

All In One ESS Energy Storage System

LPWONEW Series with Wheels
LiFePO4 Battery + Smart Inverter
Tiny or Big Home Solar Solutions



LPWONEW Series Brief Introduce

LPWONEW moveable lithium battery + inverter with wheels integrates cutting-edge technology for efficient energy storage and management. Designed for seamless installation and space-saving efficiency, it offers a compact solution ideal for residential and small commercial applications. With a robust 1-10 kW inverter and 1-10 kWh lithium battery capacity, it ensures reliable power supply and energy optimization. Advanced features include smart monitoring, remote control capabilities, and built-in safety protocols for enhanced reliability. This All In One system delivers versatility, performance, and ease of use, making it a dependable choice for modern energy needs. Customize All In One system to power your facility-with or without solar and lower your energy bills.

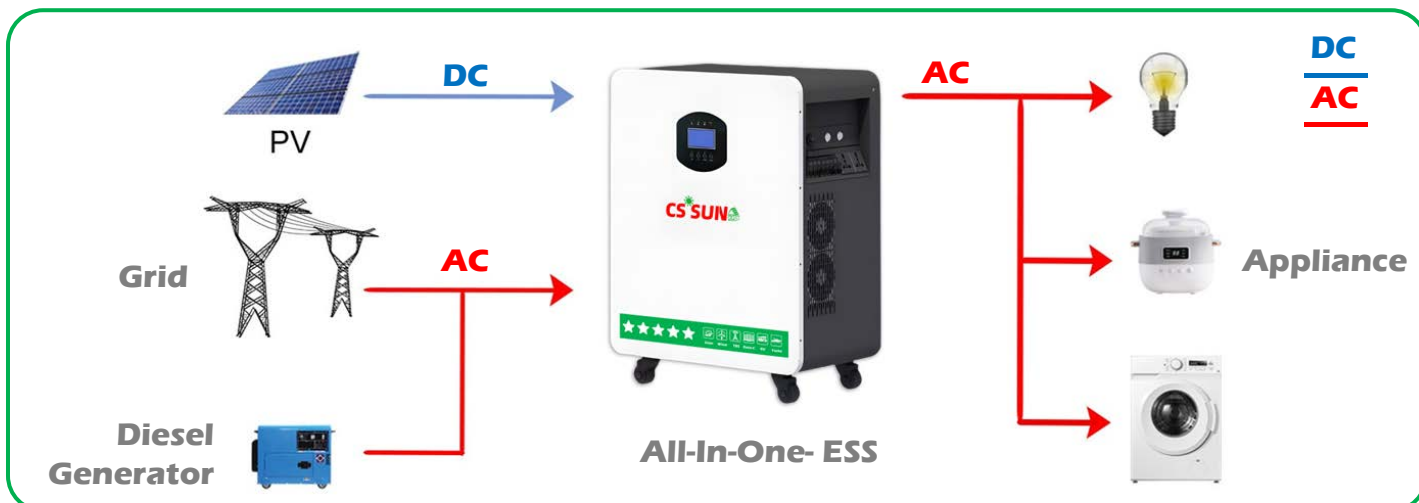
Safety

Long Life

Simple



Application Block Diagram



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Technical Specifications

Model Parametric Description		LPWONEW 1.28KWh+1KW	LPWONEW 2.56KWh+3KW	LPWONEW 5.12KWh+6KW	LPWONEW 10.24KWh+12KW	LPWONEW 16.0KWh+12KW
Battery	Battery Type	LiFePO4 Battery				
	Battery Energy	1.28KWh	2.56KWh	5.12KWh	10.24KWh	16.0KWh
	Nominal Voltage	12.8V	25.6V	51.2V	51.2V	51.2V
	Rated Capacity	100Ah	100Ah	100Ah	200Ah	314Ah
	Voltage Range	11.0~14.0V	22.0~28.0V	42.0~57.0V	42.0~57.0V	42.0~57.0V
	Cycle Life	Prismatic Cell, > 6000cycles @ 80%DOD				
	Months Self Discharge	<3%				
	Communicate Protocol	CAN/RS485				
	Charge Temperature	0 °C to 45 °C (32F to 113F) @60±25% Relative Humidity				
	Discharge Temperature	-20 °C to 60 °C (-4F to 140F) @60±25% Relative Humidity				
	Storage Temperature	0 °C to 40 °C (32F to 104F) @60±25% Relative Humidity				
PV	Max. Power	600W	3000W	5500W	10.4KW(5200*2)	15.0KW(7500*2)
	Max. PV Voltage	150VdC	450Vdc	500Vdc	500Vdc	500Vdc
	MPPT Voltage Range	20~50Vdc	30~400Vdc	120~430Vdc	90~450V	90~450V
	Max.PV charge Current	40A	80A	80A	80A*2	80A*2
AC Output	Rated Power	1.0KW	3.0KW	6.0KW	12KW	12KW
	AC Voltage	230Vac±5%				
	AC Frequency	50Hz/60Hz				
	Efficiency	≤93%	≤94%	≤94%	≤94%	≤94%
	Transfer time	10ms (for PC) 20ms (for Appliance)				
	Waveform	Pure sine wave				
AC Input	Rated AC Voltage	230Vac				
	AC Voltage Range	170~280Vac(for PC) 90~180Vac(for Applies)				
	Frequency Range	50Hz/60Hz(Auto sensing)				
General Parameters	Altitude	≤2000m				
	Humidity	5%~95%				
	Work Telemeter	-10 °C ~50 °C				
	Size(mm)	310*220*460mm 12.21*8.66*18.11Ins	370*225*510mm 14.57*8.86*20.08Ins	610*450*270mm 24.02*17.72*10.63Ins	691*510*376.5mm 27.21*20.08*14.83Ins	510*377*770mm 20.08*14.85*30.32Ins
	Weight(kg)	25kgs/55.11lbs	32kgs/70.54lbs	58kgs/127.85lbs	105kgs/231.46lbs	124kgs/273.34lbs



Note: All above information shall be changed without prior notice, CSSUN reserves the right to explain and update the latest information. Welcome inquiry us !

Durable Lithium Battery use CSSUN

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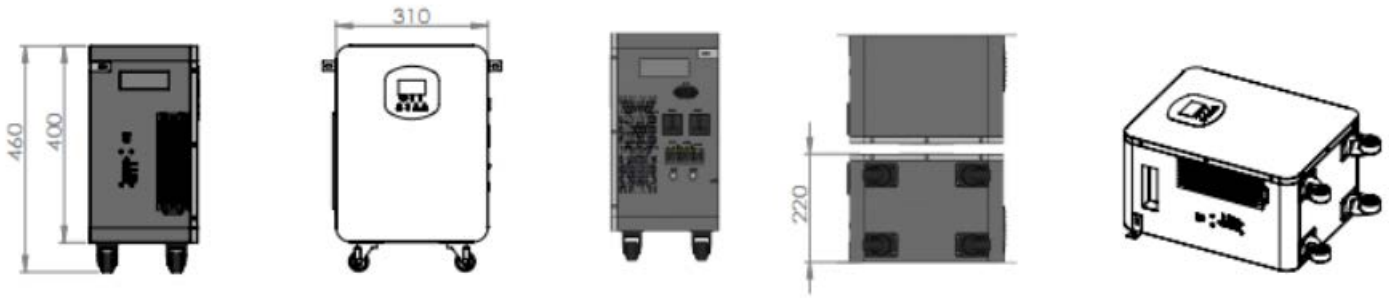


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LPWONEW 1.28KWH +1KW Size & Weight



Length: $460 \pm 1\text{mm}$

Width: $310 \pm 1\text{mm}$

Height: $220 \pm 1\text{mm}$

Weight: $25.0 \pm 0.1\text{kgs}$

LPWONEW 2.56KWH + 3KW Size & Weight



Length: $510 \pm 1\text{mm}$

Width: $370 \pm 1\text{mm}$

Height: $225 \pm 1\text{mm}$

Weight: $32.0 \pm 0.1\text{kgs}$

LPWONEW 5.12KWH + 5KW Size & Weight



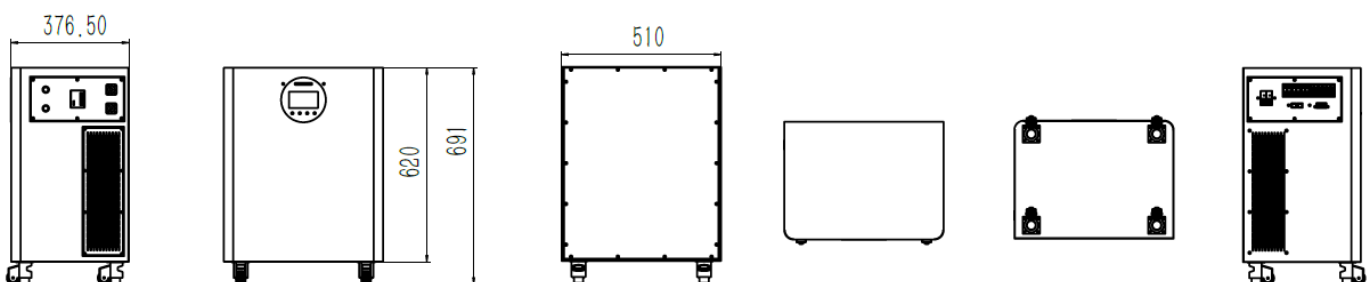
Length: $610 \pm 1\text{mm}$

Width: $450 \pm 1\text{mm}$

Height: $270 \pm 1\text{mm}$

Weight: $58.0 \pm 0.1\text{kgs}$

LPWONEW 10.24KWH + 10KW Size & Weight



Length: $691 \pm 1\text{mm}$

Width: $510 \pm 1\text{mm}$

Height: $376.5 \pm 1\text{mm}$

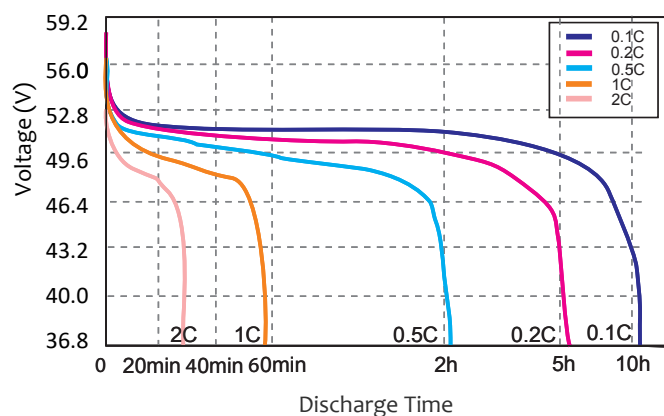
Weight: $105.0 \pm 0.1\text{kgs}$

Battery BMS Specifications

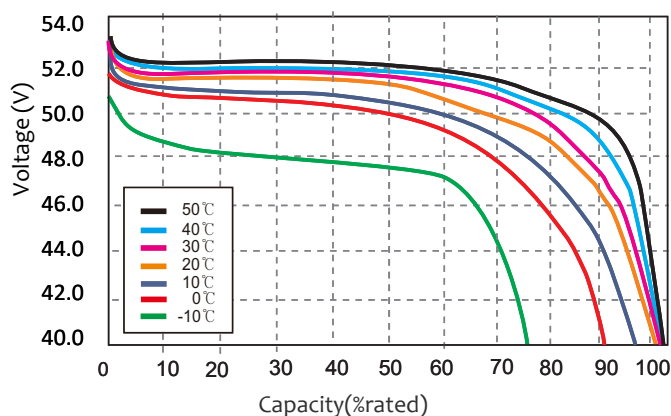
- Overcharge detection function
- Over discharge detection function
- Over current detection function
- Temperature protection
- Cell Voltage balance function
- Short detection function

Battery Performance Characteristics (Data test from 16 Series Cell)

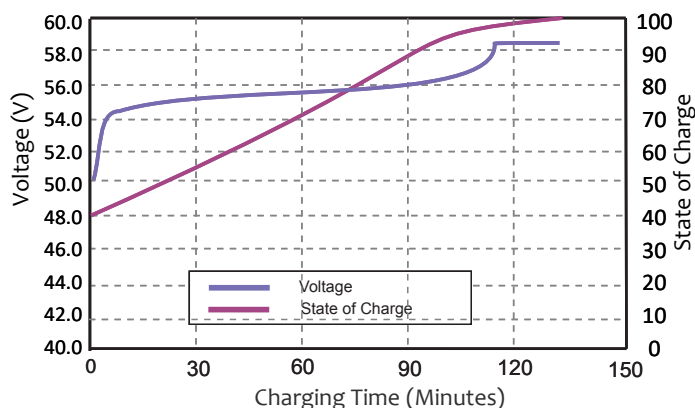
Different Rate Discharge Curve (25°C)



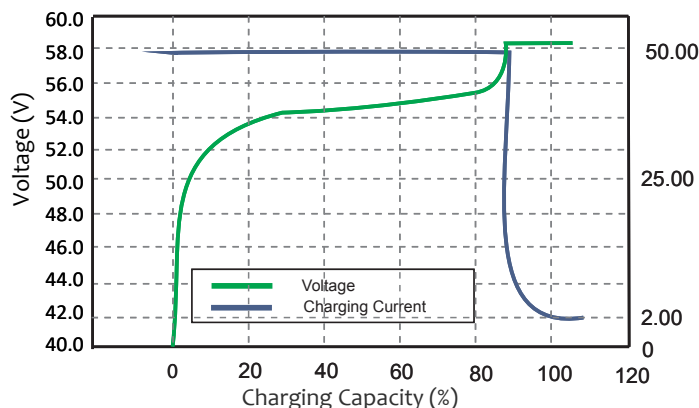
Different Temperature Discharge Curve At 0.5c



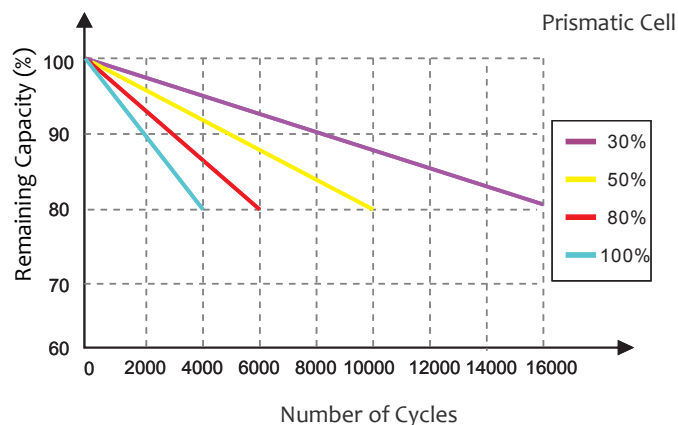
State Of Charge Curve At 0.5c (25°C)



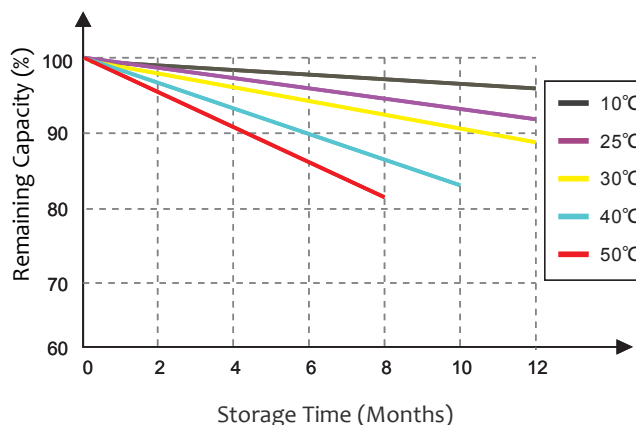
Charging Characteristics At 0.5c (25°C)



Cycle Life Curve At 1c According DoD



Self Discharge Characteristics Curve



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SAFETY WARNING : Use only within the allowed parameters. Do not short circuit or over-load the battery. Charge only using an approved charger designed specifically to charge this battery. Do not heat above maximum temperatures indicated. Never crush, mutilate, puncture or abuse the battery. Do not dismantle the pack or disable any of the protective devices or circuits. Do not use the battery if you suspect it may be faulty or damaged.