55
Cooling	Air cooling
Operating Temperature	-25 $^{\circ}\text{C}$ ~ 55 $^{\circ}\text{C}$ (Derating after 45 $^{\circ}\text{C}$ )
Anticorrosion Rating	C4 (C5 optional)
Humidity	0 ~ 95% RH (non-condensing)
Noise	$\leq 75$ dB
Altitude	3000m (Derating above 2000m)
Dimensions (W*D*H)	1,250*1,200*2,150 mm
Weight	2,000 kg
Safety/EMC	UN38.3, IEC62619, IEC63056, IEC62477-1, IEC61000-6-2/4
Grid code	EN50549-1/-10, EN50549-2/-10, G99, VDE4105, NRS097, C10/11



# All-in-one Air-cooled ESS Cabinet

ECO-E241WP-2A



## Brief

The ECO-E241WP-2A integrates a long-life battery system, high-performance PCS, efficient balancing BMS, active safety systems, smart distribution, and HVAC into a single cabinet, ensuring long-term operation with superior safety, stability, and reliability. Through AC-side parallel connections, it enables agile deployment of ESS power with flexible capacity expansion.



## Features

- **Economical and Efficient**  
RTE up to 87%,  
DoD up to 100%.
- **Safe & Reliable**  
IP55 protection level, optimized ventilation design,  
cells temperature difference  $\leq 6^{\circ}\text{C}$ .
- **Compact**  
1.8m<sup>2</sup> footprint only,  
easy transportation & fast installation.
- **Long Cycle Life**  
Over 8,000 times cycle life,  
excellent performance of battery system.

- **Flexible Expansion**  
Modular design, simplified parallel expansion,  
fast expansion.
- **Smart O & M**  
Diversified O & M access,  
both on APP & Cloud.

## Specifications

DC Side	
Cell Type	LFP / 314 Ah
Pack Configuration	24.1 kWh / 1P24S
System Configuration	241 kWh / 1P240S
Rated DC Voltage	768 V
DC Voltage Range	672 ~ 864 V
Max. Charge/Discharge Rate	0.5 P
Max. Depth of Discharge	100% (25 $\pm$ 2 $^{\circ}\text{C}$ )
AC Side	
Rated Output Power	125 kW
Rated AC Voltage	400 V
AC Voltage Range	$\pm 15\%$
Grid Type	3W+N+PE
Rated Frequency	50 Hz / 60 Hz
Power Factor	0.99/ -1 ~ +1
THDi	$\leq 3\%$
DC Ratio	$< 0.5\%$ Ipn
General	
Max. Round Trip Efficiency	87%
Cycle Life	$\geq 8,000$ cycles
Communication	Modbus TCP/IP
Fire Suppression System	Aerosol
Ingress Rating	IP55
Cooling	Air cooling
Operating Temperature	-25 $^{\circ}\text{C}$ ~55 $^{\circ}\text{C}$ (Derating after 45 $^{\circ}\text{C}$ )
Anticorrosion Rating	C4 (C5 optional)
Humidity	0~95% RH (non-condensing)
Noise	$\leq 75$ dB
Altitude	3000m (Derating above 2000m)
Dimensions (W*D*H)	1,250*1,450*2,250 mm
Weight	2,670 kg
Safety/EMC	UN38.3, IEC62619, IEC63056, IEC62477-1, IEC61000-6-2/4
Grid code	EN50549-1/-10, EN50549-2/-10, G99, VDE4105, NRS097, C10/11



# All-in-one Liquid-cooled ESS Cabinet

ECO-E261LP-2A

## Brief

The ECO-E261LP-2A features 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**  
1.4m<sup>2</sup> footprint only, easy transportation & fast installation.
- High Integration**  
261kWh energy in one cabinet with remarkable endurance.
- Efficient Cooling**  
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**  
Modular design, simplified parallel expansion.
- Ultimate Safety**  
In-PACK fire warning and protection with aerosol, prevent heat diffusion and runaway.

## Specifications

DC Side	
Cell Type	LFP / 314 Ah
Pack Configuration	52.2 kWh / 1P52S
System Configuration	261 kWh / 1P260S
Rated DC Voltage	832 V
DC Voltage Range	728 ~ 936 V
Max. Charge/Discharge Rate	0.5 P
Max. Depth of Discharge	100% (25 ± 2 °C)
AC Side	
Rated Output Power	125 kW
Rated AC Voltage	400 V
AC Voltage Range	±15%
Grid Type	3W+N+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°C~55°C (Derating after 45°C)
Anticorrosion Rating	C4 (C5 optional)
Humidity	0~95% RH (non-condensing)
Noise	≤ 75 dB
Altitude	3000m (Derating above 2000m)
Dimensions (W*D*H)	1,050*1,350*2,400 mm
Weight	2,600 kg
Safety/EMC	UN38.3, IEC62619, IEC63056, IEC62477-1, IEC61000-6-2/4, UL9540A
Grid code	EN50549-1/-10, EN50549-2/-10, G99, VDE4105, NRS097, C10/11, CEI0-21, CEI0-16



# 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**  
2m<sup>2</sup> 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	0.25 P	0.5 P	0.5 P
Max. Depth of Discharge	100% (25 ± 2 °C)		
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°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		



# Liquid-cooled Battery Cabinet





ECO-B418LP-2N



## Brief

The ECO-B418LP-2N is a free-standing battery cabinet featuring pack-level liquid cooling and cell-level temperature balancing. It maintains temperature differences within 3 °C between cells, enhancing temperature consistency and extending battery life. Its modular design offers flexible parallel configurations and can be paired with a centralized PCS to create a complete ESS solution that delivers higher energy density and significantly improves cost-effectiveness.



## Features

- **Compact**  
1.7m<sup>2</sup> footprint only, easy transportation & fast installation.
- **High Integration**  
Multiple units connected in parallel achieve MV/HV connection with PCS-boost containers.
- **Efficient Cooling**  
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**  
Support seamless cabinets combination and flexible grid access.
- **Ultimate Safety**  
In-PACK fire warning and protection with aerosol, prevent heat diffusion and runaway.

## Specifications

Item	Parameter
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	0.5 P
Max. Depth of Discharge	100% (25 ± 2 °C)
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)
Altitude	4500m
Dimensions (W*D*H)	1,350*1,350*2,400 mm
Weight	3,700 kg
Safety/EMC	UN38.3, IEC62619, IEC63056, IEC62477-1, IEC61000-6-2/4



# Air-cooled Hybrid Cabinet

ECO-E64WX

## Brief

The ECO-E64WX is a compact PV-plus ESS solution, designed on ESS integration and digital monitoring technologies. The cabinet integrates components such as lithium battery, HVAC, fire suppression system (FSS), and EMS. With compact structure, it enables easy installation and flexible capacity expansion. Paired with hybrid inverter, the ESS supports multiple work modes and various operation strategies.



## Features

- Economical & Efficient**  
RTE up to 87%, DOD up to 100%.
- Safe & Reliable**  
IP55, optimized ventilation design, temperature difference within 6°C.
- Compact & Convenient**  
0.96m<sup>2</sup> footprint, easy to transport and install.
- Expandable & Modular**  
Modular design supports parallel connection for convenient system expansion.
- Versatile**  
Support multiple brands of hybrid inverter, with higher selectivity.
- PV pluggable**  
Support PV connection, with higher integration.
- Self-developed**  
PACK and EMS are all independently developed with good compatibility.
- Easy O & M**  
Support multiple ways of operation and maintenance, including onsite, cloud.

## Specifications

Battery Cabinet					
Cell Type	LFP /120 Ah				
Pack Configuration	9.216 kWh / 1P24S				
System Configuration	64.512 kWh / 1P168S				
Rated DC Voltage	537.6 V				
DC Voltage Range	470.4 ~ 604.8 V				
Max. Charge/Discharge Rate	0.8 P				
Max. Depth of Discharge	100% (25 ± 2 °C)				
PV Input					
Max. input power	37.5kW	45kW	54kW	60kW	75kW
PV Voltage Range	200V~850V				
MPPT	4				
MAX. Input Current	30A*4				
AC Side					
Rated Output Power	25kW	30kW	36kW	40kW	50kW
Rated AC Voltage	400 V				
AC Voltage Range	±15%				
Grid Type	3W+N+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	87%				
Cycle Life	≥ 5,500 cycles				
Communication	Modbus TCP/IP				
Fire Suppression System	Aerosol				
Ingress Rating	IP55				
Cooling	Air cooling				
Operating Temperature	-25°C~55°C (Derating after 45°C)				
Anticorrosion Rating	C4 (C5 optional)				
Humidity	0~95% RH (non-condensing)				
Altitude	3000m (Derating above 2000m)				
Dimensions (W*D*H)	800*1,200*2,030 mm				
Weight	1,000 kg				
Safety/EMC	UN38.3, IEC62619, IEC63056, IEC62477-1, IEC61000-6-2/4				
Grid code	EN50549-1/-10, EN50549-2/-10, G99, VDE4105, NRS097, C10/11				



# Air-cooled Hybrid Cabinet









## ECO-B100/120WP-2H

### Brief

The ECO-B100/120WP-2H series is a professional PV-plus ESS solution, designed on ESS integration and digital monitoring technologies. The cabinet integrates components such as lithium battery, HVAC, fire suppression system (FSS), and EMS. With compact structure, it enables easy installation and flexible capacity expansion. Paired with hybrid inverter, the ESS supports multiple work modes and various operation strategies.



### Features

- **Economical and Efficient**  
RTE up to 90%, DOD up to 100%.
- **Safe & Reliable**  
IP55, optimized ventilation design, temperature difference within 6°C.
- **Compact & Convenient**  
0.96m<sup>2</sup> footprint, easy to transport and install.
- **Expandable & Modular**  
Easy modular design supports parallel connection for convenient system expansion.
- **Versatile**  
Support multiple brands of hybrid inverter, with higher selectivity.
- **PV pluggable**  
Support PV connection, with higher integration.
- **Self-developed**  
LFP314Ah battery cell system integration, leading cost advantage, 3S fusion.
- **Easy O&M**  
Support multiple ways of operation and maintenance, including onsite, cloud.

### Specifications

Battery Cabinet	ECO-B100WP-2H		ECO-B120WP-2H
Cell Type	LFP / 314Ah		LFP / 314Ah
Pack Configuration	20.096 kWh / 1P20S		20.096 kWh / 1P20S
System Configuration	100.48 kWh / 1P100S		120.576 kWh / 1P120S
Rated DC Voltage	320 V		384 V
DC Voltage Range	280 ~ 360 V		336 ~ 432 V
Max. Charge/Discharge Rate	0.5 P		
Max. Depth of Discharge	100% (25 ± 2°C)		
Cycle Life	≥ 8,000 cycles		
PV Input			
Max. input power	60kW	80kW	100kW
PV Votage Range	150 ~ 850V	150 ~ 850V	150 ~ 850V
MPPT	3	4	4
Max. input Current	40A*3	40A*4	40A*4
AC Side			
Rated Output Power	30kW	40kW	50kW
Rated AC Voltage	400V		
AC Voltage Range	±15%		
Grid Type	3W+N+PE		
Rated Frequency	50Hz/60Hz		
Power Factor	0.99/ -0.8 ~ +0.8		
THDi	≤3%		
DC Ratio	< 0.5% I <sub>pn</sub>		
General			
Max. Round Trip Efficiency	90%		
Communication	Modbus TCP/IP		
Fire Suppression System	Aerosol		
Ingress Rating	IP55		
Cooling	Air cooling		
Operating Temperature	-25°C~55°C (Derating after 45°C)		
Anticorrosion Rating	C4 (C5 optional)		
Humidity	0~95% RH (non-condensing)		
Altitude	3000m (Derating above 2000m)		
Dimensions (W*D*H)	800*1,200*2,100 mm		
Weight	1200 kg		
Safety/EMC	UN38.3, IEC62619, IEC63056, IEC62477-1, IEC61000-6-2/4		
Grid code	EN50549-1/-10, EN50549-2/-10, G99, VDE4105, NRS097, C10/11		



# All-in-one Liquid-cooled ESS Container

ECO-E20FT2170LP-2



## Brief

Elecnova's innovative 400 V all-in-one container solution integrates PCS, EMS, BMS, cooling and fire suppression systems, AC combiner cabinet, and other essential components. The highly integrated system, combined with high-quality 314 Ah battery cells, delivers higher energy density in a compact footprint. Its efficient hybrid cooling system ensures stable operation, keeping cell temperature differences within 3 °C. Designed in a standard 20 ft container, the solution allows easy transportation, rapid installation, and flexible deployment, making it suitable for a wide range of commercial, industrial, and utility-scale energy storage applications.

## Features



### Hybrid Cooling System

The liquid-cooled battery system, paired with air-cooled PCS system, provides dual assurance for optimal efficiency and outstanding performance.



### All-in-One Design

Highly integrated 3S system, cooling system, and fire protection system, delivering greater capacity within a smaller footprint.



### String-Based Solution

Each battery cluster is independently managed, enhancing system reliability and stability.



### Standard 20ft Container

Pre-tested and pre-installed before delivery, enabling easy transportation, simple commissioning, and shorter lead times.

## Specifications

DC Side	
Cell Type	LFP / 314 Ah
Pack Configuration	48.2 kWh / 1P48S
System Configuration	2170 kWh / 9P240S
Rated DC Voltage	768 V
DC Voltage Range	672 ~ 864 V
Max. Charge/Discharge Rate	0.5 P
Max. Depth of Discharge	100% (25 ± 2 °C)
AC Side	
Rated Output Power	1000 kW
Rated AC Voltage	400 V
AC Voltage Range	±15%
Grid Type	3W+N+PE
Rated Frequency	50 Hz / 60 Hz
Power Factor	0.99/ -1 ~ +1
THDi	≤3%
DC Ratio	<0.5% I <sub>pn</sub>
General	
Max. Round Trip Efficiency	89%
Cycle Life	≥ 8,000 cycles
Communication	Modbus TCP/IP
Fire Suppression System	Aerosol system+Water spray system
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)	6,058*2,438*2,591 mm
Weight	28 t
Safety/EMC	UN3536, IEC62619, IEC63056, IEC62477-1, IEC61000-6-2/4, UL9540A, IEC62933-5-2
Grid code	EN50549-1/-10, EN50549-2/-10, G99, VDE4105, NRS097, C10/11, CEI0-21, CEI0-16



# Liquid-cooled Battery Container

ECO-B20FT5015LP-2



## Brief

The 20-ft liquid-cooled ESS container integrates PACK, EMS, BMS, HVAC, and fire suppression system (FSS) into a single container. Designed for demanding applications, the 20-ft liquid-cooled ESS container is suitable for power generation, grid, and commercial & industrial (C&I) ESS scenarios that require high power and flexible capacity.

## Features



**Higher Energy Density**  
The 20-ft liquid-cooled energy storage container offers a maximum capacity of 5.015 MWh, delivering higher energy density and reducing overall costs.



**Lower Self Power Consumption**  
A variable-frequency compressor adapts to temperature conditions, reducing the system's power consumption.



**Lower Operating Noise**  
Minimized fan usage significantly reduces operating noise compared to air-cooled solutions.



**Longer Service Life**  
Enhanced cell temperature consistency extends battery life, increases safety, and improves return on investment.



**Better Temperature Control**  
The liquid cooling system maintains cell temperature differences below 3°C, improving voltage consistency and overall performance.



**Higher Protection**  
The container features an IP55-rated enclosure (PACK IP65), up to C5 corrosion protection, and high/low-temperature design for robust environmental resistance.

## Specifications

Item	
Cell Type	LFP314 Ah
Pack Configuration	104.5kWh / 1P104S
System Configuration	5.015MWh / 12P416S
Rated DC Voltage	1331.2 V
DC Voltage Range	1165 ~ 1498 V
Max. Charge/Discharge Rate	0.5 P
Max. Depth of Discharge	100% (25 ± 2 °C)
Cycle Life	≥ 8,000 cycles
Fire Suppression System	Aerosol system+Water spray system
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)
Altitude	3000m
Dimensions (W*D*H)	6,058*2,438*2,896 mm
Weight	41.8t
Safety/EMC	UN3536, IEC62619, IEC63056, IEC62477-1, IEC61000-6-2/4



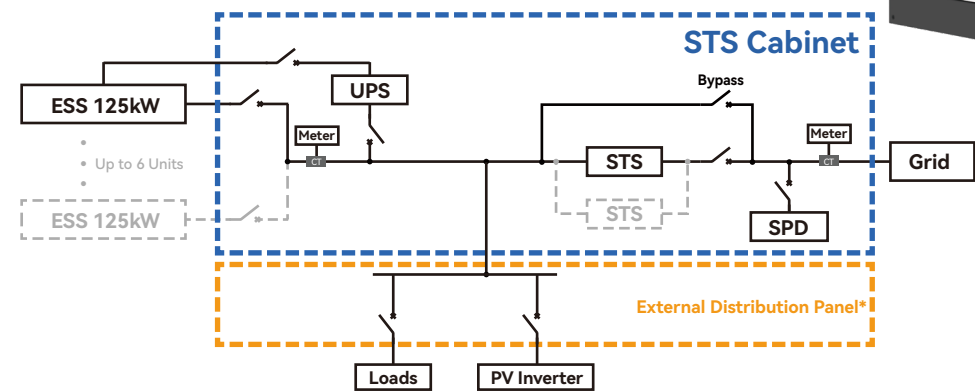
# STS Cabinet

## ECO-ST5-C125-2/4/6IN

**Recommended Compatible Products:**  
ECO-E101WX, ECO-E241WP-2A, ECO-E261LP-2A

### Brief

Elecnova ECO-ST5-C125-2/4/6IN is a seamless on/off-grid switching cabinet designed for the 125kW rated power Elecnova all-in-one ESS cabinet within 20ms switching time. It enables on/off-grid switching for single or multiple parallel-connected application. Equipped with reserved ports for PV inverter power and critical loads connection, allowing for the normal operation of PV system and loads in grid outage condition.



\*Note: Distribution panel is not included in STS cabinet.

### Features

**Intelligent collaboration**  
Seamless on/off-grid switching within 20ms.

**Reliable**  
Leading brands selection of all equipments, safe and reliable.

**Highly Integration**  
Integrate STS, UPS, meter, breakers, ATS(optional) and other accessories in one system, compact and easy transportation.

**Electrical Safety**  
Backup design and assurance of critical loads without interruption.

### Specifications

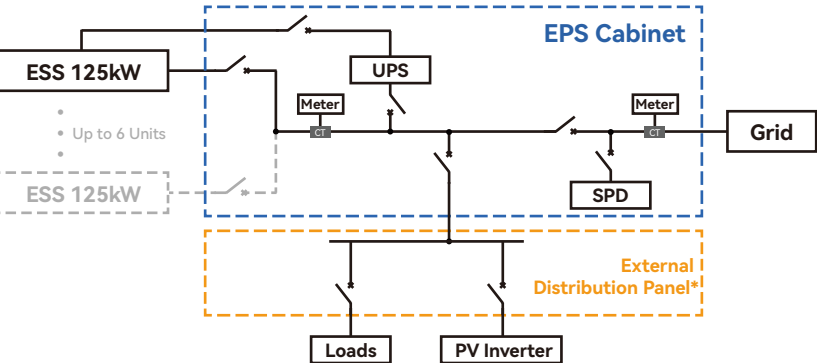
ESS Side Parameters	ECO-ST5-C125-2IN	ECO-ST5-C125-4IN	ECO-ST5-C125-6IN
Max. No. of ESS Connection	2 units	4 units	6 units
Max. ESS Current	2*250A	4*250A	6*250A
Rated ESS Power	2*125kW	4*125kW	6*125kW
Grid Side Parameters			
No. of Grid Connection Port	1		
Max. Grid Current	500A	800A	1600A
Grid Voltage Range	400V±15%		
Grid Type	3W+N+PE		
Rated Frequency	50/60Hz		
On/off-grid Switching Time	20ms		
PV Input Requirements			
Max. PV&Loads Port Current	250A	630A	800A
Recommended Max. PV Power	170kW	430kW	550kW
Recommended Max. Load Power*	70% × ESS Power		
Auxiliary Equipments Parameters			
UPS	Standard		
Maintenance Socket	Standard, 16A		
Surge Protection	AC Type II		
Meter Accuracy	0.5S		
ATS	Optional		
General Parameters			
Dimension (W×D×H)	800×1200×1800 mm	1000×1200×1800 mm	1200×1200×2200 mm
Altitude	3000m		
Ambient Temperature	-15°C~45°C		
Humidity	0~95%RH (non-condensing)		
Cooling Method	Air cooling		
IP Rating	IP54		
Communication	RS485, Modbus TCP/IP		

\*Note: The value indicated herein is a recommended reference based on PF=0.7. When the load involves motors or other types of impact loads, it is recommended to equip the system with a soft starter. Please contact Elecnova for further technical support prior to order placement.

# EPS Cabinet

## ECO-EPS-C125-1/3/6IN

**Recommended Compatible Products:**  
ECO-E101WX, ECO-E241WP-2A, ECO-E261LP-2A



\*Note: Distribution panel is not included in EPS cabinet.



### Brief

Elecnova EPS (Emergency Power Supply) cabinet ECO-EPS-C125-1/3/6IN series is designed to enable on/off-grid switching for single unit or multiple parallel-connected units in emergency situations, with the switching time within 20 seconds, ensuring the operation of critical loads under off-grid conditions. The EPS cabinet supports both remote and on-site manual switching between on/off-grid modes, meeting the switching requirements of various application scenarios. In addition, the EPS cabinet allows the integration of grid-tied inverters and ensures their normal operation under off-grid conditions, thereby optimizing the system logic and overall efficiency of PV-plus-BESS projects. This enables the ESS to be applied in a wider range of complex application

### Features

**IP54 Outdoor Design**  
High protection rating for harsh environments

**Space Saving**  
Integrated structure with minimal size.

**Fast Deployment**  
Modular design for efficient wiring and installation.

**On/off-grid Switching**  
Built-in UPS provides backup power for on-grid and off-grid switching.

### Specifications

ESS Side Parameters	ECO-EPS-C125-1IN	ECO-EPS-C125-3IN	ECO-EPS-C125-6IN
Max. No. of ESS Connection	1	3	6
Max. ESS Current	250A	3*250A	6*250A
Max. ESS Power	125kW	3*125kW	6*125kW
Grid Side Parameters			
No. of Grid Connection Port		1	
Max. Grid Current	315A	800A	1600A
Rated Voltage		400V	
Voltage Range		400V±15%	
Grid Type		3W+N+PE	
Rated Frequency		50/60Hz	
On/off-grid Switching Time		≤20s	
PV & Loads Requirements			
Max. PV&Loads Port Current	250A	630A	1250A
Recommended Max. PV Power	170kW	430kW	860kW
Recommended Max. Load Power*		70% × ESS Power	
Auxiliary Equipments Parameters			
UPS		Standard	
Surge Protection		AC Type II	
Meter Accuracy		0.5S	
General			
Dimension (W×D×H)	600×800×1500 mm	800×1000×2400 mm	1000×1000×2400 mm
Altitude		≤3000m	
Ambient Temperature		-10℃~40℃	
Humidity		0~95%RH (non-condensing)	
Cooling Method		Air cooling	
IP Rating		IP54	
Communication		RS485, Modbus TCP/IP	

\*Note: The value indicated herein is a recommended reference based on PF=0.7. When the load involves motors or other types of impact loads, it is recommended to equip the system with a soft starter. Please contact Elecnova for further technical support prior to order placement.





*Build Elecnova  
as a Top Expert in Energy Storage Solutions.*