

# *LFP Liquid-Cooled Energy Storage Module*



## Product features



### High Security

- IP67 protection rating for all outdoor applications
- Preventive fire strategy with pack-level fire suppression and detection system
- Safe and stable operation under all charging and discharging conditions
- Temperature difference between cells  $\leq 3^{\circ}\text{C}$  within a module, ensuring efficient and stable temperature control



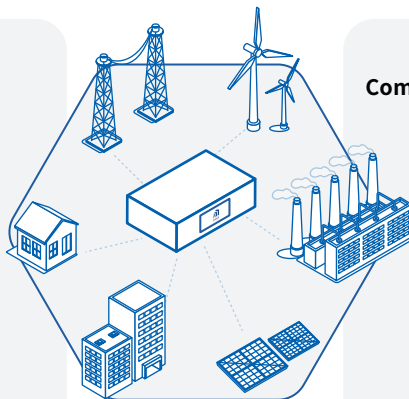
### Outstanding Efficiency

- Rapid response within 30ms when discharging mode activated
- Round-trip efficiency exceeds 93%



#### Utility-scale solution

Peak shaving  
Scheduling response  
Primary and secondary frequency regulation  
Black start  
Energy arbitrage  
Demand management  
T&D deferral  
Backup power  
Dynamic reactive power support

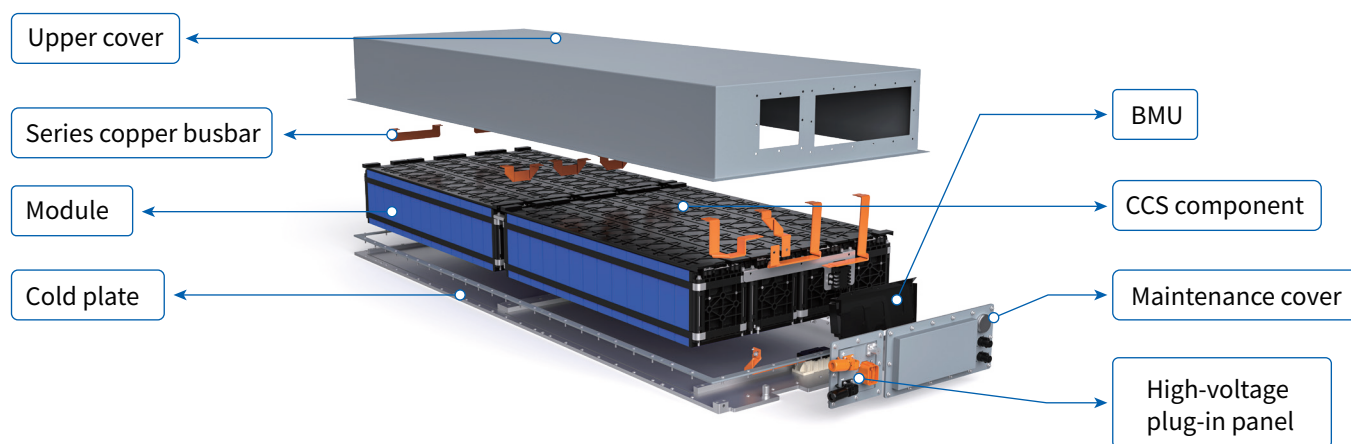


#### Commercial & Industrial Solution



Peak shaving  
Relieve capacity congestion  
Dynamic reactive power support  
Delaying expansion and upgrading  
Energy arbitrage  
Backup power

## Applications



PE0104 Energy Storage Module

## Technical Specifications

Product model	PE0052	PE0104	PP0047
Chemistry	LFP		
Cooling Solution	Liquid		
Battery manufacturer	CATL		
Configuration	1P52S	1P104S	1P52S
Rated Energy (kWh)	52.2	104.4	47.4
Rated Capacity (Ah)	314	314	314
C-Rate	0.5	0.5	1.0
Rated Power (kW)	26.1	52.2	23.7
Rated Voltage (V)	166.4	332.8	166.4
Altitude	≤5,000m (16,400 ft) (Derating above 2000m)		
IP	IP67		
Weight (kg)	339±3 (747 lbs)	684±3 (1,508 lbs)	336±5 (741 lbs)
Dimension (L×W×H) (mm)	1160×810×245 (45.7" x 31.9" x 9.6")	2180×790×245 (85.8" x 31.1" x 9.6")	1160×810×245 (45.7" x 31.9" x 9.6")
Certifications	GB/T36276, UN38.3, UL 1973, UL 9540A, IEC 62619, IEC 63056I, EC 60730-1, EN 61000-6-2, EN 61000-6-4, EN 62477-1, RoHS, REACH		

# Liquid-Cooled Energy Storage Cabinet



## Product features



### High Security

- IP55 protection level with C5 anti-corrosion level for extreme environmental applications
- Preventive fire strategy with pack-level fire suppression and detection system, and rack-level sprinkler systems



### Outstanding Efficiency

- Low self-consumption with 91% system efficiency (without AUX)
- Integrated liquid cooling system with outstanding temperature control ability



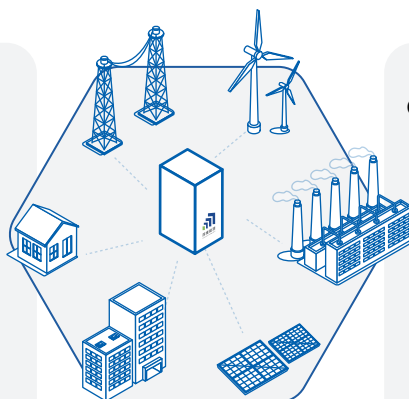
### Fully Integrated

- Flexible modular design
- Independent water cooling system
- High energy density design, saving 50% of space required
- Can be shipped with batteries installed, reducing the cost of on-site installation and commissioning



### Utility-scale solution

Peak shaving  
Scheduling response  
Primary and secondary frequency regulation  
Black start  
Energy arbitrage  
Demand management  
T&D deferral  
Backup power



## Applications



### Commercial & Industrial Solution

Peak shaving  
Relieve capacity congestion  
Dynamic reactive power support  
Delaying expansion and upgrading  
Energy arbitrage  
Backup power

# Technical Specifications

Product model		CE0261
DC-Side Parameters	Chemistry	LFP
	Battery manufacturer	CATL
	Configuration	1P260S
	Rated Energy (kWh)	261.2
	Rated Capacity (Ah)	314
	C-Rate	0.5
	Rated Voltage (V)	832
AC-Side Parameters	Rated Power (kW)	125
	Max Power (kW)	137.5
	Output Voltage (V)	400±10%
	Power Factor	-0.99 to +0.99
	Frequency (Hz)	60
System Parameters	Cooling Method	Liquid
	Fire Protection System	Aerosol
	Operating Temperature	-30 to 50 (°C) (Derating above 45) / -22 to 122 (F)
	Operating Humidity	0 to 95% ( Non-condensing)
	Switch Time(between charging & discharging)	≤100 ms
	Noise Level (dB)	≤75
	Anti-corrosion Level	C5
	Altitude	≤5,000m (16,400 ft) (Derating above 2,000m)
	IP	IP55
	Weight (kg)	3,000 / (6,614 lbs)
	Dimensions (L×W×H) (mm)	2300×1350×1350 (90.5”x 53.1” x 53.1”)
Certifications	GB/T36276, UN38.3, UL 1973, UL9540, UL 9540A, IEC 62619, IEC 63056, IEC 60730-1, EN 61000-6-2, EN 61000-6-4, EN 62477-1, RoHS, REACH	

# Liquid-Cooled Energy Storage Container



## Product features



### High Security

- Protection level IP55/Pack IP67 and C5 anti-corrosion level for all outdoor applications
- Fully charge and discharge, extremely safe and stable operation
- Fire prevention-optimized design with three-tiered detection across modules, rack, and container
- Temperature difference between cells within a module  $\leq 3^{\circ}\text{C}$ , ensuring efficient and stable temperature control



### Outstanding Efficiency

- Rapid response within 30ms
- Round-trip efficiency exceeds 93%



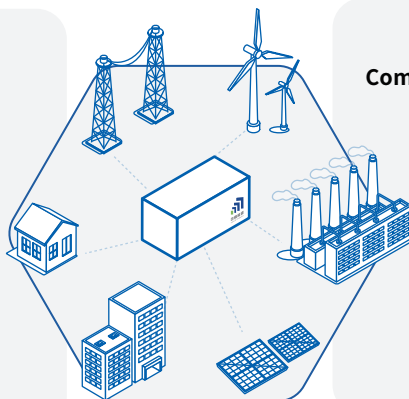
### Fully Integrated

- Modular design with a compact structure
- Separate electrical room and battery room for convenient maintenance
- Non-walk-in/modular highly integrated design, saving 35% of space required
- Prefabricated containerized solution, reducing the cost of on-site installation and commissioning



### Utility-scale solution

Peak shaving  
 Scheduling response  
 Primary and secondary frequency regulation  
 Black start  
 Energy arbitrage  
 Demand management  
 T&D deferral  
 Backup power



### Commercial & Industrial Solution



Peak shaving  
 Relieve capacity congestion  
 Dynamic reactive power support  
 Delaying expansion and upgrading  
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## Applications



## Technical Specifications

Product model	DE5015-A	DE5015	DE3035
Chemistry	LFP		
Battery manufacturer	CATL		
Configuration	12P416S (PE0052)	12P416S (PE0104)	8P416S
Rated Energy (kWh)	5,015	5,015	3,035
Rated Capacity (Ah)	314	314	285
C-Rate	0.5	0.5	1.0
Rated Power (kW)	2,507	2,507	3,035
Rated Voltage (V)	1,331		
Cooling solution	Liquid		
Fire-fighting Configuration	Aerosol/Dry pipe optional		
Operating Temperature	-30 to 50 (°C) (Derating above 45) / -22 to 122 (F)		
Operating Humidity	0~100% (≤95% Non-condensing)		
Noise Level (dB)	≤85		
Anti-corrosion Level	C5		
Altitude (m)	≤5,000m (16,400 ft) - (Derating above 2000m)		
IP	IP55		
Weight (mt)	<45 / <(99,208 lbs)	<43 / <(94,800 lbs)	<35 / <(99,208 lbs)
Dimensions (L×W×H)(mm)	6250×2650×3100 (246" x 104" x 122")	6058×2438×2896 (239" x 96" x 114")	6096×2650×3100 (240" x 104" x 122")
Certifications	GB/T36276, UN38.3, UL 1973, UL9540, UL 9540A, IEC 62619, IEC 63056, IEC 60730-1, EN 61000-6-2, EN 61000-6-4, EN 62477-1, RoHS, REACH		