

Diesel Generation

Residential

Commercial

Public services

Microgrid controller

Industrial

Wind energy

Solar energy (PV)

Li-ion energy storage

Utility
Grid-connected or off-grid operation

Company Profile ▼

Shenzhen Pknergy Energy Co., Ltd is a new energy company established in 1998, mainly engaged in lithium batteries, lithium iron phosphate(LiFePO4) batteries, and lithium lead-acid batteries, li-polymer batteries. PKnergy specializes in R&D, production, sales of energy storage solutions, and renewable energy solutions. Focus on becoming a high-tech enterprise of green energy and a battery solution provider for customized applications.

Since its establishment, Pknergy has been committed to serving communication, IT, home applications, finance, security, transportation, high-end consumer electronics, medical equipment, power tools and other industries involving batteries and power. After years of development, Pknergy has become one of the top lithium battery solution providers in the global market.

After years of development, Pknergy has become one of the top lithium battery solution providers in the global market.



At the same time, we have the most advanced ODM service, processing and production and the most powerful full supply chain system. As a participant in the global market, PKNERGY's products have passed CB, UL, CE/IEC, reach, RoHS and other international certifications. In addition, PKNERGY has also introduced ISO9001 and ISO14001 systems. Due to its rapid growth,

PKNERGY has introduced the best equipment, the most advanced technology and management system. The innovative attitude always brings customers the best product and service experience.

PKNERGY has established lots of logistics warehousing bases to efficiently serve customers in North America Canada, USA, etc.

Company History

Parent company Pkcell Company establishment and entry into the battery market.

1998

Yongzhou, Changsha office was established

2013

Pkcell Group's output value exceeded \$50 million.

2020

Pknergy is officially entering the industrial and commercial energy storage space.

2023

2006

Dongguan factory has been put into production with an annual output value of \$5 million.

2016

Canada, the United States office was officially established. At the same time, Pknergy was officially established and officially entered the field of lithium battery.

2021

Pknergy has officially entered the energy storage sector, successively launching Rack-Mounted, Powerwall and other basic models.



Application scenarios



Communication Station



Islands



Ship



Building



No Electricity Areas

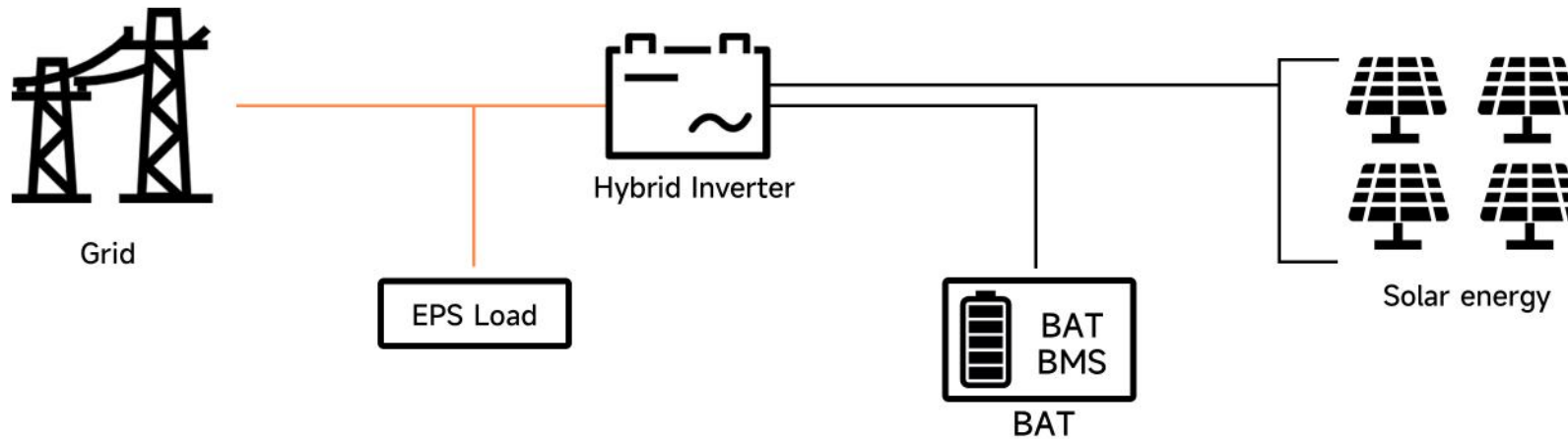


Industrial Project

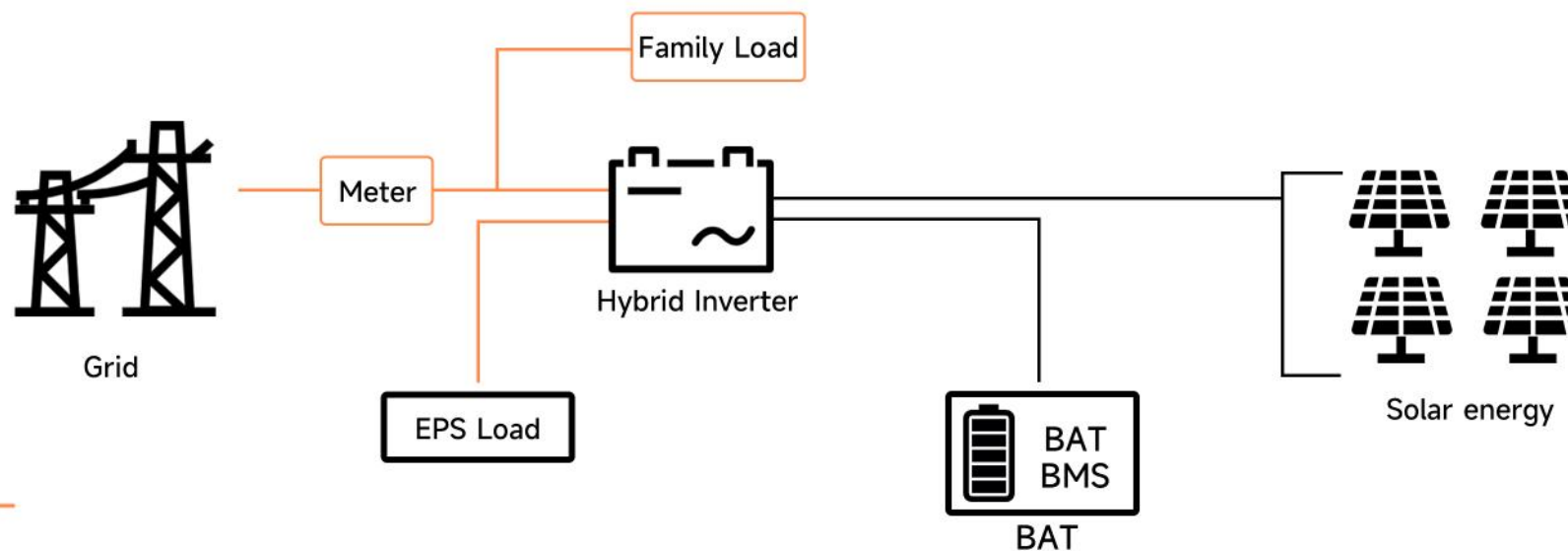


Family

Home Electricity Solutions



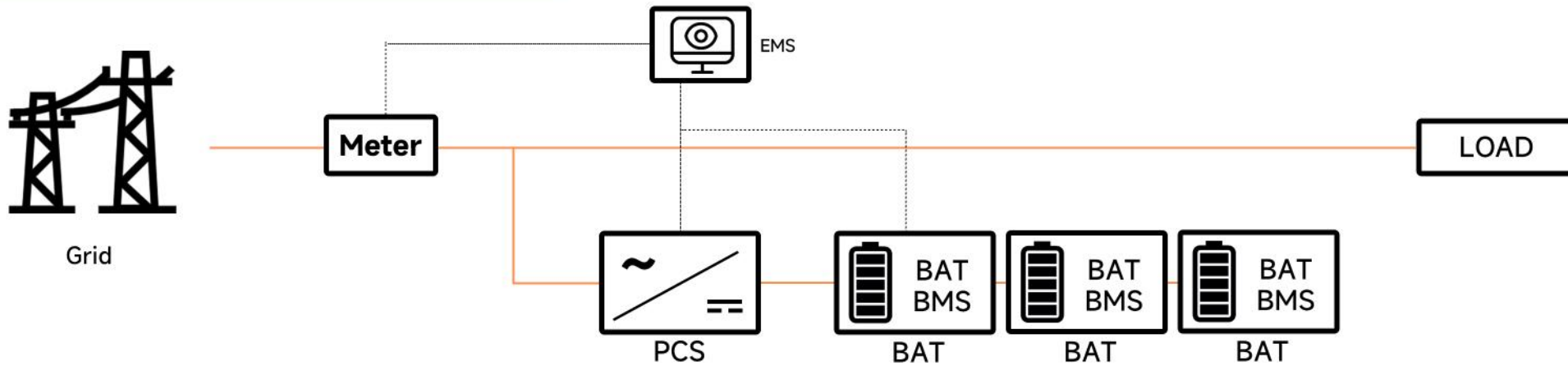
OFF-Grid energy storage system



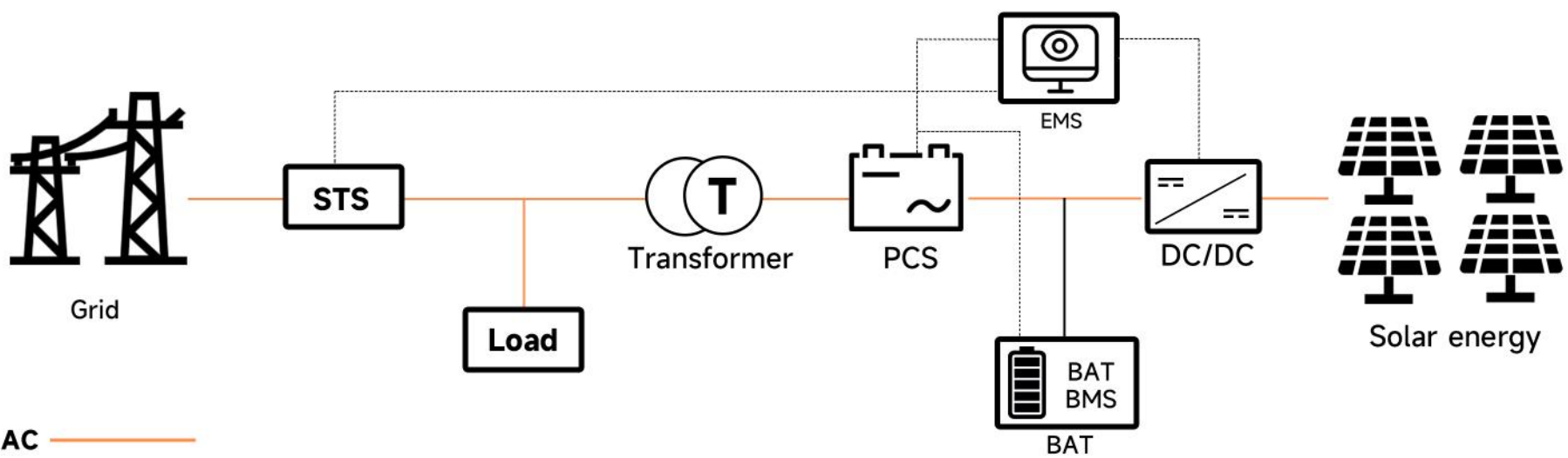
AC ———
OC ———

On/OFF-Grid energy storage system

Industrial Power Solutions



ON-Grid energy storage system



AC ———
DC ———

ON/Off-Grid energy storage system

PKNERGY full range of products



LiFePO4 Battery Series

Power wall Battery Series



- PK-48300P-M
- PK-48400P-M



- PK-48200P-E
- PK-512200P-E



- Pk-48100P-N
- Pk-512100P-N
- Pk-24200P-N



- PK-24200T/PK-48100T
- PK-512100T



- PK-512100P-L



- PK-48200P-S
- PK-512200P-S



- PK-512130P-B

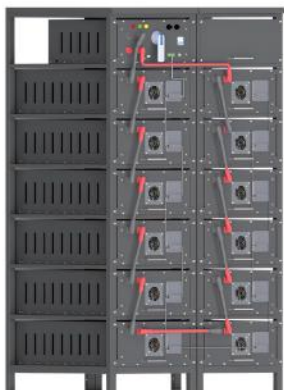
Rack-mounted Battery Seires



- PK-48100R/PK512100R
- PK-48200R/PK512200R

All-in-one & High Voltage Energy Storage Battery Series

High energy storage battery series



- PK-384/280HV-R
- PK-448/280HV-R
- PK-512/280HV-R
- PK-576/280HV-R
- PK-640/280HV-R
- PK-704/280HV-R



- PK-51100-AIO-L
- PK-51200-AIO-L
- PK-51300-AIO-L



- PK-512200-AIO-H
- PK-512400-AIO-H



- PK-20450HV-S
- PK-30750HV-S
- PK-40950HV-S
- PK-51250HV-S

BESS Series



Home Powerwall Battery Series



Product Features

- 25.6V/48V/51.2V LFP-based ESS, long life expectancy of 15+ years
- Cycle life is no less than 7000 cycles @90%DOD, warranty 10 years
- **The highest IP level can reach IP65**
- Integrated battery management system (BMS)
- Battery cell is Certificated with IEC/ UL/CEI-021/CE

PK-24200P-N/Pk-48100P-N/PK512100P-N



Model	PK-24200P-N/Pk-48100P-N	PK512100P-N
Nominal Voltage	25.6V(8series)/48V(15series)	51.2V(16series)
Cell model/Configuration	3.2V100Ah/8S2P(25.6V) 3.2V100Ah/15S1P(48V)	3.2V(100Ah)/16S1P(51.2V)
Capacity(Ah)	200AH/100AH	100AH
Rated Energy(KWH)	5.12KWH/4.8KWH	5.12KWH
Usable Energy(KWH)	4.6-4.8KWH	
Max. Charge/Discharge Current(A)	100-200A(Optional)	100-200A(Optional)
Voltage Range(Vdc)	23-28.5V/43-53V	48-56.5V
Scalability	Up to 16 parallel	
Communication	RS232-PC,TYPE-C(PC),RS485-Inverter,Canbus-Inverter	
Cycle Life	≥7000cycles@25°C,90% DOD,60%EOL	
Design Life	≥15Years(25°C)	
MECHANICAL SPECIFICATIONS		
Weight[Approx](KG)	Approx:48kg	Approx:49kg
Dimension (W/D/H)(mm)	580*390*185 mm	
Installation Mode	Wall hanging	
IP Grade	IP21/IP65[Optional]	
MECHANICAL SPECIFICATIONS		
Safety(Pack)	CE-EMC,UN38.3,MSDS	
Safety(Cell)	UN38.3,MSDS,IEC62619,CE,UL1973,UL2054	
Protection	BMS. Breaker	
ENVIRONMENTAL SPECIFICATIONS		
Operating Temperature(°C)	Charge:-10°C~50°C;Discharge:-20°C~50°C	
Altitude (m)	≤2000	
Humidity	≤95%(Non-condensing)	

Home Powerwall Battery Series



Product Features

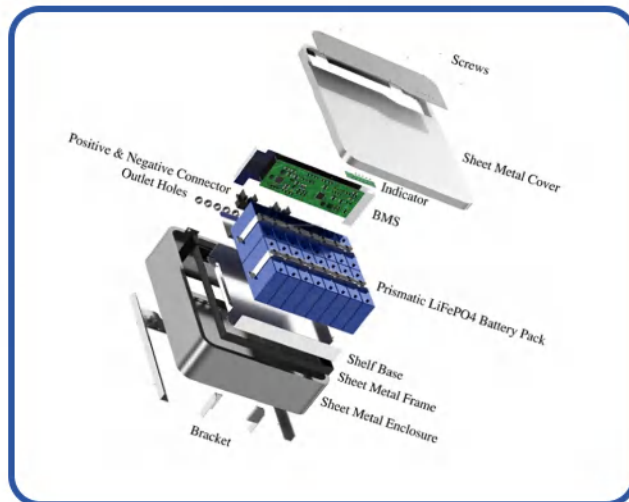
- 48V/51.2V LFP-based HOME STORAGE, long life expectancy of 15+ years.
- Cycle life is no less than 7000 cycles @90% DOD, warranty 10 years
- Quick and Easy Installation, Maintenance-free
- Integrated battery management system (BMS)
- Battery cell is Certificated with IEC/ UL/CEI-021/CE

Technical Specifications(BAT)

Model	PK-48200P-E	PK-512200P-E
Nominal Voltage	48V	51.2V
Cell model/Configuration	3.2V100Ah 15S2P	3.2V100Ah 16S2P
Capacity(Ah)	200AH	
Rated Energy(KWH)	9.6KWH	10.24KWH
Usable Energy(KWH)	8.64KWH	9.2KWH
Max. Charge/Discharge Current(A)	100-200A(Optional)	100-200A(Optional)
Voltage Range(Vdc)	43-53V	48-56.5V
Scalability	Up to 16 parallel	
Communication	RS232-PC,RS485(B)-BAT,RS485(A)-Inverter,Canbus-Inverter	
Cycle Life	≥7000cycles@25°C,90% DOD,60%EOL	
Design Life	≥15Years(25°C)	
MECHANICAL SPECIFICATIONS		
Weight[Approx](KG)	92kg	96kg
Dimension (W/D/H)(mm)	485*690*186mm	
Installation Mode	Wall hanging	
IP Grade	IP21/IP65[Optional]	
MECHANICAL SPECIFICATIONS		
Safety(Pack)	IEC62619,UL1973,CE-EMC,CEI-021,UN38.3,MSDS	
Safety(Cell)	UN38.3,MSDS,IEC62619,CE,UL1973,UL2054	
Protection	BMS. Breaker	
ENVIRONMENTAL SPECIFICATIONS		
Operating Temperature(°C)	Charge:-10°C~50°C;Discharge:-20°C~50°C	
Altitude (m)	≤2000	
Humidity	≤95%(Non-condensing)	



PK-48200P-E
PK-512200P-E



Home Powerwall Battery Series



Multi-angle display of products



PK-48300P-M/PK48400P-M

Product Structure Breakdown Diagram

BMS System

- Intelligent system that protects the core components of the battery pack.
- over-discharge and charge protection, protects battery life.

LiFePo4 Battery Module

- The heart of the entire battery pack, where all the power comes from.

Battery Bracket

- Easy to install, maintain battery balance.

Frosted Shell

- Aesthetic, non-slip.

Sheet Metal Frame

Internal Bracket

Fixing Bracket

Front Metal Enclosure

- Protects internal structure, customization.

Technical Specifications(BAT)

Model	PK-48300P-M	PK48400P-M
Nominal Voltage	48V/51.2V	48V/51.2V
Cell model/Configuration	3.2V 100Ah/15S3P 3.2V 100Ah/16S3P	3.2V 200Ah/15S4P 3.2V 200Ah/16S4P
Capacity(Ah)	300Ah/400Ah	
Rated Energy(KWH)	14.4KWH/15.36KWh	19.2KWH/20.48KWH
Usable Energy(KWH)	13.64/14.26KWH	18.4KWH/19.32kWH
Max. Charge/Discharge Current(A)	100-200A(Optional)	100-200A(Optional)
Voltage Range(Vdc)	43-53V	48-56.5V
Scalability	Up to 16 parallel	
Communication	RS232-PC,RS485(B)-BAT, RS485(A)-Inverter,Canbus-Inverter	
Cycle Life	≥7000cycles@25°C,90% DOD,60%EOL	
Design Life	≥15Years(25°C)	
MECHANICAL SPECIFICATIONS		
Weight[Approx](KG)	Approx: 125±1kg	Approx: 205±1.5kg
Dimension (W/D/H)(mm)	622*185*760 mm	920*730*220 mm
Installation Mode	Wall hanging/Ground	
IP Grade	IP21/IP65[Optional]	
MECHANICAL SPECIFICATIONS		
Safety(Pack)	IEC62619,UL1973,CE-EMC,CEI-021,UN38.3,MSDS	
Safety(Cell)	UN38.3,MSDS,IEC62619,CE,UL1973,UL2054	
Protection	BMS. Breaker	
ENVIRONMENTAL SPECIFICATIONS		
Operating Temperature(°C)	Charge:-10°C~50°C;Discharge:-20°C~50°C	
Altitude (m)	≤2000	
Humidity	≤95%(Non-condensing)	

Home Powerwall Battery Series

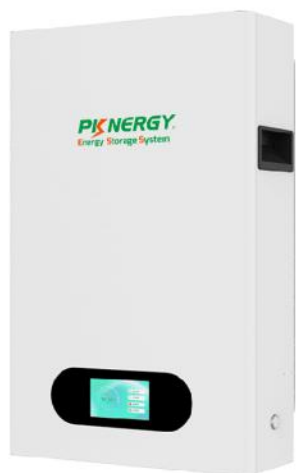


Technical Specifications(Invertreer)

Model	Pk-48100P-L	PK512100P-L
Nominal Voltage	25.6V(8series)/48V(15series)	51.2V(16series)
Cell model/Configuration	3.2V100Ah/8S2P(25.6V) 3.2V100Ah/15S1P(48V)	3.2V(100Ah)/16S1P(51.2V)
Capacity(Ah)	200AH/100AH	100AH
Rated Energy(KWH)	5.12KWH/4.8KWH	5.12KWH
Usable Energy(KWH)	4.6-4.8KWH	
Max. Charge/Discharge Current(A)	100-200A(Optional)	100-200A(Optional)
Voltage Range(Vdc)	23-28.5V/43-53V	48-56.5V
Scalability	Up to 16 parallel	
Communication	RS232-PC,TYPE-C(PC),RS485-Inverter,Canbus-Inverter	
Cycle Life	≥7000cycles@25°C,90% DOD,60%EOL	
Design Life	≥15Years (25°C)	
MECHANICAL SPECIFICATIONS		
Weight (Approx)(KG)	Approx:48kg	Approx:49kg
Dimension (W/D/H)(mm)	580*390*185 mm	
Installation Mode	Wall hanging	
IP Grade	IP21/IP65[Optional]	
SECURITY AND CERTIFICATION		
Safety(Pack)	CE-EMC,UN38.3,MSDS	
Safety(CeLL)	UN38.3,MSDS,IEC62619,CE,UL1973,UL2054	
Protection	BMS.Breaker	
ENVIRONMENTAL SPECIFICATIONS		
Operating Temperature(°C)	Charge:-10°C~50°C;Discharge:-20°C~50°C	
Altitude (m)	≤2000	
Humidity	≤95%(Non-condensing)	

Product Features

- 48V/51.2V LFP-based ESS, long life expectancy of 15+ years
- Cycle life is no less than 7000 cycles @90% DOD, warranty 10 years
- The highest IP level can reach IP65
- Integrated battery management system (BMS)
- Touch-screen LED display, support software customization



Home Powerwall Battery Series



Technical Specifications(BAT)

Model	PK-48200P-S	PK-512200P-S
Nominal Voltage	48V	51.2V
Cell model/Configuration	3.2V100Ah/15S2P	3.2V100Ah/16S2P
Capacity(Ah)	200AH	
Rated Energy(KWH)	9.6KWH	10.24KWH
Usable Energy(KWH)	8.64KWH	9.2KWH
Max. Charge/Discharge Current(A)	100-200A(Optional)	100-200A(Optional)
Voltage Range(Vdc)	43-53V	48-56.5V
Scalability	Up to 16 parallel	
Communication	RS232-PC,RS485(B)-BAT RS485(A)-Inverter,Canbus-Inverter	
Cycle Life	≥7000cycles@25°C,90% DOD,60%EOL	
Design Life	≥15Years (25°C)	
MECHANICAL SPECIFICATIONS		
Weight (Approx)(KG)	92kg	96kg
Dimension (W/D/H)(mm)	485*690*186mm	
Installation Mode	Wall hanging	
IP Grade	IP21/IP65[Optional]	
SECURITY AND CERTIFICATION		
Safety(Pack)	IEC62619,UL1973,CE-EMC,CEI-021,UN38.3,MSDS	
Safety(Cell)	UN38.3,MSDS,IEC62619,CE,UL1973,UL2054	
Protection	BMS,Breaker	
ENVIRONMENTAL SPECIFICATIONS		
Operating Temperature(°C)	Charge:-10°C~50°C;Discharge:-20°C~50°C	
Altitude (m)	≤2000	
Humidity	≤95%(Non-condensing)	

Product Features

- 48V/51.2V LFP-based HOME STORAGE, long life expectancy of 15+ years.
- Cycle life is no less than 7000 cycles @90% DOD, warranty 10 years
- Quick and Easy Installation, Maintenance-free
- Integrated battery management system (BMS)
- **Frosted metal case with custom color support (Upgradable to glass case)**

PK-48200P-S/PK-512200P-S



Home Powerwall Battery Series



Technical Specifications(BAT)

Model	PK-512130P-B
Nominal Voltage	51.2V
Cell model/Configuration	3.2V130Ah(BYD BLADE CELL)16S1P
Capacity(Ah)	130Ah
Rated Energy(KWH)	6.65KWH
Max.Charge/DischargeCurrent(A)	120-200A(Optional)
VoltageRange(Vdc)	43-53V
Scalability	Up to 16 parallel
Communication	RS232-PC,RS485(B)-BAT, RS485(A)-Inverter,Canbus-Inverter
Cycle Life	≥8000cycles@25°C,80%DOD,60%EOL
Design Life	≥15Years (25°C)
MECHANICAL SPECIFICATIONS	
Weight (Approx)(KG)	78kg
Dimension (W/D/H)(mm)	1080*430*141mm
Installation Mode	Wall hanging
IP Grade	IP21/IP65[Optional]
SECURITY AND CERTIFICATION	
Safety(Pack)	IEC62619,UL1973,CE-EMC,CEI-021,UN38.3,MSDS
Safety(CeLL)	UN38.3,MSDS,IEC62619,CE,UL1973,UL2054
Protection	BMS.Breaker
ENVIRONMENTAL SPECIFICATIONS	
Operating Temperature(°C)	Charge:-10°C~50°C;Discharge:-20°C~50°C
Altitude (m)	≤2000
Humidity	≤95%(Non-condensing)

Product Features

- 48V/51.2V LFP-BYD BLADE CELL HOME STORAGE,
- Cycle life is no less than 8000 cycles @80% DOD, warranty 12 years
- Integrated battery management system (BMS)
- Battery cell is Certificated with IEC/ UL/CEI-021/CE
- **BYD authorized blade cell, New design**

PK512130P-B



Home Powerwall Battery Series



Product Features

- 48V/51.2V LFP-based ESS, long life expectancy of 15+ years.
- Cycle life is no less than 7000 cycles @90% DOD, warranty 10 years
- Quick and Easy Installation, Maintenance-free.
- Integrated battery management system (BMS).
- Home appliance style design, thickness as low as 80MM

Multi-angle display of products

PK-24200T/PK-48100T/PK-512100T



Technical Specifications(BAT)

Model	PK-24200T/PK-48100T	PK-512100T
Nominal Voltage	25.6V(8series)/48V	51.2V(16series)
Cell model/Configuration	3.2V100Ah/8S2P(25.6V) 3.2V100Ah/15S1P(48V)	3.2V100Ah/16S1P(51.2V)
Capacity(Ah)	200AH/100AH	100AH
Rated Energy(KWH)	5.12KWH/4.8KWH	5.12KWH
Usable Energy(KWH)	4.6-4.8KWH	
Max. Charge/Discharge Current(A)	100-200A(Optional)	100-200A(Optional)
Voltage Range(Vdc)	23-28.5V/43-53V	48-56.5V
Scalability	Up to 16 parallel	
Communication	RS232-PC, TYPE-C(PC), RS485-Inverter, Canbus-Inverter	
Cycle Life	≥7000cycles@25°C,90% DOD,60%EOL	
Design Life	≥15Years(25°C)	
MECHANICAL SPECIFICATIONS		
Weight[Approx](KG)	Approx:47kg	Approx:48kg
Dimension (W/D/H)(mm)	900*650*80mm	
Installation Mode	Wall hanging	
IP Grade	IP21/IP65[Optional]	
MECHANICAL SPECIFICATIONS		
Safety(Pack)	CE-EMC,UN38.3,MSDS	
Safety(Cell)	UN38.3,MSDS,IEC62619,CE,UL1973,UL2054	
Protection	BMS. Breaker	
ENVIRONMENTAL SPECIFICATIONS		
Operating Temperature(°C)	Charge: -10°C~50°C; Discharge: -20°C~50°C	
Altitude (m)	≤2000	
Humidity	≤95%(Non-condensing)	

All-In-One Battery Series



All-in-one ON/Off-grid energy storage system

PK-51100-AIO-L/ PK-51200-AIO-L/ PK-51300-AIO-L



Technical Specifications(BAT&SYSTEM)

MODEL	PK-51100-AIO-L/PK-51200-AIO-L/PK-51300-AIO-L		
Nominal DC Voltage	51.2V		
Battery Capacity	100Ah	200Ah (100Ah*2)	300Ah(100Ah*3)
Energy(KWh)	5.12KWh	10.24KWh	15.36KWh
Maximum Discharging Current	100A		
Cycle Life	≥7000cycles@25°C,90% DOD,60%EOL		
Certification	UN38.3,MSDS,CE-EMC		
System General Data			
Temperature range	20-60°C		
Environment humidity	0-95%		
Dimensions (H*W*D) mm	985*630*205mm	1316*630*205mm	1648*630*205mm
Net Weight (kg)	75KG	120kg	180kg
Communication method	WIFI/4G		
Grid connection certification	CE-LVD:CE-EMC:EN50549-1/CEI-021:VDE4105/0124: G99:IEC61727/62116/61693:NA/EEA-NE7-CH2020		

Technical Specifications(Inverter)

Model	PK-HYB-3600	PK-HYB-5000	PK-HYB-6000
PV INPUT [DC]			
Recommend max.PV input power	8700Wp	10000 Wp	1000 Wp
Max. PV voltage	600V		
Min.operation/ Start-up Volloge	40V/50V		
Reled PV inaut wollage	360V		
No.ofindependent MPPTinputs/ strings	2/1		
Input/Output(AC)			
Max,AG input power from grid	8700VA	10000VA	11000VA
Raled AC oulpuf power	3680W	5000W	6000W
Max.AC oulpuf power	3680W	5000W	6000W
Rated AC volfrage	220V/230V/240V		
AC woiboge range	154V-276V		
Roled aid hegyanyo	50Hz/60Hz		
Grid Type	single phase		
Efficiency			
Ma,efficiency	97.50%	97.70%	
European efficiency	97%	97.3%	
Protection&Function			
Protection	DC reverse polarity/ AC short circuit/Leakage/ Battery input reverse polarity		
Surge Protection	DC type II/AC type II		
DC swith-PV /DC luse(battery)	Yes		
Battery input reverse polarity protection	Yes		
General Data			
imensions(W"H'D)	600*365*180mm		
Weight	≤20kg		
Degree of protection	IP65		
Operating ombient temperature range	-25°C-60°C.0-100%		
Max. operating allitude	4000m		
General Data			
Raled oulpuf power for back up load	6000 W		
Backup Data(off-grid model)			
Rated voltage	220V/230V/240V(±2%)		
requency range	50Hz/60Hz4(±0.5%)		
Rated output power	3680W/3680VA	5000W/5000VA	5000W/4000VA
Peak output power	8400VA,10s		

All-In-One Battery Series



Product Features

- Complete installation within 15 minutes;
- The system supports remote OTA upgrades;
- 10-40kWh available Battery Pack.
- Wide PV input range:40-600Vdc.
- High PV input power. 50% higher than competitors.
- Fully compatible with high load appliances such as: air condition unit, heat pumps, dryers.
- Build-in smart modes including self-consume, VPP,remote control etc., to maximize users' financial savings.
- Safety and Reliability:Integrated AFC, effective arcing detection.
- Effortless installation: Full-house backup, no alteration on consumer, plug-in terminals.
- UPS mode: Seamless transition to backup mode to assure an uninterrupted power supply.
- Cycle life is no less than 7000 cycles @90% DOD,0.5C.
- Battery cell is Certificated with IEC/UL.

Technical Specifications(BAT&SYSTEM)

MODEL	PK-512200-AIO-H/PK-512400-AIO-H	
Nominal DC Voltage	51.2V	
Battery Capacity	200Ah	400Ah(200Ah*2)
Energy(KWh)	10.24KWh	20.48KWh
Maximum Discharging Current	100A	
Cycle Life	≥7000cycles@25°C,90% DOD,60%EOL	
Certification	UN38.3,MSDS,CE-EMC,IEC62619,UL1973	
System General Data		
Temperature range	-20~60°C	
Environment humidity	0-95%	
Dimensions (H*W*D) mm	1300*620*212mm	1895*620*212mm
Net Weight (kg)	120KG	220KG
Communication method	WIFI/4G	
Grid connection certification	CE-LVD;CE-EMC;EN50549-1;CE1-021;VDE4105/0124; G99;IEC61727/62116/61683;NA/EEA-NE7-CH2020;	

Technical Specifications(Inverter)

Model	PK-HYB-360	PK-HYB-5000	PK-HYB-6000
PV INPUT [DC]			
Recommend max.PV input power	8700Wp	10000 Wp	1000 Wp
Max. PV voltage	600V		
Min.operation/ Start-up Volloge	40V/50V		
Reled PV inaut wollage	360V		
No.ofindependent MPPTinputs/ strings	2/1		
Input/Output(AC)			
Max,AG input power from grid	8700VA	10000VA	11000VA
Raled AC oulpuf power	3680W	5000W	6000W
Max.AC ouput power	3680W	5000W	6000W
Rated AC volgave	220V/230V/240V		
AC woiboge range	154V-276V		
Roled aid hegyanyoy	50Hz/60Hz		
Grid Type	single phase		
Efficiency			
Ma,efficiency	97.50%	97.70%	
European efficiency	97%	97.3%	
Protection&Function			
Protection	DC reverse polarity/ AC short circuit/Leakage/ Battery input reverse polarity		
Surge Protection	DC type II/AC type II		
DC swith[PV //DC luse(batery)	Yes		
Battery input reverse polarity protection	Yes		
General Data			
imensions(W"H"D)	600*365*180mm		
Weight	≤20kg		
Degree of protection	IP65		
Operating ombient temperature range	-25°C-60°C.0-100%		
Max. operating allitude	4000m		
General Data			
Raled ouput power for back up load	6000 W		
Backup Data(off-grid model)			
Rated voltage	220V/230V/240V(±2%)		
requency range	50Hz/60Hz4(±0.5%)		
Rated output power	3680W/3680VA	5000W/5000VA	5000W/4000VA
Peak output power	8400VA,10s		

High Voltage Battery Series



Technical Specifications(Invertretr)

Model	PK-20450HV-S	PK-30750HV-S	PK-40950HV-S	PK-51250HV-S
Nomingi Voltage	204.8V[64series]	307.2V[96series]	409.6V[128series]	512V[160series]
Cell model/Configuration	3.2V 50Ah/32s1P/102.4V 50Ah/5.12KWh			
Capacity(Ah)	50AH			
Rated Energy(KWH)	10.24KWh	15.36KWh	20.48KWh	25.6KWh
sable Energy[KWH]	9.21KWh	13.82KWh	18.43KWh	23.04KWh
Max. Charge/Discharge Curment(A)	25A/50A			
Voltage Range(Vdc)	180-228V	270-340V	350-450V	440-560V
Scalability	Up to 4 parallel			
Communication	RS232-PC,RS485-Inverter,Canbus-Inverter			
Cycle Life	≥7000cycles@25°C,90% DOD,60%EOL			
Design Life	≥15Years (25°C)			

Product Features

PK-HV-box Series, a High-voltage lithium battery. With a scalable modular design, the capacity range can be expanded from 10.24kWh to 102.4kWh. The installation and maintenance is easier and faster with free of cables between modules. Long life technology ensures more than 7000 cycles with 90% DOD.

PK-20450HV-S/PK-30750HV-S/PK-40950HV-S/PK-51250HV-S



Technical Specifications(BAT&SYSTEM)

Convenient	Compatible	Compliant
Stackable & compact design	Compatible with multiple inverters	Ip65 Protection
ease of installation	Multiple communication	indoor or outdoor application
Scalable	Sufficient	Safe
Use of Series connection	High energy density	Multiple protection
from 2 to 5 modules	110Wh/kg	LiFePO4 material, safe and long life

MECHANICAL SPECIFICATIONS

Weight (Approx)(KG)	Approx:130kg	Approx:180kg	Approx:230kg	Approx:280kg
Dimension (W/D/H)(mm)	636*185*1065	636*185*1418	636*185*1770	636*185*2122
Installafion Mode	Stack			
IP Grade	IP65			

SECURITY AND CERTIFICATION

Safety(Pack)	UN38.3,MSDS,IEC62619[CB],CE-EMC			
Safety(CeLL)	UN38.3,MSDS,IEC62619,CE,UL1973,UL2054			
Protection	BMS.Breaker			

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature(°C)	Charge:-10°C-50°C; Discharge:-20°C-50°C			
Humidity	≤95%(Non-condensing)			

Rack-Mounted Battery Series



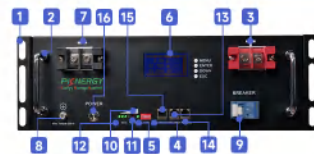
Product Features

- 48V/51.2V LFP-based ESS, long life expectancy of 15+ years.
- Cycle life is no less than 7000 cycles @90% DOD, warranty 10 years
- Integrated battery management system (BMS)
- Up to 25 parallel

Multi-angle display of products

No.	Item	Description
1	Battery Holder	For battery pack mounting
2	Handle	Handle for carrier
3	Battery +	Terminal M8 screw
4	Reset	Emergency Reset
5	ADS	Battery address
6	LCD	Display battery information
7	Battery -	Terminal M8 screw
8	GND	GND Connection for safety
9	breaker	breaker

10	RUN	Run LED display
11	ALM	Alarm LED display
12	soc	Capacity remaining display
13	RS485A	Communication port with inverter
14	RS485B	Communication port with inverter
15	RS232A	Communication port with PC
16	ONOFF Switch	Internal communication between packs



Technical Specifications(BAT)

Model	PK48100R/PK512100R	PK48200R/PK512200R
Cell model/Configuration	3.2V 100Ah/15S1P 3.2V 100Ah/16S1P	3.2V 200Ah/15S2P 3.2V 200Ah/16S2P
Voltage(V)	48V/51.2V	
Capacity(Ah)	100AH	200AH
Rated Energy[KWH]	4.8/5.12KWH	9.6/10.24WH
Usable Energy[KWH]	4.6KWH	9.45KWH
Max.Charge/Discharge Current(A)	100-200A(Optional)	
Voltage Range(V dc)	43-53V/48-56.5V	
Scalability	Up to 25 parallel	
Communication	RS232-PC,TYPE-C(PC).RS485-Inverter,Canbus-Inverter	
Cycle Life	≥7000cycles@25°C,90% DOD,60%EOL	
Design Life	15Years(25°C)	
MECHANICAL SPECIFICATIONS		
Weight[Approx](KG)	48kg	92kg
Dimension (W/D/H)(mm)	483*480*133mm	483*620*225mm
Installation Mode	Stack	
IP Grade	IP21/Optional	
MECHANICAL SPECIFICATIONS		
Safety(Pack)	UN38.3,MSDS,IEC62619 CE-EMC,UL1973	CE-EMC,UN38.3,MSDS
Safety(Cell)	UN38.3,MSDS,IEC62619 CE,UL1973,UL2054	UN38.3.MSDS
Protection	BMS. Breaker	
ENVIRONMENTAL SPECIFICATIONS		
Operating Temperature(°C)	Charge: -10°C~50°C; Discharge: -20°C~50°C	
Altitude (m)	≤2000	
Humidity	≤95%(Non-condensing)	

BESS



High energy storage battery series

- Highly integrated: Productized system, integrating energy storage battery.
- PCs and power distribution, temperature control fire extinguishing, water immersion door magnetic and monitoring communication to fully control the operating status and risks of the system.
- Flexible parallel functions: with patent technology of VSG features and functions, can realize the functions of multiple equipment remotely parallel and on/off grid switching without communication lines.
- Excellent protection: Patent outdoor cabinet protection design, optimizing heat dissipation and air ventilation, prevent dust and rain. Front back and two sides with door for maintenance, easy to make multiple sets of systems side by side deployment on site, saving the floor space.
- Various functions: Standardized structure design, menu function configuration, solar charging module [DC-DC], and on/off grid switching module, isolation transformer and other components can be selected flexibly and efficiently under micro-grid and other applications.
- Space saving: Door mounted integrated air conditioning, does not occupy cabinet space, improving the available space of outdoor cabinet, keep top structure integrity, results in better waterproof effects.
- Intelligent management: Local monitoring screen can realize various functions such as system operation monitoring, energy management formulation and remote software upgrade of equipment.

Model	PK-ESS-90	PK-ESS-107	PK-ESS-180	PK-ESS-197	PK-ESS-215
BATTERY(DC)					
Nominal Voltage	320V	384V	640V	704V	768V
Capacity(Ah)	280AH	280AH	280AH	280AH	280AH
Rated Energy(KWH)	89.6KWh	107.52KWh	179.2KWh	197.12KWh	215.04KWh
Cycle Life	6000cycles@25°C,90% DOD,60%EOL				
PVINPUT (DC)					
Recommend PV input power	50KWp		100KWp		
Number of MPPT	2/1		4/2		
MPPT Voltage range	200-600V				
AC Power(AC)					
Rated AC output power	50KW		100KW		
Maximum AC Current	72A		144A		
Rated AC voltage	400V,3W+N+PE/3W+PE				
AC voltage Range	154V-276V				
Rated grid frequency	50Hz/60Hz				
Grid Type	Three phase				
Overload capability	110%,10min/120%,1min				
PF	-1.0cap-1.0ind				
THDI	<3%				
General data					
Environmental temperature	-25-60°C(Derating above 45°C)				
Relative humidity	0-95%non-condensing				
Protection degree	IP54				
Noise emission(DB)	≤70db				
Isolation transformer	Optional				
Cooling	Forced-air				
Display	Touch screen LCD				
Communication interface	Ethernet/Can-bus				
Altitude	3000m(derating exceeding 2000m)				
Dimension[mm]	1200*1355*2150mm			1850*1355*2150mm	
Weight[kg]	1620kg	1750kg	2140Kg	2270Kg	2400Kg



High energy storage battery series

Model	PK-384/280HV-R	PK-448/280HV-R	PK-512/280HV-R	PK-576/280HV-R	PK-640/280HV-R	PK-704/280HV-R	PK-768/280HV-R
Nominal Voltage	384V	448V	512V	576V	640V	704V	768V
Cell model/Configuration	3.2V280Ah(EVE)/120S1P	3.2V280Ah(EVE)/140S1P	3.2V280Ah(EVE)/160S1P	3.2V280Ah(EVE)/180S1P	3.2V280Ah(EVE)/200S1P	3.2V280Ah(EVE)/220S1P	3.2V280Ah(EVE)/240S1P
Capacity[Ah]	280AH	280AH	280AH	280AH	280AH	280AH	280AH
Rated Energy(KWH)	107.52KWH	125.44KWH	143.36KWH	161.2BKWH	179.2KWH	197.12KWH	215.04KWH
Weight[Approx](KG)	820kg	960kg	1080kg	1200kg	1350kg	1500kg	1650kg
Dimension [W/D/H](mm)	1992*950*550mm	2250*950*550mm	1475*950*1100mm	1475*950*1100mm	1732*950*1100mm	1732*950*1100mm	1992*950*1100mm
Voltage Range[Vdc]	350-425V	410-495V	470-560V	520-640V	580-710V	640-770V	695-840V
Max.Charge Dis-charge Current (A)	140A/140A						
Scalability	Upto 15 parallel						
Communication	RS485(B)-BAT, RS485(A)-PC, Canbus-Inverter						
Cycle Life	≥6000cycles@25°C,90% DOD,60%EOL						
Design Life	≥15Years (25°C)						
Protection	Bms,Breaker						
Operating Temperature (°C)	Charge:-10°C-50°C;Discharge:-20°C-50°C						
Altitude (m)	≤2000						
Humidity	≤95%(Non-condensing)						





120KW Hy-Grid Solar System In Thailand



BESS Container



14MW Hy-Grid Solar System



70KW Residential Use in Singapore



20KW Hy-Grid Solar System In Indonesia



Base station UPS power projects



100KW On-grid Solar System in Hungary



20KW Residential Use in USA



Head Office

SHENZHEN PKNERGY ENERGY CO., LTD
Address
 7th Floor , block B, Yicheng Huanzhi center, Renmin Road,Longhua District, Shenzhen,China
Tel
 86-755-86670672
 www.pknergy.com
 WWW.pknergypower.com

USA Branch Office

FUSPOWER INC(USA)
Address
 4650 Arrow Hwy Ste E6/7, Montclair, Ca,91763
Tel
 +1-909-971-3484
Fax
 +1-909-971-3483

Canada Branch Office

DURNERGY Inc.
Address
 Unit #11, 270 Esna Park Dr., Markham, ON L3R 1H3, Canada
Tel
 +1-(905) 604-7556
Fax
 +1-(905) 604-7559

Lebanon Agent Office

Address
 607 warehouse street, Antelias Mizher, elMetin, Lebanon
TEL
 +(961)0370087172
FAX
 +(961)0370087172

Chile Branch Office

Address
 Av. Kennedy N° 6800 Of 610A Vitacura, Santiago, Chile
Tel
 +56 965073589
Fax
 +56 965073589



