Pytes

LI-ION BATTERY FOR ENERGY STORAGE

BATTERY EXPERT-GREEN ENERGY PROVIDER



2026 V2.0

Shanghai Pytes Energy Co., Ltd. All Rights Reserved.

MILESTONES

2004 ~ 2014

PACK Sector
- LEV
- Consumer sector

2015

Formally Established

2016

State Certificate
High-tech enterprise

2017

Shandong Factory Production Capacity Doubled

2018

Entered ESS Market

2019

Top 3 in EU&USA LEV Market

Vietnam Factory

2020

EU & USA Offices

Awarded Shanghai "Professional and Innovative Enterprise"

2021

Renamed to Pytes

2022

Completed Shareholding System Reform

2024

$ 150M Annual Revenue
$ 118M Total Assets
1000+ Employees
4 GWh Annual Capacity

2025

Vietnam Factory Expansion



Pytes

As a leading lithium battery solution provider, Pytes is committed to providing energy storage solutions. Started in 2004, with continuous support and technical experience, more than 1,000 Pytes employees are now working to build a greener future.

Grasping the general trend of globalization, Pytes not only has multiple production bases in China, but also runs branches, offices and factories in North America, Europe, Vietnam and other sites to achieve multi-regional coverage of the service network, with faster delivery and quicker response.

Creating, Undertaking, Sharing, we practice our philosophy and fulfill the mission that to deliver safe, reliable and affordable clean energy to home and community for a more carbon-free future.



Glocalization service

- ✓ Hundreds of localization service teams
- ✓ 7*24H，fast feedback
- ✓ Digital after-sales service platform (CSS)

- **Shanghai PYTES Energy Co., Ltd.**
  Address: No. 3492 Jinqian Road, Fengxian DTS, Shanghai China
  TEL: +86 (21) 5747 5852
- **PYTES (USA) Energy, Inc**
  Address: 13921 Senlac Dr. Suite 100 Farmers Branch TX 75234 USA
  TEL: +1 (626) 734 3692
- **PYTES B.V.**
  Address: Molendijk-Zuid 23B, 5482 WZ Schijndel, Netherlands
  TEL: +31 (0) 625 560 152
- **PYTES Vietnam**
  Address: Lot B201A DH Street, Thai Hoa Industrial Park, Duc Hoa Ha Commune, Duc Hoa DST, Long An Province, Vietnam
  TEL: +84 (272) 381 9993
- **Shandong Pytes New Energy Technology Co., Ltd.**
  Address: Bld. 1 High Tech Industrial Park, No. 36 East Dongfeng Rd, Huishan Economic Development Zone, Jining, Shandong China
  TEL: +86 (537) 866 6008
- **Shangdong PYTES Electronics Co., Ltd.**
  Address: Bld. 2 High Tech Industrial Park, No. 36 East Dongfeng Rd, Huishan Economic Development Zone, Jining, Shandong China
  TEL: +86 (537) 866 6001

Residential Energy Storage Solutions

V5° / V5°α





Features

Remote Monitoring and Upgrading
- Optional

Powerful
- 3.84kW Nominal Output Power

Wider Operation Temperature
- Heating Pad Integrated

Scalable
- Up to 491.52kWh Parallel Connection

Flexible Installation Options
- Compatible with Multi Enclosures & Brackets

CE CLEAN ENERGY COUNCIL UN38.3 SGS TÜV SÜD CEC SGIP

V5° / V5°α Specs

	V5°	V5°α
Electrical		
Nominal Voltage	51.2V	
Voltage Range	47.5V~57.6V	
Nominal Capacity	100Ah	
Nominal Energy	5.12kWh	
Recommended Charge /Discharge Current [1]	75A	
Peak Charge /Discharge Current	101A~120A (3min); 121A~180A (15sec)	

[1]:The recommended and Max continuous charge and discharge current is for a battery cell temperature within 10°C~40°C(50°F~104°F) to consider. It will result in a derating on current if out of the temperature range.

General

Power Terminal	PHOENIX M6 Bolt	Amphenol Surlok Plus 8.0mm
Chemistry	LFP	
External Communication Protocol	CAN / RS485 / Dry Contact / WiFi(Optional Dongle)	
Dimension (With Handle) (L x W x H)	484 x 560.2 x 140mm / 19.06 x 22.05 x 5.51inch (3.2U)	
Dimensions (Without Handle) (L x W x H)	424 x 530 x 140mm / 16.69 x 20.87 x 5.51inch	
Weight	44kg / 97lbs	
Operating Temperature (without Heating Pad)	Charge: 0°C~50°C / 32°F~122°F Discharge: -10°C~50°C / 14°F~122°F	
Operating Temperature (with Heating Pad)	-18~50°C / -0.4~122°F	
Round-Trip Efficiency	⩾95%	
Cycle Life	⩾6000 Cycles	
Warranty	10 Years	
Add-on Functionalities		
Heating Pad (Optional)	Temperature Rise: 10°C / h / 18°F/h Operation Temperature: -18°C~15°C / -0.4°F~59°F[1]	
Scalability	16 pcs (81.92kWh) in a group 6 groups (491.52kWh) in a system w / a Hub	

Certifications

UL9540 Ed.2 (2020), UL9540A, UL1973, CEC, SGIP, CE, IEC62619, UN38.3

[1] The heating pad activates when the temperature is between -18°C and 15°C (-0.4°F to 59°F), and deactivates at 20°C (68°F).

Residential Energy Storage Solutions

V5° Plus / V5°α Plus



Features

Remote Monitoring and Upgrading
- Optional

Wider Operation Temperature
- Heating Pad Integrated

Flexible Installation Options
- Compatible with Multi Enclosures & Brackets

Powerful
- 3.84kW Nominal Output Power

Scalable
- Up to 491.52kWh Parallel Connection

V5° Plus / V5°α Plus Specs

Electrical

Nominal Voltage	51.2V
Voltage Range	47.5V~57.6V
Nominal Capacity	100Ah
Nominal Energy	5.12kWh
Recommended Charge/ Discharge Current[1]	75A
Max Continuous Charge/ Discharge Current[2]	75A
Peak Charge / Discharge Current	101A~120A (3min); 121A~200A (15sec)
Integrated Breaker	DC 125V/125A
Rated DC power	3.84kW
Battery Depth of Discharge	90%

[1][2]: The recommended and Max continuous charge and discharge current is for a battery cell temperature within 10°C~40°C (50°F~104°F) to consider. It will result in a derating on current if out of the temperature range.

General

Power Terminal	V5° Plus: PHOENIX M6 bolt V5°α Plus: Amphenol Surlok Plus 8.0mm
Chemistry	LFP
External Communication	RS485 / CAN / Dry Contact / WiFi (w/ optional device)
Internal Communication	RS232
Dimensions (L×W×H)	484±2×578.2±2×140±2mm (3.2U)/ 19.05±0.08×22.76±0.08×5.51±0.08inch (3.2U)
Weight	45.34kg/100lbs
Operating Temperature (without Heating Pad)	Charge: 2°C ~ 57°C / 35.6°F ~134.6°F Discharge: -18°C~57°C / -0.4°F~134.6°F
Operating Temperature (with Heating Pad)	-18°C~57°C / -0.4 °F~134.6°F [1]
Round-Trip Efficiency	⩾95%
IP rating of Enclosure	IP20
DC Breaker	Dual Pole/125Vdc/125Adc/Icu 10kA
Cycle Life	⩾6000 Cycles
Warranty[3]	10 Years[4]

[3]: @25°C,90% DoD. [4]: 70% SOH at 10 years from warranty activation date.

Add-on Functionalities

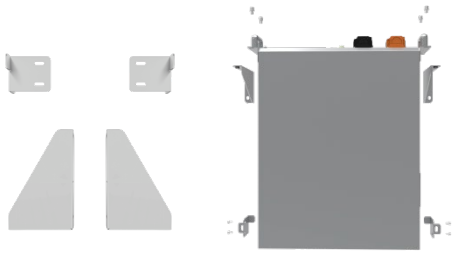
WIFI Connection	Remote monitoring and upgrade
Scalability	16 pcs (81.92kWh) in a group 6 groups (491.52kWh) in a system w/ a Hub

Certifications(On-going)

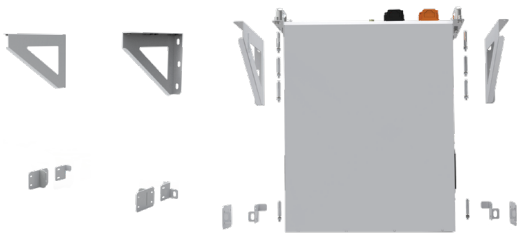
UL9540 Ed.2 (2020), UL9540A, UL1973, SGIP, CE, IEC62619, UN38.3

[1] The heating pad activates when the temperature is between -18°C and 15°C (-0.4°F to 59°F), and deactivates at 20°C (68°F).

V5° Compatible Bracket/Cabinet



V5 BK1
Wall Mounted
Load Capacity: 1×V5°/ V5°α / V5°α Plus
Dimensions(W×DxH):
27×92×145mm / 1.06×3.62×5.71inch(Upper bracket)
48×50×60mm / 1.89×1.97×2.36inch
(Lower auxiliary bracket)
Weight: 0.586kg / 1.29lbs



V5 BK2
Wall Mounted
Load Capacity: 2×V5°/ V5°α / V5°α Plus
Dimensions(W×DxH):
27×187×291mm / 1.06×7.36×11.46inch(Upper bracket)
53×50×60mm / 2.09×1.97×2.36inch(Lower Bracket)
Connection Board Dimensions(WxHxD):
27.5×60×100mm / 1.08×2.36×3.94inch
Weight: 2.09kg / 4.61lbs



V5° Bracket
Floor Mounted
Load Capacity: 1×V5°/ V5°α / V5°α Plus
Up to 6pcs per Stack
Dimensions(W×DxH):
50×177.8×62.2mm / 1.97×7×2.45inch
Weight: 1.44kg / 3.2lbs



V-BOX-IC
Floor Mounted
Load Capacity: 3×V5°/ V5°α
Dimensions(W×DxH):
533×616×650mm / 21.0×24.3×25.6inch
Weight: 42.2kg / 93lbs
Enclosure Rating: IP20



V-BOX-IC SE
Floor Mounted
Load Capacity: 3×V5°/ V5°α
Dimensions(W×DxH):
533×565×660mm / 21.0×22.2×26.0inch
Weight: 27.7kg / 61.1lbs



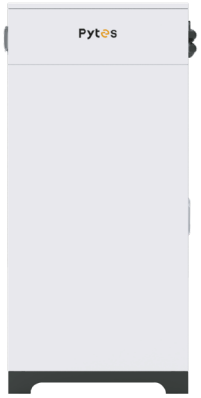
V-BOX-NEMA3
Wall / Floor Mounted
Load Capacity: 2×V5°/ V5°α
Dimensions(W×DxH):
521.5×430.9×647.4mm / 20.5×17.0×25.5inch
Weight: 29.5kg /65.04lbs
Enclosure Rating: NEMA3



V-Box-OC(IV)
Floor Mounted
Load Capacity: 4×V5°/ V5°α
Dimensions(W×DxH):
645.16×396.24×1394.46mm / 25.4×15.6×54.9inch
Weight: 194lbs
Enclosure Rating: IP55



VR-BOX-IC
Wall Mounted
Load Capacity:
2×V5°/ V5°α / V5°α Plus / E-BOX 48100R
Dimensions(W×DxH):
681×341×851mm / 26.8×13.4×33.5inch
Weight: 35.3kg / 77.8lbs
Enclosure Rating: IP20



V-BOX-OC Plus
Floor Mounted
Load Capacity:
4*V5°α / Plus4*V5°α
Dimensions(W×DxH):
655*395*1416 mm / 25.79*15.55*55.7 inch
Weight: 97.2 kg / 214.29 lbs
Enclosure Rating: IP55

Residential Energy Storage Solutions

E-BOX 48100R



Features

Scalable

- From 5.12kWh to 491.52kWh

Compact, Flexible and Easy Install

Long-lasting

- ≥6000Cycles @ 90%DoD

Safe & Reliable

- Tier 1 Automotive Grade A LiFePO4 cells
- Self-designed & Field-proven BMS

CE CLEAN ENERGY COUNCIL UN38.3 SGS TUV CEC SGIP

E-BOX 48100R Specs

Electrical

Nominal Voltage	51.2V
Voltage Range	47.5V~57.6V
Nominal Capacity	100Ah
Nominal Energy	5.12kWh
Recommended Charge/ Discharge Current	50A (2.56kW dc)
Maximum Charge/ Discharge Current	50A (2.56kW dc)
Peak Discharge Current	102A (5.22kW@15s)

General

Chemistry	LFP
Communication Protocol	CAN/RS485
Dimensions (With Handle) (L x W x H)	480 x 658 x 117 mm / 18.90 x 25.91 x 4.61 inch (2.6U)
Dimensions (Without Handle)) (L x W x H)	435 x 620 x 117 mm / 17.13 x 24..41 x 4.61 inch
Weight	51 kg / 112.5 lbs
Operating Temperature	Charge: 0~50°C / 32~122°F Discharge: -10~50°C / 14°F~122°F
Round-Trip Efficiency	⩾95%
Cycle Life*	⩾6000Cycles
Warranty	10 Years

* Test Condition 0.5C, 25°C @90%DoD

Certifications

UL9540 Ed.2 (2020), UL9540A, UL1973, CEC, SGIP, CE, IEC62619, UN38.3

E-BOX 48100R Compatible Bracket/Cabinet



Forest RB Plus
Floor Mounted
Load Capacity: 6×E-BOX 48100R

Dimensions(W×D×H)**:**
720×400×1150 mm / 28.3×15.7×45.3inch
Weight: 20kg / 44.1lbs
Enclosure Rating: IP20



E BK1
Floor Mounted
Load Capacity: 1×E-BOX 48100R
Up to 6pcs Stackable

Dimensions(W×D×H)**:**
78.5×40×161.5mm / 3.09×1.57×6.36inch (Front Bracket)
62.2×76×155mm / 2.45×2.998×6.10inch(Rear Bracket)
Weight: 3.64lbs / 1.65kg



R-BOX
Wall / Floor Mounted
Load Capacity: 2×E-BOX 48100R
Dimensions(W×D×H):
279.4×510.54×698.5mm / 11.0×20.1×27.5inch
Weight: 37.5lbs
Enclosure Rating: IP20



R-BOX-NEMA3
Wall / Floor Mounted
Load Capacity: 2×E-BOX 48100R
Dimensions(W×DxH):
530.0×400.3×734.7mm / 21.0×15.7×28.9inch
Weight: 27.7kg / 61.06lbs
Enclosure Rating: NEMA3



R-BOX-OC
Floor Mounted
Load Capacity: 4×E-BOX 48100R
Dimensions(W×DxH):
800×330×1575mm / 31.5×13.0×62.0inch
Weight: 80kg / 176.4lbs
Enclosure Rating: IP55



VR-BOX-IC
Wall Mounted
Load Capacity:
2×V5°/ V5°α / V5°α Plus / E-BOX 48100R
Dimensions(W×DxH):
681×341×851mm / 26.8×13.4×33.5inch
Weight: 35.3kg / 77.8lbs
Enclosure Rating: IP20

Residential Energy Storage Solutions

C5

Wall Mounted LFP Battery



Features

Enhanced Safety

- Pre-charge Circuit Integrated
- Built-in Fire Suppression Module (Optional)

Extraordinary Performance

- Maximum Continuous 1C Discharge Rate
- Peak Discharge Rate 1.1C@3 min ⩽80% SoC
- Better Low Temperature Performance

Installer Friendly

- Self-contained Bracket Mounting
- Rack-mountable Plug-in Unit Installation

Wide-temperature Ready

- Integrated Heating Pad (Optional)

10 Years Warranty

Greater Scalability

Smart

- Remote Monitoring and Upgrading

C5 Specs

Electrical

Nominal Voltage	51.2VDC
Nominal Capacity	100Ah
Nominal Energy	5.12kWh
Operating Voltage Range	46.5VDC ~ 56.8VDC
Recommended Charge/ Discharge Current	75A (0.75C)
Maximum Continuous Discharge Current	100A (1C)
Maximum Discharge Current	110A@3min

General

Chemistry	LFP
Power Terminal	PHOENIX M6
Structure	Pre-Charge Circuit Integrated
Communication Interface	RS485 / CAN2.0 / Dry Contact / WiFi
Dimensions	638 x 484 x 190mm / 25.12 x 19.06 x 7.48inch
Weight	49.24±0.5kg / 108.56±1.10lbs
Operating Temperature (without Heating Pad)	Charge: 0 ~ 55°C / 32 ~131°F Discharge: -20 ~ 55°C / -4 ~ 131°F
Operating Temperature (with Heating Pad)	-20°C ~ 55°C / -4°F ~ 131°F
Ingress Protection Ratings	IP20
Cycle Life*	8000 Cycle 90% DoD 70% SOH
Warranty	10 Years
Mounting Method	Plug-in / Bracket Type
Fire Safety (Optional)	Aerosol Fire Suppression Module

* Test Conditions: 25°C, 0.33C / 0.33C, 90% DoD, 70% EOL

Add-on Functionalities

Scalability	16 pcs (81.92kWh) in a Group 6 groups (491.52kWh) in a System w / a Hub

Compliance

UN38.3 / CE / IEC62619 / IEC60730

Compatible Inverter

Solis / Voltronic / SMA / DEYE / GOODWE / Sungrow / Victron / Solax / Hoymiles / Growatt / SAJ / Sol-ark / Afore.. etc.

* This is an initial datasheet version and is subject to revision

Residential Energy Storage Solutions

V5W

Wall Mounted LFP Battery



Features

Enhanced Safety

- Pre-charge Circuit Integrated
- Emergency Shutdown with Battery Breaker
- Built-in Fire Suppression Module (Optional)

Extraordinary Performance

- Maximum Continuous 1C Discharge Rate
- Peak Discharge Rate 1.1C@3 min ⩽80% SOC
- Better Low Temperature Performance

Installer Friendly

- Wall or Ground Mounted
- Effortless Installation and Quick Commissioning

Enhanced Environmental Protection

- IP66 Rated Water and Dust Protection
- Integrated Heating Pad (Optional)

Smart

- Remote Monitoring and Upgrading

V5W Specs

Electrical

Nominal Voltage	51.2VDC
Nominal Capacity	100Ah
Nominal Energy	5.12kWh
Operating Voltage Range	46.5VDC ~ 56.8VDC
Recommended Charge/ Discharge Current	75A (0.75C)
Maximum Continuous Discharge Current	100A (1C)
Maximum Discharge Current	110A@3min

General

Chemistry	LFP
Power Terminal	Amphenol SurLok Plus 5.7
Structure	DC Breaker & Pre-Charge Circuit Integrated
Communication Interface	RS485 / CAN2.0 / Dry Contact / WiFi (Integrated)
Dimensions (without Cover)	560 x 560 x 184.5mm / 22 x 22 x 7.26inch
Dimensions (with Cover)	609 x 560 x 184.5mm / 23.98 x 22 x 7.26inch
Weight (without Cover)	49.1±0.5kg / 108.25±1.10lbs
Weight (with Cover)	50.3±0.5kg / 110.89±1.10lbs
Operating Temperature (without Heating Pad)	Charge: 0 ~ 55°C / 32 ~131°F Discharge: -20 ~ 55°C / -4 ~ 131°F
Operating Temperature (with Heating Pad)	-20°C ~ 55°C / -4°F ~ 131°F
Ingress Protection Ratings	IP66
Cycle Life*	8000 Cycles @ 90% DoD, Ret 70% SoH
Warranty	10 Years
Mounting Method	Wall / Ground Mounted
Fire Safety (Optional)	Aerosol Fire Suppression Module

* Test Conditions: 25°C, 0.33C / 0.33C, 90% DoD, 70% EOL

Compliance

UN38.3 / CE / IEC62619 / IEC60730

Compatible Inverter

Solis / Voltronic / SMA / DEYE / GOODWE / Sungrow / Victron / Solax / Hoymiles / Growatt / SAJ / Sol-ark / Afore.. etc.

* This is an initial datasheet version and is subject to revision

Residential Energy Storage Solutions

Pi LV1

Stackable LFP Battery System



Features

Safe

- LFP Chemistry, Field-Proven BMS Integrated in Individual Module, DC Breaker & Fuse Adapted

Scalable on Demand

- Flexible Configuration from 5.12 to 30.72 kWh per Stack, Up to 8 Stacks

Powerful

- Up to 10.24kW Continuous Output

Outdoor Rated Enclosure

- Water & Dust proof for Both Indoor and Outdoor

Plug-and-play (15-min installation)

- Quick Connectors, Hand-wiring Free

Smart

- Remote Upgrading & Monitoring

CE CLEAN ENERGY COUNCIL UN38.3 SGS TUV CEC SGIP

Pi LV1 Specs

Battery Module Unit:

Cell Type	LFP
Nominal Energy	5.12kWh
Nominal Voltage	51.2V
Voltage Range	47.5V~56.8V
Nominal Capacity	100Ah
Recommended Continuous Discharge Current	50A
Recommended Continuous Charge Current	50A
Certifications	UL9540 Ed.2 (2020), UL9540A, UL1973, CEC, SGIP, CE, IEC62619, UN38.3



Model	1	2	3	4	5	6
Cell Type	LFP					
Nominal Voltage	51.2V					
Voltage Range	47.5V~56.8V					
Nominal Energy [1]	5.12kWh	10.24kWh	15.36 kWh	20.48 kWh	25.6 kWh	30.72 kWh
Recommended Power	2.56kW	5.12kW	7.68kW	10.24kW	10.24kW	10.24kW
	681 x 242 x 540 26.8 x 9.5 x 21.3	681 x 242 x 800 26.8 x 9.5 x 31.5	681 x 242 x 1060 26.8 x 9.5 x 41.7	681 x 242 x 1320 26.8 x 9.5 x 52.0	681 x 242 x 1580 26.8 x 9.5 x 62.2	681 x 242 x 1840 26.8 x 9.5 x 72.4
Weight(kg/lbs)	71.7/158.1	125/275.6	178.3/393.1	231.6/510.6	284.9/628.1	338.2/745.6
Efficiency	⩾95%					
Communication	CAN, RS485, WIFI, Dry Contact					
WiFi Module	Wifi frequency range:2412-2472MHz Wifi Max. transmission power<20dBm Bluetooth frequency range: 2402-2480MHz Bluetooth Max. transmission power<4dBm					
Cycle Life [2]	⩾6000Cycles					
Protection level	IP55					
Ambient Temperature	Charge: 0°C ~ 45°C / 32°F ~113°F Discharge: -10°C~50°C / 14°F~122°F					
Storage Temperature	Within 1 month: -20°C~50°C / -4°F~122°F 1~3 months: -10°C~40°C /14°F~104°F 3~12 months: 0°C~30°C /32°F~86°F					
BCU						
BMU						

[1] : 4 models parallel in Pi LV1 is Recommended. [2]: @25°C, 0.5C Charging/Discharging, 90% DoD

Residential Energy Storage Solutions

PiA1P Series

6-10kW|5.12-30.72kWh| Single Phase
ALL-IN-ONE



Features

Installation Friendly
- Modular design
- Plug-Play Installation

Outdoor
- IP65 Rated

AC Coupling
- with Existing Solar System
- Self-designed & Field-proven BMS

Flexible Configuration
- 5.12kWh-20.48kWh

Smart
- Dual Output for Load Management
- Programmable supply priority for PV, Battery or Grid

Powerful
- 6kW, 8kW, 10kW Output

Multi Power Sorces
- 2 MPP trackers
- Generator Compatible
- Two independent AC Ports

PiA1P Series Specs

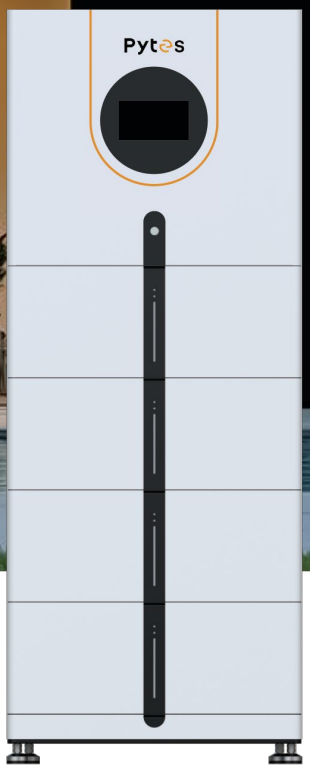
MODEL	PiA1P6K	PiA1P8K	PiA1P10K
PHASE	1-phase in / 1-phase out	1-phase in / 1-phase out	1-phase in / 1-phase out
Maximum PV Input Power	12000W	16000W	18000W
Rated Output Power	6000VA/6000W	8000VA/8000W	10000VA/10000W
Maximum Charging Power	6000W	8000W	10000W
GRID OUTPUT (AC)			
Nominal Output Voltage	220/230/240 VAC		
Output Voltage Range	184 - 264.5 VAC or 195.5 - 253 VAC or 184 - 264.4 VAC (Selectable)		
Nominal Output Current	26.1A	34.8A	43.5A
Power Factor	>0.99	>0.99	>0.99
EFFICIENCY			
Maximum Conversion Efficiency (DC/AC)	>97%		
OFF-GRID OPERATION			
AC INPUT			
AC Start-up Voltage / Auto Restart Voltage	60 - 80 VAC / 180 VAC		
Acceptable Input Voltage Range	90 - 280 VAC or 170 - 280 VAC		
Frequency Range	50 Hz/60 Hz (Auto sensing)		
Maximum AC Input Current	40A	60A	
PV INPUT (DC)			
Maximum DC Voltage	500 VDC	500 VDC	500 VDC
MPP Voltage Range	120 VDC ~ 450 VDC	120 VDC ~ 450 VDC	120 VDC ~ 450 VDC
Number of MPP Trackers / Maximum Input Current	2 / 21A	2 / 27A	
BATTERY MODE OUTPUT (AC)			
Nominal Output Voltage	220/230/240 VAC		
Output Waveform	Pure sine wave		
Efficiency (DC to AC)	90% - 93%		
AC INPUT			
AC Start-up Voltage / Auto Restart Voltage	60 - 80 VAC / 180 VAC		
Acceptable Input Voltage Range	90 - 280 VAC or 170 - 280 VAC		
Maximum AC Input Current	40A	60A	
AC INPUT			
Battery Type	Lead-acid or Lithium-ion	Lead-acid or Lithium-ion	Lead-acid or Lithium-ion
Battery Voltage Range (V)	40-60VDC		
Nominal DC Voltage	48 VDC		
Maximum Solar Charging Current	135A	190A	210A
Maximum AC Charging Current	135A	190A	210A
Maximum Charging Current	135A	190A	210A
GENERAL			
PHYSICAL			
Dimension, D X W X H (mm)	241 x 415 x682		
INTERFACE			
Communication Port	RS-232/RS485, WIFI		
LCD	7-inch HMI		
ENVIRONMENT			
Humidity	0 ~ 100% RH (No condensing)		
Operating Temperature	-20°C to 55°C		
PROTECTION & CERTIFICATE			
Satety	EU grid-connected regulations EN50549-1/-10		

Energy Storage Battery						
System Energy	5.12kWh	10.24kWh	15.36kWh	20.48kWh	25.6kWh	30.72kWh
Cell Type	LFP					
Normal Voltage	51.2Vdc					
Normal Capaticy	100Ah	200Ah	300Ah	400Ah	500Ah	600Ah
Recommended Charge/discharge current	50A	100A	150A	210A	210A	210A
No. of Battery Modules	1	2	3	4	5	6
Cycle Life	6000 times (25°C. 0.5C/0.5C. 90%DOD, 70% EOL)					
Ambient Temperature	Charging: (-20, 55) °C					
	Discharging: (-20, 55) °C					
Enclosure Type	IP65					
Warranty	10 years					
Certification	CE, UN38.3					

Residential Energy Storage Solutions

PiA3P Series

8-12kW| 5.12-30.72kWh| Three Phase
ALL-IN-ONE



Features

Installation Friendly
- Modular design
- Plug-Play Installation

Smart
- Dual Output for Load Management
- Programmable supply priority for PV, Battery or Grid

Outdoor
- IP65 Rated

Powerful
- 6kW, 8kW, 10kW Output

AC Coupling
- with Existing Solar System
- Self-designed & Field-proven BMS

Multi Power Sorces
- 2 MPP trackers
- Generator Compatible
- Two independent AC Ports

Flexible Configuration
- 5.12kWh-30.72kWh

PiA3P Series Specs

MODEL	PiA3P8K	PiA3P10K	PiA3P12K
MAXIMUM PV INPUT POWER	12000W	15000W	18000W
RATED OUTPUT POWER	8000W	10000W	12000W
MAXIMUM CHARGING POWER	8000W	10000W	12000W
GRID-TIE OPERATION			
PV INPUT (DC)			
Nominal DC Voltage	720 VDC		
Maximum DC Voltage	900 VDC		
Start-up Voltage / Initial Feeding Voltage	150 VDC / 150 VDC		
MPP Voltage Range	150 VDC ~ 850 VDC		
Full MPP Voltage Range	400 VDC ~ 850 VDC	420 VDC ~ 850 VDC	400 VDC ~ 850 VDC
Number of MPP Trackers / Maximum Input Current	2 / A: 15A, B: 15A	2 / A: 18A, B: 18A	2 / A: 27A, B: 18A
Number of Strings Per MPP Tracker	A: 2, B: 2	A: 2, B: 2	A: 2, B: 2
GRID/UTILITY OUTPUT (AC)			
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)		
Output Voltage Range	184 - 265 VAC* per phase		
Nominal Output Current	11.6 A per phase	14.5 A per phase	17.4A per phase
Power Factor range	0.9 lag ~ 0.9 lead		
EFFICIENCY			
Maximum Conversion Efficiency (DC/AC)	>96%		
European Efficiency@ Vnominal	>96%		
OFF-GRID OPERATION			
AC INPUT			
AC Start-up Voltage	120 - 140 VAC per phase		
Auto Restart Voltage	180 VAC per phase		
Acceptable Input Voltage Range	170 - 290 VAC per phase		
Maximum AC Input Current	40 A		
PV INPUT (DC)			
Maximum DC Voltage	900 VDC		
MPP Voltage Range	150 VDC ~ 850 VDC		
Full MPP Voltage Range	400 VDC ~ 850 VDC	420 VDC ~ 850 VDC	400 VDC ~ 850 VDC
Number of MPP Trackers / Maxium Input Current	2 / A: 15A, B: 15A	2 / A: 18A, B: 18A	2 / A: 27A, B: 18A
Number of Strings Per MPP Tracker	A: 2, B: 2	A: 2, B: 2	A: 2, B: 2
BATTERY MODE OUTPUT (AC)			
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)		
Output Waveform	Pure sine wave		
Efficiency (DC to AC)	>93%		
HYBRID OPERATION			
PV INPUT (DC)			
Nominal DC Voltage	720 VDC		
Maximum DC Voltage	900 VDC		
Start-up Voltage / Initial Feeding Voltage	150 VDC / 150 VDC		
MPP Voltage Range	150 VDC ~ 850 VDC		
Full MPP Voltage Range	400 VDC ~ 850 VDC	420 VDC ~ 850 VDC	
Number of MPP Trackers / Maxium Input Current	2 / A: 15A, B: 15A	2 / A: 18A, B: 18A	2 / A: 18A, B: 18A
Number of Strings Per MPP Tracker	A: 2, B: 2	A: 2, B: 2	A: 2, B: 2
GRID/UTILITY OUTPUT (AC)			
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)		
Output Voltage Range	184 - 265 VAC* per phase		
Nominal Output Current	11.6 A per phase	14.5 A per phase	17.4A per phase
AC INPUT			
AC Start-up Voltage	120 - 140 VAC per phase		
Auto Restart Voltage	180 VAC per phase		
Acceptable Input Voltage Range	170 - 290 VAC per phase		
Maximum AC Input Current	40 A		
BATTERY MODE OUTPUT (AC)			
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)		
Output Waveform	Pure sine wave		
Maximum Discharging Current	200A	220A	250A
Efficiency (DC to AC)	>93%		
BATTERY & CHARGER			
Battery Voltage Range	40 ~ 60 VDC		
Maximum Charging Current	160 A	200A	240A
GENERAL			
PHYSICAL			
Maximum Charging Current	241 x 415 x682		
BATTERY & CHARGER			
Maximum Charging Current	RS-232/RS485, WIFI		
Maximum Charging Current	7-inch HMI		
BATTERY & CHARGER			
Maximum Charging Current	0 ~ 100% RH (No condensing)		
Maximum Charging Current	-20°C to 55°C		
BATTERY & CHARGER			
Maximum Charging Current	EU grid-connected regulations EN50549-1/-10		

Energy Storage Battery						
System Energy	5.12kWh	10.24kWh	15.36kWh	20.48kWh	25.6kWh	30.72kWh
Cell Type	LFP					
Normal Voltage	51.2Vdc					
Normal Capaticy	100Ah	200Ah	300Ah	400Ah	500Ah	600Ah
Recommended Charge/discharge current	50A	100A	150A	210A	210A	210A
No. of Battery Modules	1	2	3	4	5	6
Cycle Life	6000 times (25°C. 0.5C/0.5C. 90%DOD, 70% EOL)					
Ambient Temperature	Charging: (-20, 55) °C					
	Discharging: (-20, 55) °C					
Enclosure Type	IP65					
Warranty	10 years					
Certification	CE, UN38.3					

Residential Energy Storage Solutions

V12

Wall Mounted LFP Battery



Features

Enhanced Safety

- Pre-charge Circuit Integrated
- Emergency Shutdown with Battery Breaker
- Built-in Fire Fighting System (Optional)

Higher Energy Density

- Tier 1 Automotive Grade 230Ah Cells Lighter and More Compact for Given Capacity

High Power Output

- 5.12kW Nominated Output Power

The All Weather Battery

- C4-M Certified Anti-Corrosion
- IP66 Rated Water & Dust Proof
- Heating Pad Integrated

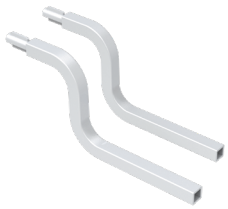
Smart

- Remote Monitoring and Upgrading

Installer Friendly

- Wall or Ground Mounted
- Effortless Installation and Quick Commissioning

Optional Carrying Handle



Optional Carrying Handle

Dimensions:
328×136×20mm /
12.9×5.4×0.8 inch



Floor mount bracket

Dimensions:
688x265x(Variable from 255-280)mm

V12 Specs

Electrical

Nominal Voltage	51.2V
Operating Voltage Range	47.5~57.6V
Nominal Capacity	230Ah
Battery Capacity in kWh	11.776kWh
Recommended Charge Current	100A(5.12kW)
Recommended Discharge Current	100A(5.12kW)
Peak Discharge Current	200A [for 180 seconds]
Rated DC Power	5.12kW
Battery Depth of Discharge	90%

General

Power Terminal	V12 PHOENIX BPC250 Quick Connector
Chemistry	LFP
Structure	DC Breaker & Pre-Charge Circuit Integrated
Communication Interface	RS485 / CAN / WIFI / Dry Contact
Dimensions(L x W x H)	640 x 230 x 520mm / 25.20 x 9.06 x 20.47inch
Weight	100kg / 220.5lbs
Operating Temperature	Charge: 0~55°C / 32~131°F Discharge: -20~55°C / -4~131°F
Cycle Life [1]	6000 Cycles
Altitude	<13123.35ft / 4000m
Warranty [2]	10 Years Basic Warranty
Ingress Protection	IP66
Corrosion Resistance Class	C4-M
Mounting Method	Wall / Ground (W/ Optional Battery Tray)
Heating Pad (Integrated)	Temperature Rise: 8°C/h / 14.4°F/h

[1] Test Conditions: 25°C, 0.5C/0.5C, 90% DoD,
[2] 70% SOH at Years Warranty Activation Date

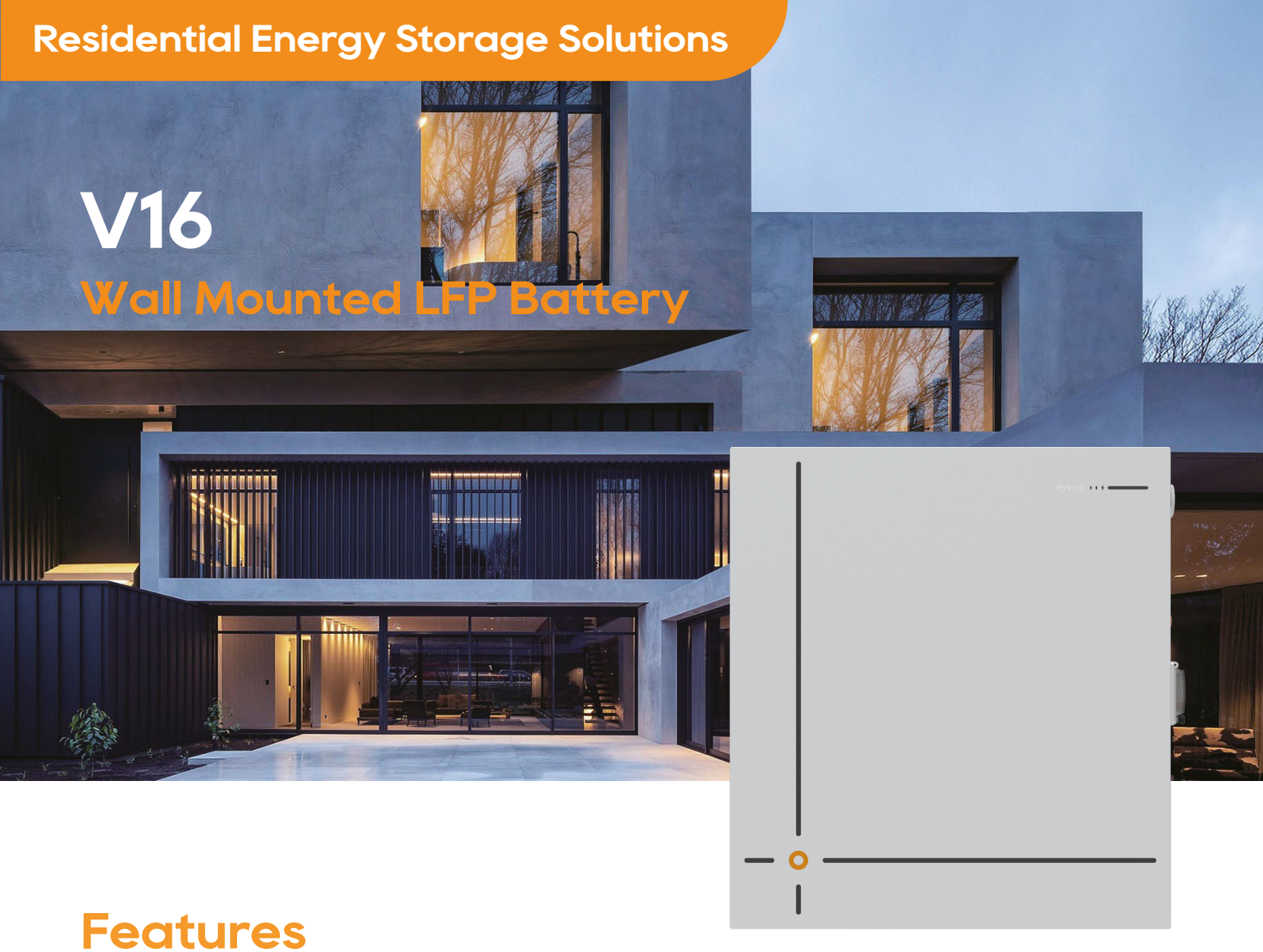
Certifications

UL 9540, UL 9540A, UL 1973, CEC, IEC62619, CE, UN38.3

Residential Energy Storage Solutions

V16

Wall Mounted LFP Battery



Features

The All Weather Battery

- IP66 Rated
- Integrated Heating Pad

Fail-Safe Protections

- Integrated Battery Breaker
- Aerosol Fire Suppression

Powerful

- 200A/10.24kW Output Power

Robust

- 16kWh Nominal Energy

Wide Compatibility

- Closed Loop Communication with Most Inverters

Effortless Installation

- Wall / Ground Mounted
- Quick Commissioning

V16 Specs

Electrical

Nominal Voltage	51.2V
Nominal Capacity	314Ah
Nominal Energy	16.07kWh
Operating Voltage Range	46.5V~56.8V
Recommended Charge Current	125A (6.4kW)
Recommended Discharge Current	150A (7.68kW)
Maximum Discharge Current	200A (10.24kW)

General

Chemistry	LFP
Structure	DC Breaker & Pre-Charge Circuit Integrated
Communication Interface	RS485 / CAN / WIFI / Dry Contact
Dimensions	700 x 671 x 260mm / 27.56 x 26.42 x 10.24inch
Weight	130 ± 0.5kg / 287.7 ± 1.1 lbs
Operating Temperature	Charge: 0~55°C / 32~131°F Discharge: -20~55°C / -4~131°F
Heating Pad(Integrated)	Operation Temperature -18°C~15°C / 0°F ~ 59°F
Ingress Protection Ratings:	IP66
Cycle Life*	8000 Cycles
Warranty	10 Years
Fire safety	Aerosol fire suppression module integrated

* Test Conditions: 25°C, 0.5C/0.5C, 90%DoD, 70% EOL)

Compliance

UN38.3, CE, IEC62619, UL1973, UL9540, UL9540A, CEC, SGIP

Residential Energy Storage Solutions

V16 Lite



Features

Safe

- LFP Chemistry, Tier 1 Automotive Cells & Field-Proven BMS
- Emergency Shutdown

Powerful

- 16.07kWh High capacity
- 7.68kW Powerful Output
  One Battery for the Whole Family

Smart

- Remote Upgrading & Monitoring

Elegant

- Sleek and Minimalist Design with Clean Lines, Featuring Hidden Interface

Wide Compatibility Range

- Closed-Loop Compatible with Over 20+ Inverters

Easy To Install

- Wall or Ground Mounted
- Effortless installation and Quick Commissioning

V16 Lite Specs

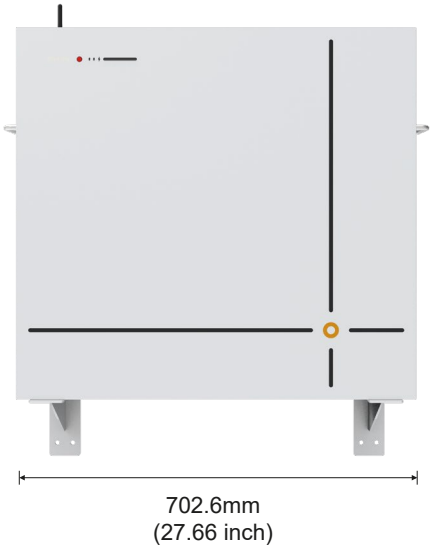
Electrical

Nominal Voltage	51.2V
Voltage Range	46.5V~56.8V
Nominal Capacity	314Ah
Nominal Energy	16.07kWh
Recommended Charge/ Discharge Current	150A (7.68kW)
Maximum Charge/ Discharge Current	200A (10.24kW@180s)
Peak Discharge Current	300A(@15.36kW@15s)

General

Chemistry	LFP
Structure	DC Breaker & Pre-Charge Circuit Integrated
Communication Protocol	RS485 / CAN / Dry Contact / Wifi
Dimensions (W x D x H)	702.6 x 189.5 x 651.9 mm / 27.66 x 7.46 x 25.67 inch
Weight	126kg / 277.78lbs
Operating Temperature	Charge: 0℃~55℃ / 32℉~131℉ Discharge: -20℃~55℃ / -4℉~131℉
Heating Pad(Optional)	Operation Temperature -18℃-15℃ / 0℉-59℉ [1]
Cycle Life	8000 Cycles @0.5C / 0.5C, 25℃ / 77℉ 90% DoD
Ingress Protection	IP20
Altitude	<4000m
Warranty	10 Years
Fire safety (Optional)	Aerosol fire suppression module

Dimensions





[1] Heating pad starts at 15°C or below temperature, and stops when temperature is 20°C.

RV Battery

Ecox 12100



Features

Lighter

- 50% lighter than lead-acid batteries of the same capacity

Higher Charge/Discharge Rate

- 30% higher energy density than lithium iron phosphate batteries of the same capacity

Long-lasting

- Up to 4500+ cycles, maximizing your return on investment

Remote Monitoring

- Built-in Bluetooth module, supports real-time battery monitoring via mobile devices

Scalable on Demand

- Supports up to 16 batteries in 4S4P configuration, with a maximum energy of 20.48 kWh

Application Scenarios

The Ecox 12100 is suitable for deep-cycle off-grid applications such as RVs, boats, trucks, and cabins, and can replace deep-cycle lead-acid batteries

Ecox 12100 Specs

Electrical

Nominal Voltage	12.8VDC
Nominal Capacity	100Ah
Internal Resistance	<10m Ω
Round-Trip Efficiency	99%
Self-discharge Rate	⩽3% per month
Scalability	4S4P
Cycle Life	>4500
Maximum Continuous Discharge Current	100A
Maximum Discharge Current	200A@30s
Maximum Continuous Charge Current	100A
Recommended Continuous Charge Current	⩽50A
Recommended Charge Voltage	14V~14.8V

Environmental

Recommend Storage Temperature	-4°F~140°F ,-20°C~60°C
Discharging Temperature	-4°F~122°F ,-20°C~50°C
Autitude	<4000m
Relative Humidity	5%~95% (no condensation)

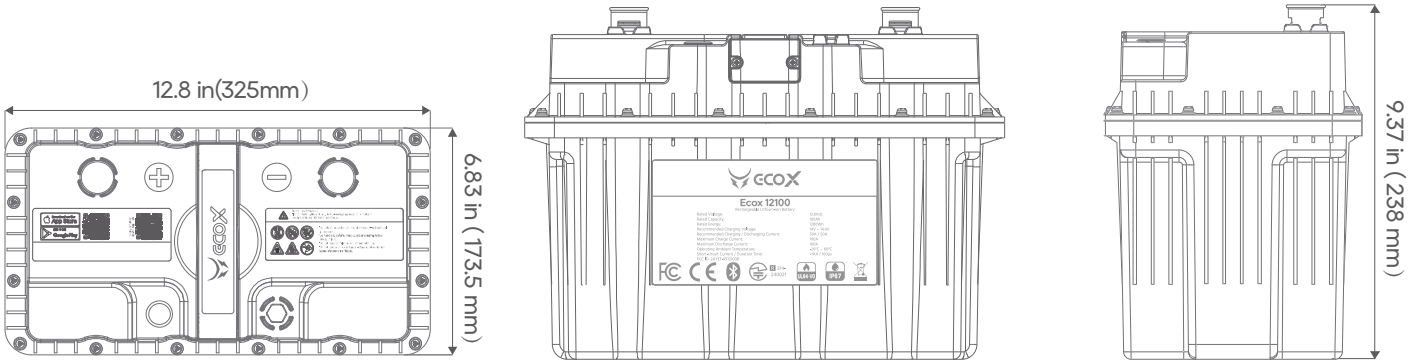
Mechanical

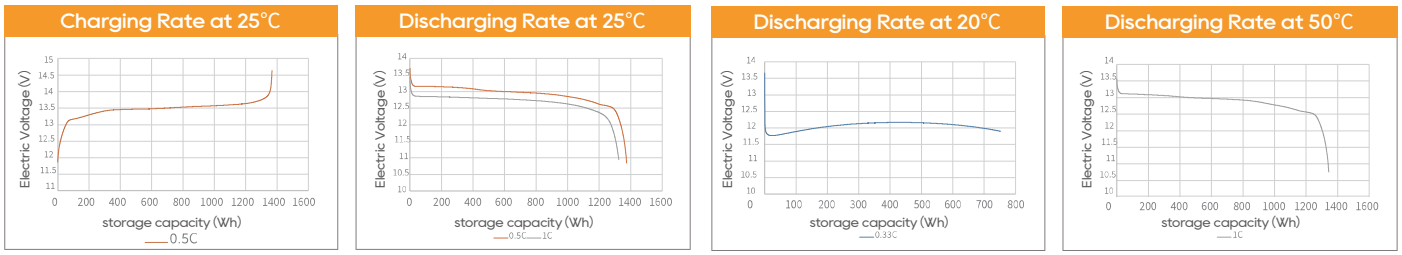
Dimensions	12.8 x 6.83 x 9.37 in (325 x 173.5 x 238mm)
Weight	approx 26.46 lbs (12kg)
Terminal Type	M8 x 14
Terminal Torque	9±1Nm
Housing Material	PC
Ingress Protection	IP67
Battery Type	LFP

Other

Certification	UN38.3, FCC, IEC 62619, CE
Communication	BLE 5.0
APP	Battery Cloud

Dimensions





* The above data is based on controlled environment test records, and actual usage may vary depending on external environmental conditions.

RV Battery

ECOX 12100 SE



Features

Lighter

- 50% lighter than lead-acid batteries of the same capacity

Higher Charge/Discharge Rate

- 30% higher energy density than lithium iron phosphate batteries of the same capacity

Long-lasting

- Up to 4000+ cycles, maximizing your return on investment

Remote Monitoring

- Operation indicator, warning light, and SOC indicator allow you to monitor the battery status in real-time

Scalable on Demand

- Supports up to 8 batteries in parallel, with a maximum energy of 10.24 kWh

Self-heat

- Built-in heating film, supports battery charging in cold environments

Application Scenarios

Ecox 12100 SE is suitable for deep-cycle off-grid applications such as RVs, boats, trucks, and cabins, and can replace deep-cycle lead-acid batteries

Ecox 12100 SE Specs

Electrical

Nominal Voltage	12.8VDC
Nominal Capacity	100Ah
Internal Resistance	<10mΩ
Self-discharge Rate	⩽3% per month
Scalability	8P
Cycle Life	＞4000
Maximum Continuous Discharge Current	100A
Peak Discharge Current	200A@10s
Maximum Continuous Charge Current	100A
Recommended Charge Current	⩽50A
Recommended Charge Voltage	14V-14.4V

Environmental

Recommened Storage Temperature	50°F~104°F , 10°C~40°C
Storage Temperature	-4°F~122°F , -20°C~50°C
Autitude	<4000m
Relative Humidity	5%~95% (no condensation)

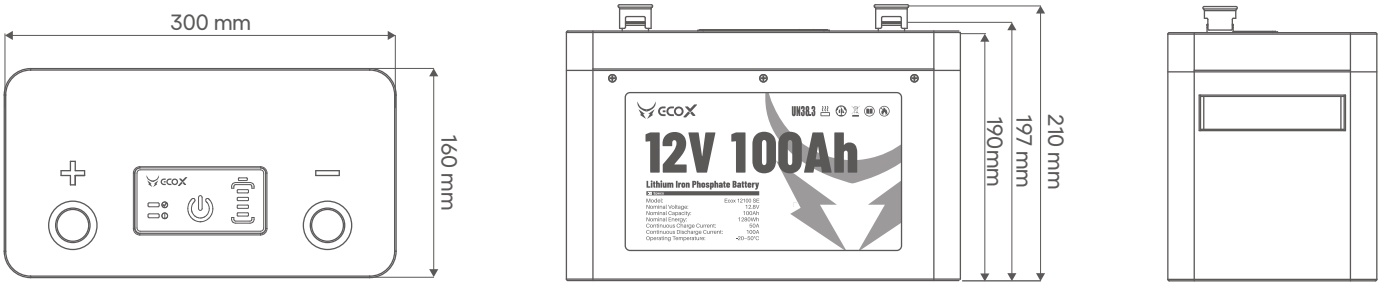
Mechanical

Dimensions	300 x 160 x 210 mm
Weight	approx 12kg
Terminal Type	M8 x 1.25 x 14mm
Terminal Torque	8±1Nm
Housing Material	Metal
Ingress Protection	IP20
Battery Type	LFP
Cooling	Nature Cooling

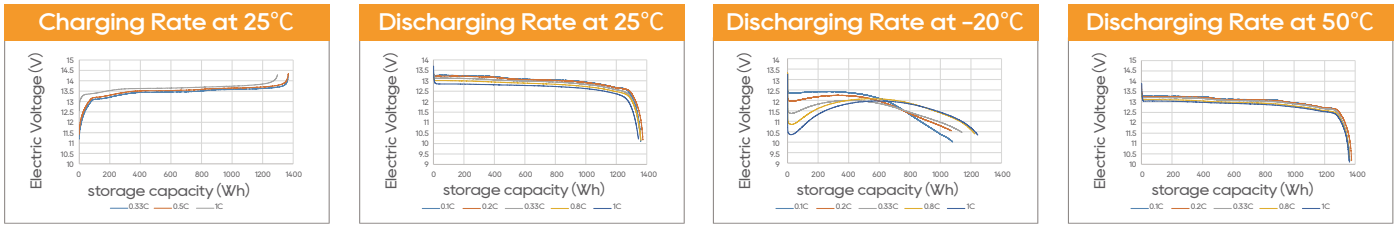
Other

Certification	UN38.3, IEC 62619, CE
Heating	Support

Dimensions



Unit: mm



* The above data is based on controlled environment test records, and actual usage may vary depending on external environmental conditions.

RV Battery

Ecox 12200



Features

Lighter

- 50% lighter than lead-acid batteries of the same capacity

Higher Charge/Discharge Rate

- 30% higher energy density than lithium iron phosphate batteries of the same capacity

Long-lasting

- Up to 4000+ cycles, maximizing your return on investment

Remote Monitoring

- Built-in Bluetooth module, supports real-time battery monitoring via mobile devices

Scalable on Demand

- Supports up to 16 batteries in 4S4P configuration, with a maximum energy of 40.96 kWh

Self-heat

- Built-in heating film, supports battery charging in cold environments

Application Scenarios

The Ecox 12200 is suitable for deep-cycle off-grid applications such as RVs, boats, trucks, and cabins, and can replace deep-cycle lead-acid batteries

Ecox 12200 Specs

Electrical

Nominal Voltage	12.8VDC
Nominal Capacity	200Ah
Internal Resistance	<10mΩ
Round-Trip Efficiency	99%
Self-discharge Rate	⩽3% per month
Scalability	4S4P
Cycle Life	＞4000 (80% DOD, 0.5 C, 25°C)
Maximum Continuous Discharge Current	100A
Maximum Discharge Current	200A@5s
Maximum Continuous Charge Current	100A
Recommended Charge Voltage	14V-14.6V

Environmental

Discharging Temperature	-20°C~60°C
Charging Temperature	0°C~55°C
Storage Temperature	-40°C~60°C
Autitude	<4000m
Relative Humidity	5%~95% (no condensation)

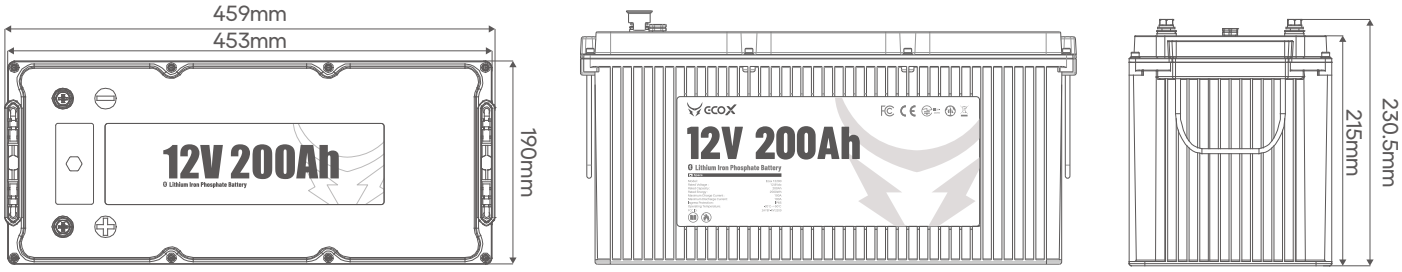
Mechanical

Dimensions	495 x 190 x 234.5 mm
Weight	approx 20.9kg
Terminal Type	M8 x 1.25 x 14mm
Terminal Torque	9±1Nm
Housing Material	PC
Ingress Protection	IP65
Battery Type	LFP

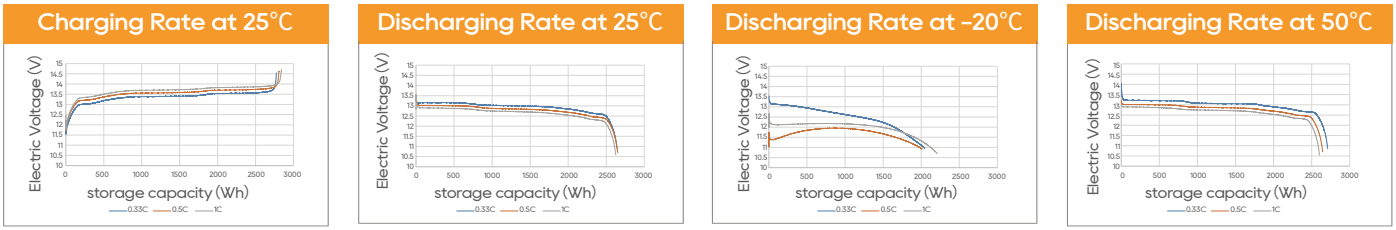
Other

Certification	UN38.3, IEC 62619, FCC, CE
Communication	BLE 5.0
Heating Film	Support
APP	Battery Cloud

Dimensions



Unit: mm



* The above data is based on controlled environment test records, and actual usage may vary depending on external environmental conditions.

RV Battery

Ecox 12314



Features

Lighter

- 50% lighter than lead-acid batteries of the same capacity

Higher Charge/Discharge Rate

- 30% higher energy density than lithium iron phosphate batteries of the same capacity

Long-lasting

- Up to 8000 cycles, maximizing your return on investment

Scalable on Demand

- Support up to 4 units in series or 8 units in parallel, with a maximum energy of 32.15 kWh

Application Scenarios

The Ecox 12314 is suitable for deep-cycle off-grid applications such as RVs, boats, trucks, and cabins, and can replace deep-cycle lead-acid batteries

Ecox 12314 Specs

Electrical

Nominal Voltage	12.8VDC
Nominal Capacity	314Ah
Scalability	4S or 8P[1]
Maximum Continuous Discharge Current	160A
Maximum Discharge Current	320A@10s
Maximum Continuous Charge Current	160A
Recommended Continuous Charge Current	50A
Recommended Charge Voltage	14V~14.4V
Cycle Life	8000/100%DOD

[1]: Series-parallel connection not supported

Environmental

Storage Temperature	-20°C~55°C/-4°F~122°F
Operating Temperature	-20°C~55°C/-4°F~122°F
Autitude	⩽4000m
Relative Humidity	5%~95% (no condensation)

Mechanical

Dimensions	340 mm × 280 mm × 235 mm/ 13.3 in × 11.1 in × 9.3 in
Weight	Approx 32.5 kg
Terminal Type	M8 × 1.25 × 14 mm
Terminal Torque	8±1N·m
Case Material	Metal
IP Rating	IP66
Battery Type	LiFePO4

Other

Communication	No
Heating Pad	Support
Certification	UN38.3, FCC, CE, IEC 62619

C&I Energy Storage Solutions



Pi HC1

High Voltage Stackable LFP Battery System

Features

Safe

- LFP Chemistry, Field-Proven BMS Integrated in Individual Module, DC Breaker & Fuse Adapted

Scalable on Demand

- Flexible Configuration from 10.24 to 40.96 kWh per Stack, Up to 8 Stacks
- Each cluster supports 2 to 8 modules, with a maximum of 6 clusters in parallel (245.76 kWh)

Powerful

- Up to 40.96kW Continuous Output

Smart

- Remote Upgrading & Monitoring

Plug-and-play (15-min installation)

- Quick Connectors, Hand-wiring Free

Charge and discharge

- Simultaneously supplying power to multiple loads, no need to worry about power outages

CE CLEAN ENERGY COUNCIL UN38.3 SGS TÜV CEC SGIP

Pi HC1 Specs

Battery Module Unit:

Cell Type	LFP
Nominal Energy	5.12kWh
Nominal Voltage	102.4V
Voltage Range	89.6V~116.8V
Nominal Capacity	50Ah
Recommended Continuous Discharge Current	50A
Recommended Continuous Charge Current	50A
Certifications	CE, IEC62619, UN38.3



Model	2	3	4	5	…	8
Cell Type	LFP					
Nominal Voltage	204.8V	307.2V	409.6V	512V	…	819.2V
Nominal Energy	10.24kWh	15.36kWh	20.48kWh	25.6kWh	…	40.96kWh
Recommended Power	10.24kW	15.36kW	20.48kW	25.6kW	…	40.96kW
	680 x 360 x 670	680 x 360 x 865	680 x 360 x 1060	680 x 360 x 1255	…	680 x 360 x 1840
Efficiency	⩾95%					
Communication	CAN, RS485, WIFI					
Cycle Life	⩾8000Cycles					
Protection level	IP20					
Ambient Temperature	Charge: 0°C ~ 45°C / 32°F ~113°F Discharge: -20°C~50°C / -4°F~122°F					
BCU						
BMU						

C&I Energy Storage Solutions

HV48100



Features

Safe
- LFP Chemistry
- Smart BMS

Efficiency
- High Voltage System
- Voltage Range 200V~870V

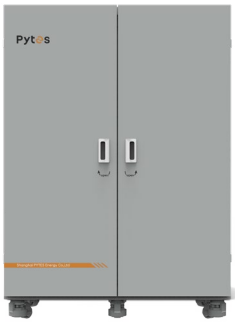
Compatible Cabinets



HV48100 8S
BMU Quantity: 5~8
Dimensions:
600×640×1555mm /
23.6×25.2×61.2inch
Weight: 89.6kg / 197.5lbs
Enclosure Rating: IP20



HV48100 12S
BMU Quantity: 9~12
Dimensions:
595 x 680 x 2100mm /
23.4 x 26.8 x 82.7 inch
Weight: 138kg / 304.2lbs
Enclosure Rating: IP20



HV48100 15S
BMU Quantity: 13~15
Dimensions:
1054 x 626 x 1463mm /
41.50 x 24.7 x 57.6 inch
Weight: 126.5kg / 278.9lbs
Enclosure Rating: IP20

HV48100 Specs

HV48100 BCU

Controller Working Voltage	200V~870V
Self-consumption Power	7.56W
Dimensions (W x D x H)	484 x 510 x 140 mm / 19.1 x 20.1 x 5.5 inch
Weight	13.3 kg / 29.3 lbs
Communication	CAN, RS485, Dry Contact, WiFi
Internal Communcation	RS232

HV48100 BMU

Cell Type	LFP
Nominal Energy	5.12kWh
Nominal Voltage	51.2V
Nominal Capacity	100Ah
Continuous Discharging/Charging Current	50Adc
Operating Voltage Range	47.5~57.6V
Depth of Discharge	90%
Series Connection Qty	5~15pcs
Dimensions (W x D x H)	484 x 530 x 140 mm / 19.1 x 20.9 x 5.5 inch
Weight	43 kg / 94.8 lbs
Internal Communcation	RS232
External Communication	CAN, RS485
Cycle Life	⩾6000Cycles
Operation Temperature	Charge： 0°C~45°C(32°F~113°F)， Discharge: -10°C~50°C(14°F~122°F)
Storage Temperature	Within 1month: -20°C~50°C(-4°F~122°F) 1-3months: -10°C~40°C(14°F~104°F) 3-12months: > 0°C~30°C(32°F~86°F)

Certifications

UL9540 Ed.2 (2020), UL9540A, UL1973, CE, IEC62619, UN38.3, CEC

C&I Energy Storage Solutions

HV48100 SE

Commercial & Industrial Solution



Features

Safe

- LFP Chemistry, Grade A Cells from Tier 1 Supplier
- Monitoring and Control to Current, Voltage, Temperature, from Cell, Pack to System
- Short Circuit Protection
- 5 Layer Cabinet Level Fire Fighting System

Environment Adaptive

- Heating Pad Integrated in Each Battery Pack
- Built-in Cooling Fan in Each Battery Pack
- Air Cooling to Cabinet
- IP55 Rated Water & Dust Proof Cabinet

Scalable

- Up to 76.8kW'h Rated Energy One Unit
- 6 Units DC-Couping Capabiity

C&I Energy Storage System Parameters

HV48100 SE [1]	2P6S	2P7S	1P12S	1P15S
System Parameters				
Rated Energy (kWh)	61.44	71.68	61.44	76.8
Rated Power (kW)	30.72	35.84	30.72	38.4
Operating Voltage (V)	273 ~ 341	318 ~ 398	546 ~ 682	683 ~ 852
Charge/Discharge Current (A)	50 x 2		50	
Rated Capacity (Ah)	100 x 2		100	
Max. # cabinet per inverter	3		6	
Weight (lb/ kg)	2234/1013	2439/1106	2203/999	2511/1139
Ingress Protection	IP55			
Operating Tempeature	-20°C~50°C/-4°F~122°F			
Relative Humidity	0~95% non-condensing			
Battery Cycle Life	≥6000Cycles @25°C 0.5C 90% DoD, 70% EOL			
Fire Fighting System	1. Heat/Smoke/Gas Detectors 2. Exhaust & Ventilation System 3. Aerosol Fire Protection 4. Explosion Relief Plate 5. Water Fire Fighting Port			
Cooling Method	Air Cooling 2kW R134a Air-conditioner Pre-Installed			
Dimensions WxDxH (mm/inch)	1100 x 1274 x 2015 mm (43.31 x 50.16 x 79.33 in)			
Operating Altitude (m)	3000			
BCU Parameters				
System Working Voltage Range (V)	142.5~864			
System Working Current (A)	50			
Monitoring Communication	RS232			
Battery Communication	CAN, RS485			
External Communication	CAN, RS485, Dry Contact			
Self-consumption Power (W)	7.56			
Dimensions (WxDxH)	484 x 510 x 140 mm			
Weight (kg)	13.6			
Protection Rate	IP20			
BMU Parameters				
Cell Type	LFP			
Nominal Energy (kWh)	5.12			
Nominal Voltage (V)	51.2			
Nominal Capacity (Ah)	100			
Rated Charge/Discharge Current (A)	50			
Maximum Charge/Discharge Current (A)	50			
Voltage Range (V)	47.5~57.6			
Expansion	3-15pcs			
Depth of Discharge	90%			
Dimensions (WxDxH)	484 x 530 x 140 mm			
Weight (kg)	45.16			
Protection Rate	IP20			
Operating Tempeature	Charge: 0°C~55°C/32°F~131°F; Discharge: -10°C~55°C/14°F~131°F			
Compliance				
Certificates	UL9540 Ed.2 (2020), UL9540A, UL1973, CE, IEC62619, UN38.3, UKCA			

[1] The HV48100SE is configurable for 3 to 15 BMUs per system; four versions are detailed for reference.

C&I Energy Storage Solutions

HV48300 Max

Adaptable C&I Solution



Features

Safe

- Tier 1 automotive-grade LFP cells
- BMS multi-level monitoring and protection
- Support aerosol fire extinguishing

Easy O&M

- Independent fan cooling for each module, simple structure & no liquid cooling circuits, low long-term maintenance cost and nearly zero civil work cost

Scalable

- Scale seamlessly to MWh-level capacity with our modular battery system industrial-scale applications
- Standardized modular design for multiple scenarios: industrial & commercial peak shaving, backup power, PV-storage-charging integration, with lower upfront investment and maintenance costs

Flexible

- Multiple battery string configurations support a wide range of operating voltage
- Universal mounting structure accommodates various inverter models
- Simple bracket, free stacking, saving time, labor and cost

HV48300 Max Specs

HV48300 Max BCU

Controller Working Voltage	232.5V~852V
Self-consumption Power	7.8W
Dimensions (W*D*H)	436*542.4*225 mm / 17.1*21.3*8.8 inch
Weight	22 kg / 48.5 lbs
Communication	CAN, RS485, Dry Contact, WiFi

HV48300 Max BMU

Cell Type	LFP
Nominal Energy	16.07kWh
Nominal Voltage	51.2V
Nominal Capacity	314Ah
Continuous Discharging/Charging Current	157Adc
Voltage Range	46.5-56.8V
Depth of Discharge	90%
Dimensions (W*D*H)	440*787*227 mm / 17.3*30.9*8.9 inch
Weight	122 kg / 268.9 lbs
Communication	CAN, RS485
Cell Cycle Life	⩾8000 cycles
Operation Temperature	Charge: 0°C~45°C(32°F~113° F), Discharge: -10°C~50°C(14°F~122°F)
Storage Temperature	Within 1month: -20°C~50°C(-4°F~122°F) 1-3months: -10°C~40°C(14°F~104°F) 3-12months: > 0°C~30°C(32°F~86°F)

HV48300 Max System

System Energy	16.07kWh*n
System Voltage	51.2V*n
System Capacity	314Ah
Battery System Charge Upper-Voltage	56.8V*n
Battery System Discharge lower-Voltage	46.5V*n
Continuous Discharging/ Charging Current	157Adc
BCU Model	HV48300 Max BCU
BMU Model	HV48300 Max BMU
BMU Qty. (Optional)	5~15
Depth of Discharge	90%
Weight	22 kg + 122 kg*n / 48.5 lbs + 268.9 lbs*n
Communication	CAN, RS485, Dry Contact, WiFi
Operation Temperature	Charge: 0°C~45°C(32°F~113°F), Discharge: -10°C~50°C(14°F~122°F)
Storage Temperature	Within 1month: -20°C~50°C(-4°F~122°F) 1-3months: -10°C~40°C(14°F~104°F) 3-12months: > 0°C~30°C(32°F~86°F)
Operation Humidity	0~95%, No Condensation
Protection level	IP20
Cell Cycle Life	⩾8000 cycles
Warranty	basic warranty 5 years/advantage warranty 10 years; or 8000 cell cycles(Condition: 0.5P/0.5P, 90%DOD [Recommended SOC Range=10-100%.], 20°C~35°C, ret 70%)

Certifications

UL9540, UL9540A, UL1973, UL60730, UN38.3, IEC62619, IEC63056, IEC60730, CE EMC, IEC62477, IEC62040, ECM

C&I Energy Storage Solutions

HV48300 Max

Adaptable C&I Solution



Features

Safe

- Tier 1 automotive-grade LFP cells
- BMS multi-level monitoring and protection
- Support aerosol fire extinguishing

Easy O&M

- Independent fan cooling for each module, simple structure & no liquid cooling circuits, low long-term maintenance cost and nearly zero civil work cost

Scalable

- Scale seamlessly to MWh-level capacity with our modular battery system industrial-scale applications
- Standardized modular design for multiple scenarios: industrial & commercial peak shaving, backup power, PV-storage-charging integration, with lower upfront investment and maintenance costs

Flexible

- Multiple battery string configurations support a wide range of operating voltage
- Universal mounting structure accommodates various inverter models
- Simple bracket, free stacking, saving time, labor and cost

HV48300 Max Specs

HV48300 Max BCU

Controller Working Voltage	232.5V~1476.8V
Self-consumption Power	7.8W
Dimensions (W*D*H)	436*542.4*225 mm / 17.1*21.3*8.8 inch
Weight	22 kg / 48.5 lbs
Communication	CAN, RS485, Dry Contact, WiFi

HV48300 Max BMU

Cell Type	LFP
Nominal Energy	16.07kWh
Nominal Voltage	51.2V
Nominal Capacity	314Ah
Continuous Discharging/Charging Current	157Adc
Voltage Range	46.5-56.8V
Depth of Discharge	90%
Dimensions (W*D*H)	440*787*227 mm / 17.3*30.9*8.9 inch
Weight	122 kg / 268.9 lbs
Communication	CAN, RS485
Cell Cycle Life	⩾8000 cycles
Operation Temperature	Charge: 0°C~45°C(32°F~113° F), Discharge: -10°C~50°C(14°F~122°F)
Storage Temperature	Within 1month: -20°C~50°C(-4°F~122°F) 1-3months: -10°C~40°C(14°F~104°F) 3-12months: > 0°C~30°C(32°F~86°F)

HV48300 Max System

System Energy	16.07kWh*n
System Voltage	51.2V*n
System Capacity	314Ah
Battery System Charge Upper-Voltage	56.8V*n
Battery System Discharge lower-Voltage	46.5V*n
Continuous Discharging/ Charging Current	157Adc
BCU Model	HV48300 Max BCU
BMU Model	HV48300 Max BMU
BMU Qty. (Optional)	5~26
Depth of Discharge	90%
Weight	22 kg + 122 kg*n / 48.5 lbs + 268.9 lbs*n
Communication	CAN, RS485, Dry Contact, WiFi
Operation Temperature	Charge: 0°C~45°C(32°F~113°F), Discharge: -10°C~50°C(14°F~122°F)
Storage Temperature	Within 1month: -20°C~50°C(-4°F~122°F) 1-3months: -10°C~40°C(14°F~104°F) 3-12months: > 0°C~30°C(32°F~86°F)
Operation Humidity	0~95%, No Condensation
Protection level	IP20
Cell Cycle Life	⩾8000 cycles
Warranty	basic warranty 5 years/advantage warranty 10 years; or 8000 cell cycles(Condition: 0.5P/0.5P, 90%DOD [Recommended SOC Range=10-100%.], 20°C~35°C, ret 70%)

Certifications

UL9540, UL9540A, UL1973, UL60730, UN38.3, IEC62619, IEC63056, IEC60730, CE EMC, IEC62477, IEC62040, ECM

C&I Energy Storage Solutions

HV48300 MAX SE

Adaptable C&I Solution



Features

Safe

- Tier 1 automotive-grade LFP cells
- BMS multi-level monitoring and protection
- Multi-layer active fire suppression system

All-Weather

- Built-in module-level fans and forced-air cooling system (HVAC) ensure efficient thermal management and reliable operation in high-temperature environments
- IP55 rating for indoor and outdoor installation

Scalable

- Scale seamlessly to MWh-level capacity with our modular battery system industrial-scale applications

Smart

- Remote monitoring with PYTES Battery Cloud

Flexible

- Multiple battery string configurations support a wide range of operating voltage
- Universal mounting structure accommodates various inverter models

HV48300 MAX SE Specs

Battery Module				
Battery Chemistry	Lithium Iron Phosphate (LFP)			
Battery Module Energy	16.076kWh			
Battery Module Nominal Voltage	51.2V			
Battery Module Operating Voltage	44.8 ~ 57.6V			
Battery Module Nominal Capacity	314Ah			
Weight (lb / kg)	262 ± 11 / 119 ± 5			
System				
Max. Battery Pack Internal Configuration [1]	1P5S ~ 1P15S		(1P5S) × 2 ~ (1P7S) × 2	
Rated Energy	80.380kWh	241.140kWh	160.760kWh	225.064kWh
Rated Power	40.192kW	120.576kW	80.384kW	112.537kW
Operating Voltage	224 ~ 288V	672 ~ 864V	224 ~ 288V	313.6 ~ 403.2V
Rated Charge/Discharge Current	157A	157A	157A x 2	157A x 2
Peak Charge/Discharge Current	205A	205A	205A x 2	205A x 2
General				
Dimensions (W x D x H)	68 x 57 x 92in (1750 x 1450 x 2350mm)			
Weight (lb / kg)	2929 / 1329	5553 / 2519	4296 / 1949	5346 / 2425
Ingress Protection Rating	IP55			
Cycle Life [2]	6000 cycles			
Warranty [3]	Battery system: basic warranty 3years/ advantage warrenty 5 years [4] Battery module: basic warranty 5years/ advantage warrenty 10 years			
Environmental				
Operating Temperature	Charging: 32°F ~ 131°F (0°C~55°C) Discharging: -4°F ~ 131°F (-20°C~55°C)			
Operating Altitude	≤ 6561.68 ft (2000m)			
Relative Humidity	5% ~ 95%, non-condensing			
Fire Suppression System				
Level 1: Detection & Ventilation	Hazardous gas detection activates ventilation system			
Level 2: Aerosol Suppression	Heat and smoke detection activates aerosol fire suppression system			
Level 3: Pressure Relief	The explosion relief valve opens automatically if internal pressure exceeds safe limits			
Level 4: Fire Hose Connection Port	Equipped with a fire hose connection port for firefighter hose attachment			
HVAC				
Rated Cooling Capacity	5000W (L35)			
Rated Heating Capacity	2500W			
Ingress Protection Rating	IP55			
Compliance				
Certifications	UL 9540A , UL 1973 , UN 38.3 , IEC62619 , CE EMC , IEC63056 , IEC62477 , IEC62040			

[1]: Flexible Configuration:
1P (1 x BCU): Number of connectable BMUs ranges from 1 to 15. Voltage Range: 44.8 V × (1 ~ 15) ~ 57.6 V × (1 ~ 15).
2P (2 x BCU in parallel): Number of connectable BMUs ranges from 1 to 7 for each BCU. Voltage Range: 44.8 V × (1 ~ 7)~57.6 V × (1 ~ 7).
[2]: Operating conditions: 77°F (25°C), 0.5 P @ 90% DoD, ret @70% (EOL).
[3]: Basic warranty 5 years/ advantage warrenty 10 years; or 6000 cycles (Condition: 0.5P/0.5P, 90% DOD[Recommended SOC Range=10-100%.], 20~35°C, ret 70%.)
[4]: Optional 2 year warranty extension available for purchase.

C&I Energy Storage Solutions

Pi Station 261 EX

Liquid Cooling Outdoor ESS



Introduction

Pytes liquid cooled all in one system, which integrates 125kW PCS and battery modules with a full configuration capacity of 261kWh. And can be widely used in various application scenarios such as peak shaving, PV energy storage, off-grid backup, and microgrid capability in one unit.

Features

Flexible

- All-in-one design and highly integrated
- Modular design

Compatible

- Grid-tied
- 400Vac 3P4W
- Optional backup module

Easy-to-Install

- IP55 rated
- Back-to-back parallel installation

Compliance

- Global grid certified & listed
- Compliance with global safety standards

Pi Station 261 EX Specs

Mode	PI STATION 261 EX
System Specificatoin	
Cell Type	LFP 3.2V / 314Ah
Nominal Output Power	125KW
Battery Capacity	261kWh
Battery Nominal Voltage	832V
Operating DC Voltage Range	650V-949V
Recommended. Charging/ Discharging Current	157[1]
Fire Fighting System	Combustible gas detector, Smoke detector, Heat detector, Aerosol fire extinguishing equipment, Cabinet Water Hoze Connection Port
Cell Cycle life	6000[2]
DOD	90%
Standard Warranty	3 Years Product Warranty, 5 Years Battery Warranty
Premium Warranty[3]	5 Years Product Warranty, 10 Years Battery Warranty
Commmunication	
Communication port	CAN, RS485, Ethernet
Communication protocol	Modbus RTU/TCP
Mechanical	
Dimensions(W x D x H)	1000 x 1390 x 2430mm
Weight	2500kg
Cooling System	Liquid cooling
IP protection	IP55
Environmental	
Reactive Humidity	0-95% (no condensing)
Operating Temperature Range	-20~55°C
Recommended Cell Temperature Range	Charge:0~55°C; Discharge:-20~55°C
Altitude	2000m (>2000 derating)
Certification	

CELL

IEC 62619, UL1642, UL1973, UL9540A, UN38.3

PCS

Europe: CE-LVD-62477, CE-LVD-62109, CE-EMC-61000, EN 50549-1, EN 50549-2, EN 50549-10; **Belgium:** C10/11; **Australia:** AS4777; **Southeast Asia Standards:** IEC61727&62116; **Thailand:** TAI-PEA, TAI-MEA; **Germany:** VDE-AR-N 4105, VDE-AR-N 4110, VDE-AR-N 4120; **Italy:** CEI 0-21, CEI 0-16; **England:** G99-typeA, G99-typeB/C/D, G100; **Finland:** 50549-2/-10+ Finland; **Netherlands:** 50549-2+Netherlands; **France:** 50549-1/-2/-10 +France; **South Africa:** South Africa NRS-097; **Greece:** 50549-1+Greece; **Poland:** 50549-1+Poland typeA, 50549-2+Poland typeB/C/D, PN-EN 50549-2 (dakks); **Denmark:** 50549-1+Denmark; **Czech Republic:** 50549-2+Czech Republic; **Sweden:** 50549-2+Sweden; **Switzerland:** 50549-2/-10+Switzerland; **Austria:** Austria TOR EZA Type A & B; **Hungary:** 50549-2+Hungary; **Spain:** 217001, 217002, NTS631; **Romania:** 50549-2+Romania; **Saudi Arabia:** The Saudi Arabian; **Slovenia:** 50549-1-2+Slovenia; **Estonia:** 50549-1-2+Estonia; **Ukraine:** 50549-1-2+Ukraine; **Macedonia:** 50549-1-2+Macedonia; **Bulgaria:** 50549-1-2+Bulgaria; **Ireland:** 50549-1-2+Ireland; **Portugal:** 50549-2/-10+Portugal

System

UN38.3, IEC62619, IEC63056, IEC62477, CE-EMC

[1] Charge and discharge current derating will occur outside 0°C and 45°C.
[2] Under test conditions(20~35°C, 0.5P/0.5P, EOL70%).
[3] Optional Premium Warranty available at an additional cost.

Inverter

S6-EH1P(3-8)K-L-PLUS-P



Features

- Supports PV input up to 160% of the inverter's rated DC power, maximising solar utilisation
- 200% overload for 10s in off-grid mode, ensuring stable startup of motors, water pumps and air conditioners
- Seamless on/off-grid switching in under 10ms, guaranteeing an uninterrupted power supply
- More battery options, compatible with any battery (between 40V-60V)
- Supports existing PV grid-tied power connection for export control and off-grid use
- Multiple methods of generator connection and auto control, enabling flexible local deployment
- Ingress protection IP66, for operation in harsh conditions
- Support max 6 units in parallel, expanding system capacity
- Smart Load management, extending backup time for critical loads
- Customizable battery backup level for uninterrupted power
- Supports PV-only off-grid operation, reducing upfront costs
- SolisCloud: Smart remote control, AI optimisation, and instant troubleshooting - all in one platform
- 7-inch industrial-grade touchscreen, providing a larger, user-friendly interface for local operation

S6-EH1P(3-8)K-L-PLUS-P Specs

Models	3K	3.6K	4.6K	5K	6K	8K
Input DC (PV side)						
Recommended max. PV array size	6 kW	7.2 kW	9.2 kW	10 kW	12 kW	16 kW
Max. usable PV input power	4.8 kW	5.76 kW	7.36 kW	8 kW	9.6 kW	12.8 kW
Max. input voltage	500 V					
Rated voltage	330 V					
Start-up voltage	90 V					
MPPT voltage range	90 – 435 V					
Max. input current	16 A / 16 A					32 A / 32 A
Max. current per DC input	16 A					
Max. short circuit current	20 A / 20 A					40 A / 40 A
MPPT number / Max. input strings number	2 / 2					2 / 4
Battery						
Battery type	Li-ion / Lead-acid					
Battery voltage range	40 – 60 V					
Max. charge / discharge power	3 kW	3.6 kW	4.6 kW	5 kW	6 kW	8 kW
Max. charge / discharge current	70 A	80 A	105 A	112 A	135 A	190 A
Number of battery port / Number of BMS port	1/1					
Communication	CAN / RS485					
Output AC (Grid side)						
Rated output power	3 kW	3.6 kW	4.6 kW	5 kW	6 kW	8 kW
Max. apparent output power	3 kVA	3.6 kVA	4.6 kVA	5 kVA	6 kVA	8 kVA
Rated grid voltage	L / N / PE, 220 V / 230 V					
Rated grid frequency	50 Hz / 60 Hz					
Rated grid output current	13.7 A / 13.1 A	16.4 A / 15.7 A	20.9 A / 20 A	22.8 A / 21.8 A	27.3 A / 26.1 A	36.4 A / 34.8 A
Power factor	> 0.99 (0.8 leading – 0.8 lagging)					
THDi	< 3%					
Input AC (Grid side)						
Max.input power	4.6 kW	5.5 kW	6.4 kW	7 kW	8.8 kW	11 kW
Input voltage range	187 – 253 V					
Max. input current	21 A	25 A	29 A	32 A	40 A	50 A
Output AC (Back-up)						
Rated output power	3 kW	3.6 kW	4.6 kW	5 kW	6 kW	8 kW
Max. apparent output power	2 times of rated power, 10 s					
Back-up switch time	< 10 ms					
Rated output voltage	L / N / PE, 220 V / 230 V					
Rated frequency	50 Hz / 60 Hz					
Rated output current	13.7 A / 13.1 A	16.4 A / 15.7 A	20.9 A / 20 A	22.8 A / 21.8 A	27.3 A / 26.1 A	36.4 A / 34.8 A
Max. AC passthrough current	35 A		40 A			50 A
THDv (@linear load)	< 2%					
Input AC (Generator side)						
Max. input power	3 kW	3.6 kW	4.6 kW	5 kW	6 kW	8 kW
Max. input current	13.7 A / 13.1 A	16.4 A / 15.7 A	20.9 A / 20 A	22.8 A / 21.8 A	27.3 A / 26.1 A	36.4 A / 34.8 A
Rated input voltage	L / N / PE, 220 V / 230 V					
Rated input frequency	50 Hz / 60 Hz					
Efficiency						
Max. efficiency	96.2%					
EU efficiency	96.1%					
BAT charged by PV / AC max. efficiency	95.3% / 93.9%					
Battery discharged efficiency	93.8%					
Protection						
Surge protection	Yes					
Output over-current protection	Yes					
Insulation resistance monitoring	Yes					
Residual current detection	Yes					
Integrated PV switch	Yes					
DC reverse-polarity protection	Yes (PV only)					
Protection class /Over-voltage category	I/II (PV and BAT), III (MAINS and BACKUP and GEN)					
Integrated AFCI 2.0	Optional					
Anti-islanding protection	Yes					
General Data						
Dimensions (W×H×D)	335 × 560 × 253 mm					
Weight	23 kg					23.5 kg
Topology	Non-isolated (PV), isolated (battery)					
Self-consumption	< 40 W					
Operating ambient temperature range	-25 ~ +60°C					
Relative humidity	0 – 100%					
Ingress protection	IP66					
Noise emission (typical)	< 40 dB (A)					<65 dB (A)
Cooling concept	Natural cooling					Intelligent redundant fan-cooling
Max. operation altitude	3000 m					
Certified standards	EN 50549-1, CEI 0-21, IEC/EN 62109-1/-2, EN 61000-6-2/-3					
Additional certifications (Available upon request)*	NRS 097-2-1, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA, NBR 16149, NBR 16150, G98, G99, NTS 631 Type A					
Features						
PV connection	MC4 connector					
Battery connection	Terminal block					
AC connection	Terminal block					
Display	7.0" LCD display & Bluetooth + APP					
Communication interface	Standard: WIFI+LAN+Bluetooth, CAN-BMS, CAN-Parallelx2, RS485-Meter, RS485, DRM, DI, DOx2; Optional: 4G					

***Certain country-specific orgrid-related certifications are not included as standard. If these certifications are required, please contact PYTES in advance before placing an order.**

Inverter

JS Series Hybrid Inverters



Features

Dual Backup Ports
- Customize Critical and Common Loads

Generator Compatible
- Dual Power Sources for Backup During Outage

200% Overload Capability
- 10 Seconds

Unbalanced Loads Supported
- 50% of Rated Power Each Phase

AC Coupling
- Solution for Legacy Users

Scalable
- Parallel up to 90kW to Form a Micro-grid

JS Series Hybrid Inverters Specs

Models	JS3PL8K	JS3PL10K	JS3PL12K	JS3PL15K
Input DC (PV side)				
Max. usable PV input power	12.8 kW	16 kW	19.2 kW	24 kW
Max. input voltage	1000 V			
Rated voltage	550 V			
Start-up voltage	160 V			
MPPT voltage range	200 – 850 V			
Max. input current	20A / 40A			40A / 40A
Max. short circuit current	30A / 50A			50A / 50A
MPPT number / Max. input strings number	2 / 3			2 / 4
Battery				
Battery type	Li-ion / Lead-acid			
Battery voltage range	40 – 60 V			
Max. charge / discharge current	180A	220A	250A	290A
Communication	CAN / RS485			
Output AC (Grid side)				
Rated output power	8 kW	10 kW	12 kW	15 kW
Max. apparent output power	8 kVA	10 kVA	12 kVA	15 kVA
Operation phase	3/N/PE			
Rated grid voltage	380 V / 400 V			
Rated grid frequency	50 Hz / 60 Hz			
Rated grid output current	12.2A / 11.5A	15.2A / 14.4A	18.2A / 17.3A	22.8A / 21.7A
Max. output current	12.2A / 11.5A	15.2A / 14.4A	18.2A / 17.3A	22.8A / 21.7A
Power factor	> 0.99 (0.8 leading – 0.8 lagging)			
THDi	< 3%			
Input AC (Grid side)				
Input voltage range	323 – 460 V			
Max. input current	18.3A / 17.3A	22.8A / 21.7A	27.3A / 26.0A	34.2A / 32.5A
Frequency range	45 – 55 Hz / 55 – 65 Hz			
Input Generator				
Max. input power	8 kW	10 kW	12 kW	15 kW
Max. input current	12.2A	15.2A	18.2A	22.8A
Rated input voltage	3/N/PE, 380 V / 400 V			
Rated input frequency	50 Hz / 60 Hz			
Output AC (Back-up)				
Rated output power	8 kW	10 kW	12 kW	15 kW
Max. apparent output power	2 times of rated power, 10 s			
Back-up switch time	< 10 ms			
Rated output voltage	3/N/PE, 380 V / 400 V			
Rated frequency	50 Hz / 60 Hz			
Rated output current	12.2 A / 11.5 A	15.2 A / 14.4 A	18.2 A / 17.3 A	22.8 A / 21.7 A
Max. continuous output current	12.2 A	15.2 A	18.2 A	22.8 A
Max. continuous AC passthrough current	50 A			
THDv (@linear load)	< 3%			
Efficiency				
Max. efficiency	97.60%			
EU efficiency	97.00%			
Protection	Anti-islanding , Output over current, Short circuit, DC reverse-polarity, Surge			
General Data				
Dimensions (W × H × D)	430 × 660 × 305 mm			
Weight	42 kg			
Topology	Non-isolated			
Operating ambient temperature	-40 ~ +60°C			
Ingress protection	IP66			
Noise emission (typical)	< 65 dB(A)			
Cooling concept	Intelligent fan-cooling			
Max. operation altitude	4000 m			
Features				
Display	7.0" LCD display & Bluetooth + APP			
Communication	CAN, RS485, Ethernet, Optional: Wi-Fi, Cellular, LAN			

Accessories



LSW-5

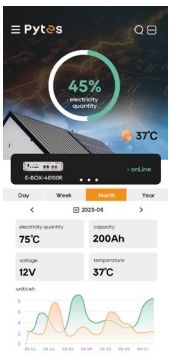
162002100019

Compatible with V5°/ V5°a/ V5°a Plus/V10



WD02

Wi-Fi dongle compatible with multiple batteries





HUB

110409100001

Enables communication with multiple groups of batteries



Busbar:

110409100204

300A Busbar

12 x M6+2 x M8 Terminals

110409100205

600A Busbar

6 x M10+2 x M8 Terminals

Accessories

Cables

Power Cables



161412100245/161412100244
UL10269-4AWG-2000mm-Negative/Positive-Black/Orange-Amphenol 5.7mm+SC25-8

161412101029/161412101027
UL10269-0AWG-2000mm-Negative/Positive-Black/Orange-Amphenol 8.0mm+SC50-10

161412100468/161412100467
UL10269-4AWG-2000mm-Negative/Positive-Black/Orange-Amphenol 5.7mm+SC25-10



161412101026/161412101024
UL10269-0AWG-2000mm-Negative/Positive-Black/Orange-SC50-6+SC50-10

161412100466/161412100465
UL10269-00AWG-2000mm-Negative/Positive-Black/Orange-SC70-10*2

161412100462/161412100461
UL10269-0000AWG-2000mm-Negative/Positive-Black/Orange-DTF120*2

Communication Cable



161412101071
Standard Communication Cable
Compatible with: Sol-ark Megarevo Solis Deye Afore Luxpower Growatt Goodwe APsystems SMA Studer etc.

1614121010xx
Customized Communication Cable
Compatible with: Epever Phocos Voltronic Victron SRNE etc.



161412100916
Console Cable
USB to RJ45 cable for monitoring & upgrading



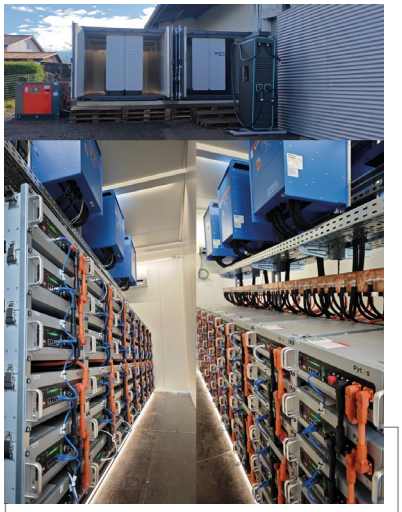
Australia

5kW/40.48kWh E-Box 48100R



England

90kW/180kWh V5°



Austria

240kW/983kWh V5°



Costa Rica

24kW/48kWh V12



England

72kW/108kWh V12



England

72kW/144kWh V12



USA

10kW/16kWh V16



Ecuador

16kW/32kWh V16



USA

15kW/32kWh V16



Costa Rica

12kW/20kWh Pi LV1



USA

12kW/50kWh Pi LV1



Australia

36kW/45kWh Pi LV1



Mexico

30kW/80kWh HV48100



Jamaica

15kW/60kWh HV48100



USA

41kW/82kWh HV48100 SE



China

230kW/460kWh Pi Station 230



Cyprus

230kW/460kWh Pi Station 230



Austria

215kW/230kWh Pi Station 230

Compatibility List of PYTES ESS and Inverters

Low Voltage

victron energy
Sol-Ark
SMA
SUNGROW
GROWATT
LUXPOWER TEK
Deye
GOODWE
solis
Voltronic Power
MPP Solar
SAJ
MEGAREVO
SRNE
Afore
SOLAX POWER
APsystems
hoymiles
EASUN POWER
Ingeteam
INHENERGY
EPEVER
MUST
SUN SYNK
Senergy
LIVOLTEK
Solplanet
phocos
STUDER
AUXSOL

High Voltage

victron energy
Sol-Ark
Deye
solis
MEGAREVO
Afore
Ingeteam
LUXPOWER TEK
Voltronic Power
AUXSOL
SINENG
hoymiles
SOLINTEG

Pytes

Shanghai PYTES Energy Co., Ltd.
NO.3492, Jinqian Road, Fengxian District, Shanghai, China

North America
pytesusa@pytesgroup.com

Europe
pytesbv@pytesgroup.com

AP & Other Regions
pytesess@pytesgroup.com



More Catalogs | LinkedIn | Facebook | Instagram | YouTube | www.pytesess.com

Shanghai PYTES Energy Co, LTD