Elecnova

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Built on quality • Powered by innovation • Delivered locally

ENERGY STORAGE SYSTEM

Elecnova

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Elecnova

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.

Elecnova

Global Layout

10%
R&D investment

7GWh
Production capacity Annual

Strategic Partner of Schneider Electric
Excellent Partner of ABB Electric

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

Contents

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%.

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

Smart O& M
Diversified access of monitoring by HMI(local), AP-P/web (remote).

Safe & Reliable
IP55, fully tested and optimized thermal management, cell difference ≤ 6°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 ± 2 °C)
AC Side	
Rated Output Power	100 kW
Rated AC Voltage	400V
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)
Noise	≤ 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 ≤6℃.

Commpact
1.8m² footprint only,
easy transportation & fast installation.

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

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

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 ± 2 ℃)
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	87%
Cycle Life	≥ 8,000 cycles
Communication	Modbus TCP/IP
Fire Suppression System	Aerosol
Ingress Rating	IP55
Cooling	Air cooling
Operating Temperature	-25℃~55℃ (Derating after 45℃)
Anticorrosion Rating	C4 (C5 optional)
Humidity	0~95% RH (non-condensing)
Noise	≤ 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℃. 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
1.4m² 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.

Flexible Expansion
Modular design, simplified parallel expansion.

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

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 ℃)
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℃~55℃ (Derating after 45℃)
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℃. 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	0.3 P	0.5 P	0.5 P
Max. Depth of Discharge		100% (25 ± 2 ℃)	
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% 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	

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
1.7㎡ 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.

Flexible Expansion
Support seamless cabinets combination and flexible grid access.

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

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℃~55℃ (Derating after 45℃)
Anticorrosion Rating	C4 (C5 optional)
Humidity	0~95% RH (non-condensing)
Altitude	4000m
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%.

Versatile
Support multiple brands of hybrid inverter, with higher selectivity.

Safe & Reliable
IP55, optimized ventilation design, temperature difference within 6°C.

PV pluggable
Support PV connection, with higher integration.

Compact & Convenient
0.96㎡ footprint, easy to transport and install.

Self-developed
PACK and EMS are all independently developed with good compatibility.

Expandable & Modular
Modular design supports parallel connection for convenient system expansion.

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	1 P					
Max. Depth of Discharge	100% (25 ± 2 °C)					
PV Input						
Max. input power	37.5kW	45kW	54kW	60kW	75kW	90kW
PV Voltage Range	200V~850V					
MPPT	4					
MAX. Input Current	30A*4					
AC Side						
Rated Output Power	25kW	30kW	36kW	40kW	50kW	60kW
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%.

Versatile
Support multiple brands of hybrid inverter, with higher selectivity.

Safe & Reliable
IP55, optimized ventilation design, temperature difference within 6°C.

PV pluggable
Support PV connection, with higher integration.

Compact & Convenient
0.96㎡ footprint,
easy to transport and install.

Self-developed
LFP314Ah battery cell system integration,
leading cost advantage, 3S fusion.

Expandable & Modular
Easy modular design supports parallel connection for convenient system expansion.

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	0.5 P
Max. Depth of Discharge	100% (25 ± 2°C)	100% (25 ± 2°C)
Cycle Life	≥ 8,000 cycles	≥ 8,000 cycles
PV Input		
Max. input power	59.8kW 60kW 80kW 98kW 100kW	59.8kW 60kW 80kW 98kW 100kW 100kW
PV Votage Range	150 ~ 850V	150 ~ 850V
MPPT	3 4	3 4
Max. input Current	40A*3 40A*4	40A*3 40A*4
AC Side		
Rated Output Power	29.9kW 30kW 40kW 49kW 50kW	29.9kW 30kW 40kW 49kW 50kW 60kW
Rated AC Voltage	400V	400V
AC Voltage Range	±15%	±15%
Grid Type	3W+N+PE	3W+N+PE
Rated Frequency	50Hz/60Hz	50Hz/60Hz
Power Factor	0.99/ -0.8 ~ +0.8	0.99/ -0.8 ~ +0.8
THDi	≤3%	≤3%
DC Ratio	＜0.5% Ipn	＜0.5% Ipn
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 (Foundation)	
	1,536*1,377*2,100mm (Entire)	
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	

Air-cooled Hybrid Cabinet

ECO-B241WP-2H

Brief

The ECO-B241WP-2H is an integrated air-cooled PV-plus energy storage cabinet that combines lithium battery modules, a fire suppression system (FSS), and an embedded EMS into a single compact unit. Its integrated design simplifies system architecture and installation, while the modular structure allows flexible capacity expansion as project requirements grow. When used with a hybrid inverter and intelligent energy management, the cabinet supports multiple operating modes, enabling efficient coordination between PV generation, energy storage, and load demand.

Features

Safe & Reliable
IP55, optimized ventilation design, temperature difference within 5°C.

Higher Space Utilization
1.8 footprint, larger capacity per cabinet, saving space and site cost.

High PV Utilization Capability
Supports up to 250 kW PV input with wide MPPT voltage range for flexible PV system design.

Versatile
Support multiple brands of hybrid inverter, with higher selectivity.

Expandable & Modular
Easy modular design supports parallel connection for convenient system expansion.

Simplified System
Sufficient power for most commercial/industrial applications, reducing parallel inverters.

Specifications

Battery Cabinet					
Cell Type	LFP / 314 Ah				
Pack Configuration	24.1 kWh / 1P24S				
System Configuration	241 kWh / 1P2400S				
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 ℃)				
Cycle Life	≥ 8,000 cycles				
PV Input					
Max. input power	150kW	160kW	200kW	200kW	250kW
PV Voltage Range	150~950V				
MPPT	10				
Max. input Current	42A*10				
AC Side					
Rated Output Power	75kW	80kW	99.9kW	100kW	125kW
Rated AC Voltage	400 V				
AC Voltage Range	±15%				
Grid Type	3W+N+PE				
Rated Frequency	50 Hz / 60 Hz				
Power Factor	0.99/ -0.8 ~ +0.8				
THDi	≤3%				
DC Ratio	＜0.5% Ipn				
General					
Max. Round Trip Efficiency	90%				
Communication	Modbus TCP/IP				
Fire Suppression System	Aerosol				
Ingress Rating	IP55				
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 (Derating above 2000m)				
Dimensions (W*D*H)	1,250*1,450*2,050 mm (Foundation) 2,050*1,692*2,050mm (Entire)				
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				

Liquid-cooled Hybrid Cabinet

ECO-B261LP-2H

Brief

The ECO-B261LP-2H is an integrated liquid-cooled PV-plus energy storage cabinet that combines lithium battery modules, a fire suppression system (FSS), and an embedded EMS into a single compact unit. Its integrated design simplifies system architecture and installation, while the modular structure allows flexible capacity expansion as project requirements grow. When used with a hybrid inverter and intelligent energy management, the cabinet supports multiple operating modes, enabling efficient coordination between PV generation, energy storage, and load demand.

Features

Safe & Reliable
IP55, optimized ventilation design, temperature difference within 3°C.

Higher Space Utilization
1.4 footprint, larger capacity per cabinet, saving space and site cost.

High PV Utilization Capability
Supports up to 250 kW PV input with wide MPPT voltage range for flexible PV system design.

Versatile
Support multiple brands of hybrid inverter, with higher selectivity.

Expandable & Modular
Easy modular design supports parallel connection for convenient system expansion.

Simplified System
Sufficient power for most commercial/industrial applications, reducing parallel inverters.

Specifications

Battery Cabinet					
Cell Type	LFP / 314 Ah				
Pack Configuration	52.25 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 ℃)				
Cycle Life	≥ 8,000 cycles				
PV Input					
Max. input power	150kW	160kW	200kW	200kW	250kW
PV Voltage Range	150~950V				
MPPT	10				
Max. input Current	42A*10				
AC Side					
Rated Output Power	75kW	80kW	99.9kW	100kW	125kW
Rated AC Voltage	400 V				
AC Voltage Range	±15%				
Grid Type	3W+N+PE				
Rated Frequency	50 Hz / 60 Hz				
Power Factor	0.99/ -0.8 ~ +0.8				
THDi	≤3%				
DC Ratio	＜0.5% Ipn				
General					
Max. Round Trip Efficiency	90%				
Communication	Modbus TCP/IP				
Fire Suppression System	Aerosol				
Ingress Rating	IP55				
Cooling	Active liquid cooling				
Operating Temperature	-25℃~55℃ (Derating after 45℃)				
Anticorrosion Rating	C4 (C5 optional)				
Humidity	0~95% RH (non-condensing)				
Altitude	3000m (Derating above 2000m)				
Dimensions (W*D*H)	1,050*1,350*2,100 mm (Foundation) 1,850*1,350*2,100 (Entire)				
Weight	2,600 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-E10FT1044LP-2-N/S

Brief

ECO-E10FT1044LP-2-N/S is a highly integrated, standard 10-foot containerized energy storage system designed for commercial and industrial applications, with a rated AC output voltage of 400V. This system is capable of on/off-grid switch functionality, and the STS and ‹20ms seamless switching feature is available as an optional upgrade, providing strong off-grid load capability. It is equipped with dedicated interfaces for diesel generator connection and PV inverter connection, enabling multiple power sources to supply the system. This flexible design allows the system to adapt to various application scenarios and diverse user requirements.

Features

On/off-grid Switching

‹20ms seamless on/off-grid switching function is an available optional feature, for special requirement.

Multiple Power Source Options

Equipped with reserved interfaces for diesel generator and PV inverter, the system supports multiple power sources, making it suitable for a wide range of application scenarios.

String-Based Solution

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

All-in-One 10-ft Container

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

Specifications

DC Side	ECO-E10FT1044LP-2-N	ECO-E10FT1044LP-2-S
Cell Type	LFP / 314 Ah	
Pack Configuration	52.2 kWh / 1P52S	
System Configuration	1044 kWh / 4P260S	
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 ℃)	
Power Source		
Rated ESS Power	500 kW	
Rated AC Voltage	400 V	
AC Voltage Range	±15%	
Grid Type	3W+N+PE	
Rated Frequency	50 Hz / 60 Hz	
Rated STS Power	/	1000kW
On/Off-grid Switching	/	‹20ms
Power Factor	0.99/ -1 ~ +1	
THDi	0.99/ -1 ~ +1	
DC Ratio	＜0.5% Ipn	
Max. PV Inverter Input Current	/	800 A
Max. Diesel Generator Input Current	/	800 A
Backup		
Max. Backup Load Port Current	800 A	
Max. Backup Load Power*	350 kW (70% of Rated Output Power)	
General		
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℃~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)	2991*2438*2896 mm	
Weight	14 t	
Safety/EMC	UN3536, IEC62477-1, IEC62619, IEC63056, UL9540A	
Grid code	EN50549-1/-10, EN50549-2/-10, G99, VDE4105, NRS097, C10/11	

*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.

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% Ipn
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	24 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-B/Z20FT5015LP

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

Model	ECO-B20FT5015LP	ECO-Z20FT5015LP
Cell Type	LFP314 Ah	
Pack Configuration	104.5kWh / 1P104S	
System Configuration	5.015MWh / 12P416S	
Number of Output Circuits	1	12
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 ℃)	
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℃~55℃ (Derating after 45℃)	
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	

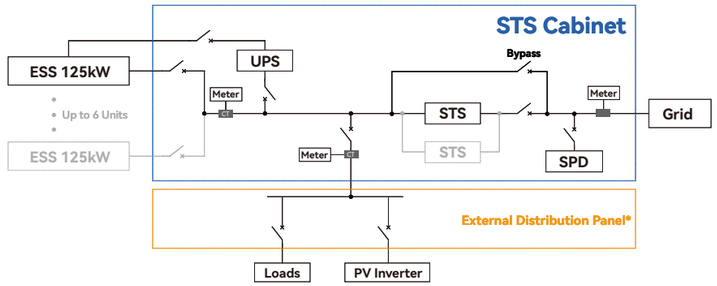
STS Cabinet

ECO-STS-C125-2/4/6IN

Recommended Compatible Products:
ECO-E101WX、ECO-E241WP-2A、ECO-E261LP-2A

Brief

Elecnova ECO-STS-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 interuption.

Specifications

ESS Side Parameters	ECO-STS-C125-2IN	ECO-STS-C125-4IN	ECO-STS-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℃~45℃	
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.

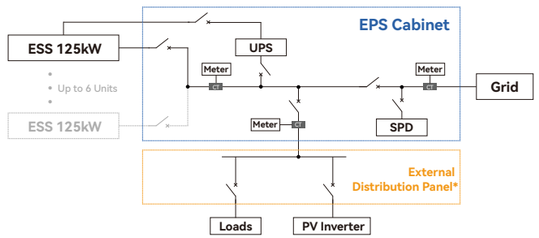
EPS Cabinet

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

Recommended Compatible Products:
ECO-E101WX、ECO-E241WP-2A、ECO-E261LP-2A

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



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

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.

Elecnova

Build Elecnova
as a Top Expert in Energy Storage Solutions.