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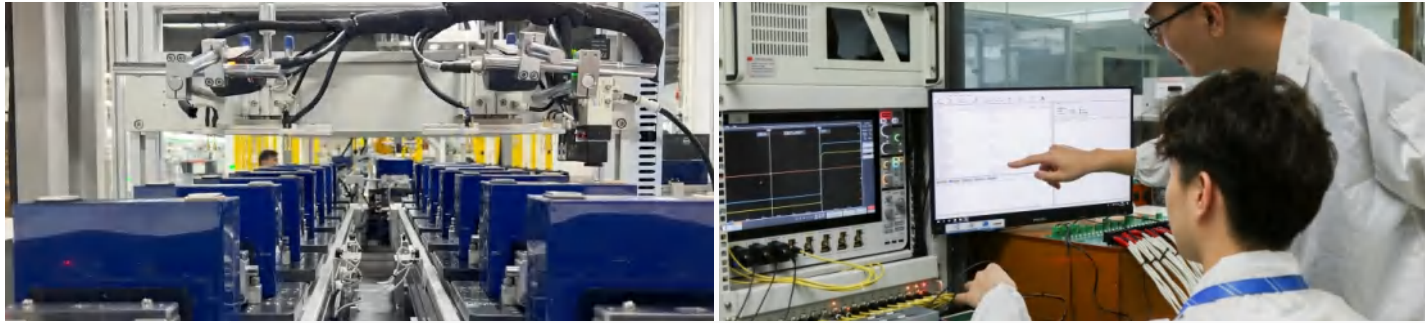


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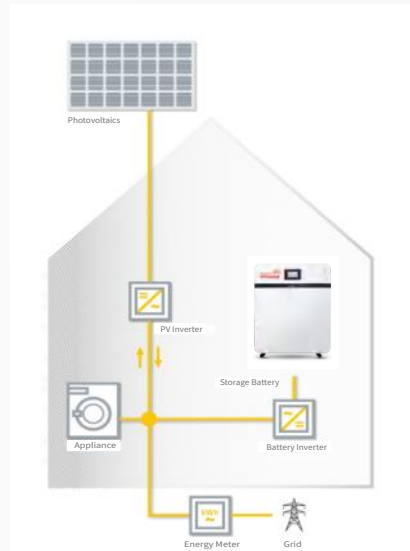
**Shenzhen Litu New Energy
Technology Co.,Ltd.**

YOUTH POWER • INFINITE ENERGY



TIER-ONE SUPPLIER FOR YOUR APPLICATIONS

YOUTHPOWER is a leading high-tech multinational company based in DongGuang, China. Since its establishment in 2003, developed re-chargeable battery packs for all market segments and products that use batteries or want to be independent of a power outlet. YOUTHPOWER has successfully expanded its renewable energy solutions globally with operations in over 50 countries and regions. After about 20 years' development, YOUTHPOWER has created series of affordable solar power generation reliable products offgrid, hybrid and all in one ESS. YOUTHPOWER is your tier-one supplier of lithium-ion applications like large energy storage systems, power packs for busses, forklifts, e-boats, as well as solar storage inverter projects.



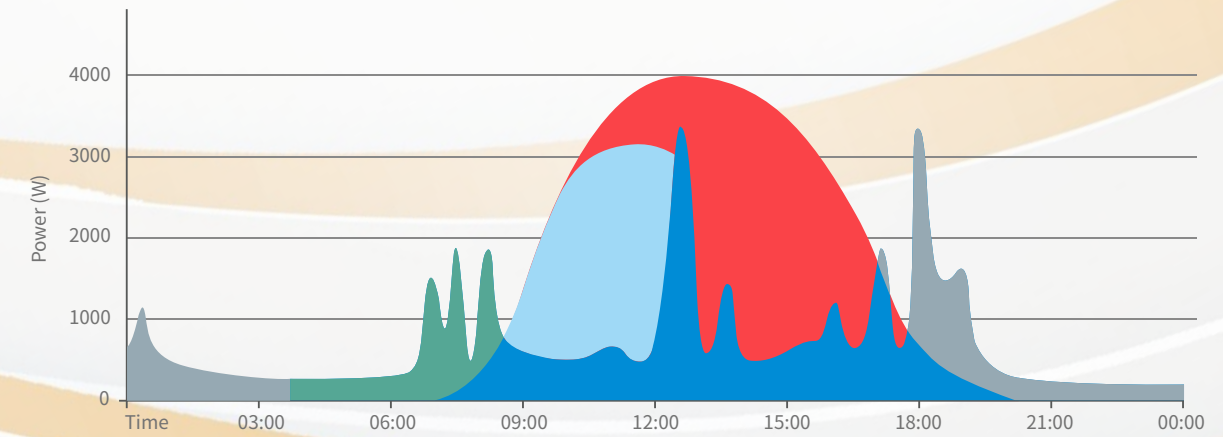
YOUTHPOWER ENERGY STORAGE SYSTEMS TAKE YOU ON THE BRIGHT SIDE

Our highly innovative energy storage systems (ESS) make solar power users independent of energy prices and able to use solar energy they collect at the time they need it. Our intelligent, modular lithium-ion energy storage units save the photovoltaic energy you collect so it is at your disposal during night time or when there is low solar radiation. While the sun is shining an inverter allows you to choose between charging up your storage unit or enables your solar power to be fed into the power grid.

REDUCE YOUR ENERGY COSTS SMARTLY

YOUTHPOWER's ESS enables you to become more independent from your electric power supplier since you can use your own electricity 24 hours a day. You can reduce your electricity bill by using solar power stored in your ESS instead of drawing power from the grid. The next time your electric company raises the energy price you can relax.

DAY PROFILE OF SELF CONSUMPTION AND PV-GENERATION WITH PHOTOVOLTAICS



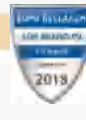
- Natural self-consumption: Photovoltaic plants with an Energy Storage System of YOUTHPOWER supply as first the current loads.
- Storage: Excess solar power will be stored in YOUTHPOWER Energy Storage System.
- Self-consumption via a storage unit: and if it's necessary it will be later used
- PV-generation: If the YOUTHPOWER storage unit is full, excess solar power will be feed into the grid.
- Purchase of electricity: In case that the power of Photovoltaic plant and the battery storage does not cover the current energy consumption, energy from public grid must be obtained.

ENERGY STORAGE SOLUTIONS WHICH MAKES YOU INDEPENDENT YOUR BENEFITS AT A GLANCE:

- 1)Optimal self-consumption during day & night
- 2)Independence from solar radiation and public grid
- 3)Economic, cost-cutting and ecofriendly
- 4)Lightweight, safe and space saving
- 5)Modular installation: the storage capacity can be adapted to your needs

ADVANTAGES:

With our innovation and reliability,
YouthPOWER gain a lot of quality recognition.



Reliable For Longer Life

Working with A grade automotive lifepo4 cells
8000 cycles. Lifecycle for whole battery pack at
6000 cycles.



Safety Certification Guarantee

All products are working with UL1642 qualified
material, most items have been certified
according to international standards including
IEC, UL, CE, EMC.



Modular Design

All battery storage systems feature a modular
design to provide maximum flexibility.



Automotive Standard Battery

YouthPOWER works with automotive standard
cell 3C rate, brings the highest safety and
performance standard to residential and
commercial storage battery solutions.



10 Years Warranty

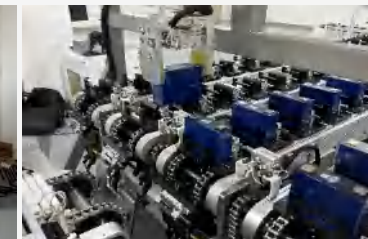
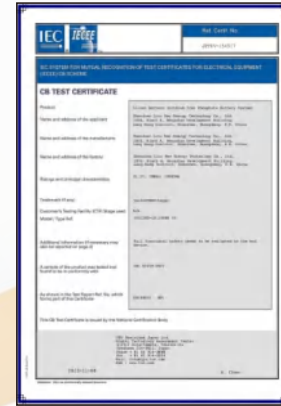
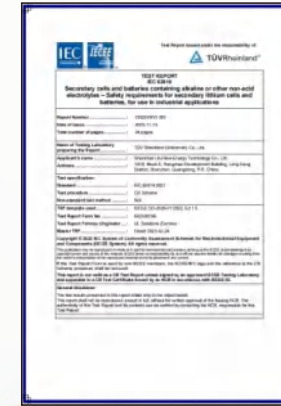
YouthPOWER provides 10 years
performance warranty



High Performance

Award winning performance and
efficiency levels

CERTIFICATE:





25.6V LITHIUM-ION BATTERY 100-300AH

- Max support 14 units parallel connection
- High integrated with less installation
- Space match with all off-grid 24v inverter
- Long cycle life 6000 cycles
- 100/200 A protection

Product Specification

Model No.	YP-24100-2.56KWH	YP-24200-5.12KWH	YP-24300-7.68KWH
Voltage	25.6V	25.6V	25.6V
Combination	8S2P	8S4P	8S6P
Capacity	100AH	200AH	300AH
Energy	2.56KWH	5.12KwH	7.68KwH
Weight	30Kg	62Kg	90Kg
Chemistry	Lithium Ferro Phosphate (Lifepo4) Safest Lithium Ion, No fire risk		
BMS	Built - in Battery Management System		
Connectors	Waterproof connector		
Dimension	680*485*180mm		
Cycles (80% DOD)	6000 cycles		
Depth of discharge	Upto 100%		
Lifetime	10 Years		
Standard charge	Constant current: 20A		
Standard discharge	Constant current: 20A		
Maximum continuous charge	100A/200A		
Maximum continuous discharge	100A/200A		
Operation temperature	Charge: 0-45°C, Discharge: -20-55°C,		
Storage Temperature	Keep at -20 to 65°C,		
Protection standard	Ip21		
Operation voltage	20-29.2 VDC		
Max.charging voltage	29.2 VDC		
Memory effect	None		
Maintenance	Maintenance free		
Compatibility	Compatible with all standard offgrid inverters and charge controllers. Battery to inverter output sizing keep 2:1 ratio.		
Warranty Period	warranty 5-10 years		
Remarks	Youth Power 24V wall battery BMS must be wired in parallel only. Wiring in series will void the warranty. Allow max. 4 units in parallel to expand more capacity.		



YouthPOWER Mini Wall Box 48V / 51.2V 100AH

- Working with ANC A grade lifepo4 cells with 8000 cycles.
- Battery pack 6000 cycles .
- Mini size but powerful storage inside.
- 95A max. protection with cheaper price.

Product Specification

Model No.	YP MW48100-4.8KWH	YP MW51100-5.12KWH
Voltage	48V	51.2V
Combination	15S2P	16S2P
Capacity	100AH	
Energy	4.8KWH	5.12KWH
Weight	45KG	50KG
Chemistry	Lithium Ferro Phosphate (Lifepo4) Safest Lithium Ion, No fire risk	
BMS	Built - in Battery Management System	
Connectors	Standard Input/Output Terminal	
Dimension	580*390*180mm	
Cycles (80% DOD)	6000 cycles	
Depth of discharge	Upto 100%	
Life time	10 years	
Standard charge	50A	
Standard discharge	50A	
Maximum continuous charge	95A	
Maximum continuous discharge	95A	
Operation temperature	Charge : 0~45°C, Discharge: -20~55°C	
Storage Temperature	Keep at -20 to 65°C	
Protection standard	Ip21	
Cut off voltage	40.5V	43.2V
Max.charging voltage	54.75V	58.4V
Memory effect	None	
Maintenance	Maintenance free	
Compatibility	Compatible with all standard offgrid inverters and charge controllers. Battery to inverter output sizing keep 2:1 ratio.	
Warranty Period	5-10 Years	
Remarks	Youth Power battery BMS must be wired in parallel only. Wiring in series will void the warranty.	



Low Voltage Hybrid / Off-grid Solar Wall Battery

- Waterproofing Grade: Ip65
- Support bluetooth & Wifi connection right now with mobile APP
- Slim thickness less than 15cm
- Easy to install, operate & maintain



Product Specification

Item	General Parameter	Remark
Model Number	YP WT10KWH16S-001	
Combination method	16S2P	
Rated Capacity Typical	200Ah	Standard discharge after Standard charge package
Type / Model	51.2V200Ah, 10.24 KWH	
Rated capacity	10.24 KWH	
Nominal voltage	51.2V DC	
Voltage at end of Discharge	Single Cell 2.7V, Pack 43.2V	Discharge Cut-off Voltage
Recommended charging voltage by manufacturer	57.6V or 3.60V/cell	Volta-meter (Serial*3.60V) ,Battery pack safe charging voltage
Internal Impedance	=40mO	Under 20±5°C Environment Temperature , the Usage Frequency of Fully Charge(1KHz) , Use AC Internal Impedance test machine to test 20±5°C
Standard charge	80A	
Max Charging Current(Icm)	100A	Ampere-meter ,Maximum allowable continuous charging current of the battery pack
Upper limit charging voltage	58.4V or 3.65V/cell	Volta-meter (Serial*3.65V) ,Battery pack safe charging voltage
Standard discharge	80A	
Max continuous Discharging current	100A	Maximum continuous discharge current allowed by the battery pack
Discharge Cut-off voltage(Udo)	43.2V	Voltage of the battery when the discharge stopped
Operation Temperature Range	Charge :0~50°C Discharge : -20~55°C	
Storage Temperature Range	-20°C~35°C	Recommend (25±3°C) ; =90%RH storage moisture range. =90%RH
Battery system Size/Weight	L798*W512*H148mm /102±3kg	Including Handle Size
Packing size	L870*W595*H245 mm	



Low Voltage Hybrid / Off-grid Solar Wall Battery

- Fashionable design
- BMS 100/200A available
- Vertical Industry Integration ensures over 6000 cycles
- Compatible with most of hybrid inverter
- Communication protocols: CAN, RS485, RS 232
- EV-Car style inner battery structure for longer cycles.



Product Specification

Model No	YP48100-4.8KWH V2 YP51100-5.12KWH V2	YP48150-7.2KWH V2 YP51150-7.68KWH V2	YP48200-9.6KWH V2 YP51200-10.24KWH V2
Nominal Parameters			
Voltage	48 V/51.2V	48 V/51.2V	48 V/51.2 V
Capacity	100 Ah	150 Ah	200Ah
Energy	4.8 /5.12 KwH	7.2/7.68 KwH	9.6 /10.24 KwH
Dimensions (L x W x H)	740*530*200mm	740*530*200mm	740*530*200mm
Weight	66/70kg	83/90 kg	101/110 kg
Basic Parameters			
Life time(25°C)	10 Years		
Life cycles(80% DOD, 25°C)	6000 Cycles		
Storage time & temperature	5 months @ 25°C; 3 months @ 35°C; 1 month @ 45°C		
Lithium Battery Standard	UL1642(Cell), IEC62619.UN38.3, MSDS ,CE,EMC		
Enclosure protection rating	IP21		
Electrical Parameters			
Operation voltage	48 Vdc		
Max. charging voltage	54 Vdc		
Cut-off Discharge Voltage	42 Vdc		
Max. charging and discharging current	100A(4800W)	120A(5760W)	120A(5760W)
Compatibility	Compatible with all standard offgrid inverters and charge controllers. Battery to inverter output sizing keep 2:1 ratio.		
Warranty Period	5-10 Years		
Remarks	Youth Power wall battery BMS must be wired in parallel only. Wiring in series will void the warranty.		
Finger Touch Version	Available only for 51.2V 200AH, 200A BMS		



YouthPOWER 14.3KWH Lithium Battery Storage 51.2V 280AH

- Perfect Compatibility: Compatible with most inverter brands on the market.
- Premium Cell: Tier one new Grade A only.
- Fast Installation: Plug & Play battery interface.
- Compact Design: Mobile type with small footprint.
- Safety: BMS & Breaker modular level protection.
- Long Life: 10,000 cycles long working life.
- Finger Touch LCD & BT Connection.

Product Specification

MODEL	YP-TH-51205-M	YP-TH-51280-M
Electrical Characteristics		
Rate voltage(Vdc)	51.2	
Cell combination(SIP)	16	
Rate capacity(AH)	205	280
Energy storage(KWH)	10.5	14.3
Cycle life	10000 cycles @80% DOD, 0.5C	
Charge/Discharge Standard		
Charge voltage(V)	56	
Max.charge current(A)	100(Optional 150/200A for 205/280AH pack)	
Max.discharge current(A)		
Discharge cut-off voltage(VDC)	43.2	
Charge cut-off voltage(VDC)	58.4	
Enviornment		
Charge temperature	0℃ to 50℃@60±25% Relative Humidity	
Discharge temperature	-20℃ to 50℃@60±25% Relative Humidity	
Storage temperature	-20℃ to 50C@60±25% Relative Humidity	
Mechanical		
IP class	IP20	
Material system	LiFePO4	
Case material	Metal	
Case type	Mobile Power	
Pack dimension L*W*H(mm)	622*520*221	766*520*221
Package dimension L*W*H(mm)	722*695*328	866*695*328
Net weight(kg)	92	115
GrosS weight(kg)	112	135
Communication		
Protocol(Optional)	CANBus/RS485/RS232	
Monitoring	Bluetooth/WLAN Optional	
Certificates		
Pack	UN38.3, MSDS	
Cell	UN38.3,MSDS,IEC62619,CE, UL1973, UL2054	



16KWH LiFePO4 Power Wall Battery 51.2V 314AH

- 16kWh LiFePO4 Big Capacity & LED Display
- 200A Fast Charge/Discharge (Safe High-Rate)
- 15-Year Lifespan, Safe & Reliable
- Plug-and-Play & Wheels Design, Easy Use & Space-Saving
- Flexible Expansion (Up to 15 Units)
- Works with Most Inverters



Product Specification

MODEL	YP51314-16KWH
Rate voltage(Vdc)(Vdc)	51.2
Rate energy(KWh)	14.3/16.07
Rate capacity(AH)	280/314
Cell combination	16S1P
Cycle life	25±2℃,0.5C/0.5C, EOL70%≥6000
Max. charge current(A)	200A
Max. discharge current (A)	200A
Discharge cut-off voltage(VDC)	43.2
Charge aut-off voltage(VDC)	57.6
Charge temperature	0℃~55℃
Discharge temperature	-20℃~55℃
Storage temperature	-20℃~50℃@60±25% Relative Humidity
IP class	IP65
Material system	LiFePO4
Case material	Metal
Case type	Mobile Power
Product dimension L*W*H(mm)	1065*460*271
Net weight(kg)	123kg
Protocd(Optional)	CAN/RS485/RS232
Monitoring	Bluetooth/WLAN Optional
Certificates	UN38.3, MSDS



20KWH SOLAR ESS

- Finger touch lcd applied
- 200A smart BMS protection
- RS485 & CANBUS applied
- Wheels standing for easy installation



Product Specification

Model No	YP51400 20KWH
Nominal Parameters	
Voltage	51.2V
Material	Lifepo4
Capacity	400Ah
Energy	20.48Kwh
Dimensions (L x W x H)	230*845*1033mm
Weight	198KG
Basic Parameters	
Life time(25° C)	Expected Life time
Life cycles(80% DOD, 25° C)	6000 Cycles
Storage time / temperature	5 months @ 25° C; 3 months @ 35° C; 1 month @ 45° C
Operation temperature	- 20° C to 60° C @60+/-25% Relative Humidity
Storage temperature	0° C to 45° C @60+/-25% Relative Humidity
Lithium Battery Standard	UL1642(Cell), IEC62619, UN38.3, MSDS, CE-EMC
Enclosure protection rating	IP21
Electrical Parameters	
Operation voltage	51.2 Vdc
Max. charging voltage	58 Vdc
Cut-off-Discharge Voltage	46 Vdc
Max, charging and discharging current	200A
Compatibility	Compatible with all standard off grid inverters and charge controllers. Battery to inverter output sizing keep 2: 1 ratio.
Warranty Period	warranty 5-10 years
Remarks	Youth Power battery BMS must be wired in parallel only. Wiring in series will void the warranty.

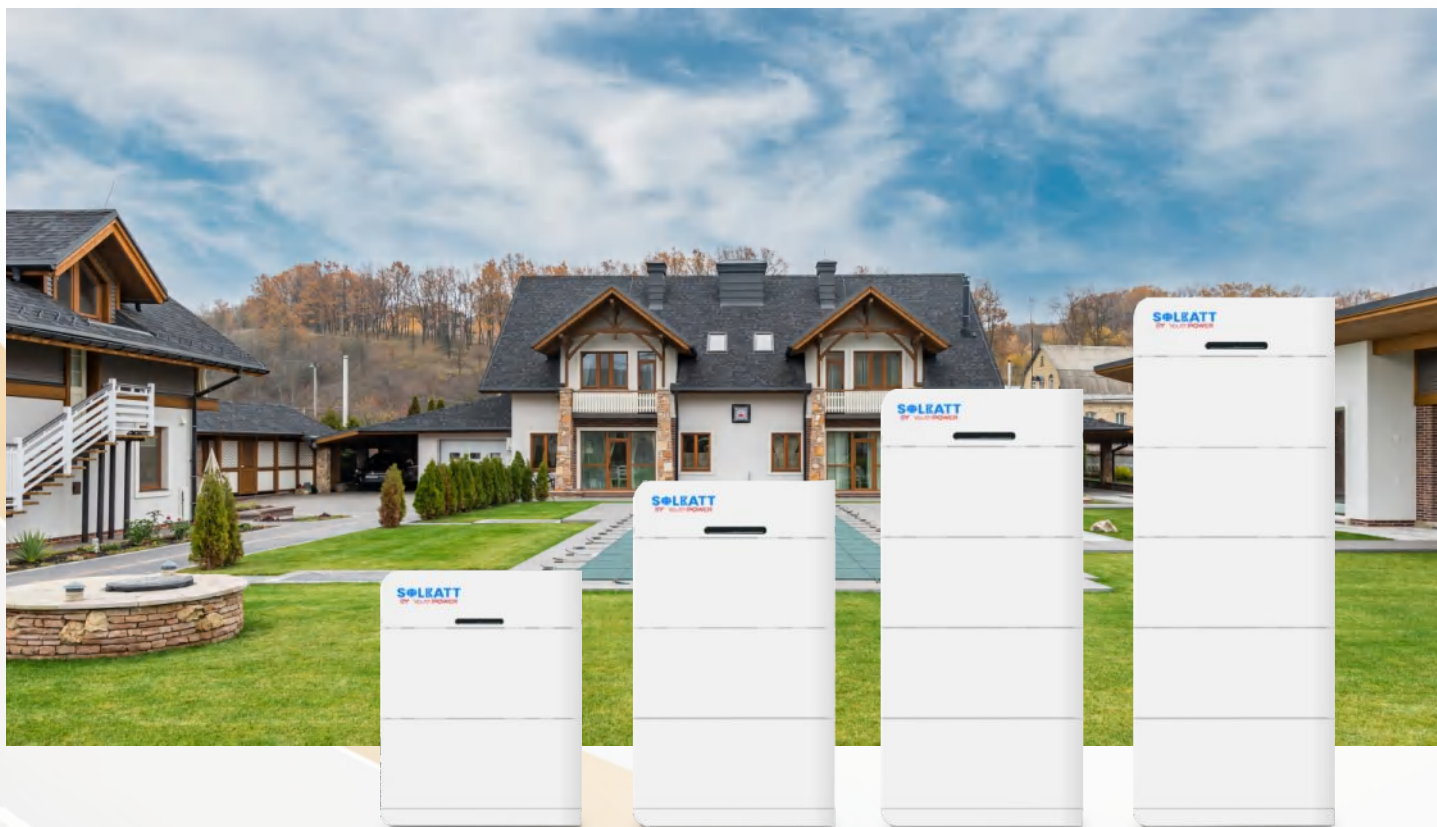


YouthPOWER 51.2V LV Stackable Battery Storage Series

- Perfect Compatibility: Compatible with most inverter brands available on the market.
- Compact Design: Small footprint, 640*205mm size.
- Fast Installation: Plug & Play battery interface/Plug in modular design.
- Flexible investment: Up to 20KWH per system and supporting up to 5 parallel configurations.
- Safety: BMS & Breaker modular level protection.
- Long Life: 6000+ cycles, long working life.

Product Specification

MODEL	YP-SS-51LVP2	YP-SS-51LVP3	YP-SS-51LVP4
Electrical Characteristics			
Rate voltage(Vdc)		51.2	
Energy storage(KWH)	10.24	15.36	20.48
Cycle life	6000 cycles @80%DOD,0.5C		
Months self discharge	≤2%		
Charge/Discharge Standard			
Charge voltage(V)		56	
Max.charge current(A)		100	
Max.discharge current(A)		100	
Discharge cut-off voltage(VDC)		43.2	
Charge cut-off voltage(VDC)		58.4	
Enviornment			
Charge temperature	0C to 50℃@60±25%Relative Humidity		
Discharge temperature	-20℃ to 50℃@60±25%Relative Humidity		
Storage temperature	-20℃ to 50℃@60±25%Relative Humidity		
Mechanical			
IP class		IP65	
Case type		Stand Stack	
Pack dimension L*W*H(mm)	640*205*897	640*205*1239	640*205*1581
Package dimenson L*W*H(mm)	760*335*450*2	760*335*450*3	760*335*450*4
	705*395*240*1	705*395*240*1	705*395*240*1
Net weight(kg)	14+48*2	14+48*3	14+48*4
GrosS weight(kg)	21+53*2	21+53*3	21+53*4
Communication			
Protocol(Optional)		CANBus/RS485/RS232	
Monitoring		Bluetooth/WLAN Optional	
Certificates			
Cel		UN38.3,MSDS	
Pack		UN38.3,MSDS,EC62619,CE,UL1973,UL2054	
Others			
15S(48V)models also available			



YP BOX HV10KW-25KW

- Support a variety of communications, can communicate with a variety of inverters;
- Products cover 10-25KWH capacity segment;
- The product supports parallel connection and expansion;
- Simple appearance design, easy installation;
- With heating and bluetooth function



Product Specification

MODEL	YP BOX HV10KW	YP BOX HV15KW	YP BOX HV20KW	YP BOX HV25KW
Rate Voltage (Vdc)	192	288	384	480
Cell Combination (S1P)	30S1P*2S	30S1P*3S	30S1P*4S	30S1P*5S
Rate Capacity (AH)	50			
Energy Storage (KWH)	9.6	14.4	19.2	24
Cycle Life	25±2°C , 0.5C/0.5C , EOL 70% ≥6000			
Charge Voltage (V)	210	315	420	525
Max. Charge Current (A)	50			
Max. Discharge Current (A)	50			
Discharge Cut-Off Voltage (VDC)	162	243	324	405
Charge Cut-Off Voltage (VDC)	216	324	432	540
Charge Temperature	0°C ~ 50°C@60 ± 25% Relative Humidity			
Discharge Temperature	-20°C ~ 50°C@60 ± 25% Relative Humidity			
Storage Temperature	-20°C ~ 50°C@60 ± 25% Relative Humidity			
IP Class	IP65			
Material System	LiFePO4			
Case Material	Metal			
Case Type	Stand Stack			
Product Dimension L*W*H (mm)	680*185*1035	680*185*1425	680*185*1815	680*185*2205
Package Dimension L*W*H (mm)	780*295*450*3	780*295*450*4	780*295*450*5	780*295*450*6
Net Weight (kg)	14+49*2	14+49*3	14+49*4	14+49*5
Gross Teight (kg)	21+53*2	21+53*3	21+53*4	21+53*5
Protocol (Optional)	CAN/RS485/RS232			
Monitoring	Bluetooth/WLAN Optional			
Certificates	UN38.3, MSDS, CE-EMC, IEC62619, 63056			



19 INCH RACK UNIT BATTERY MODULES

- Offers up to 10 times longer cycle life and 5 times longer calendar life than lead acid.
- 40% of the weight of a comparable lead acid battery.
- Delivers twice power of lead acid battery, even higher discharge rate.
- Without risk of explosion or fire for safety use.
- No memory effect.



Product Specification

Model No.	YP 3U-24100	YP 2U-4850 YP 2U-5150	YP 4U-48100 YP 4U-51100	YP 5U-48150 YP 5U-51150	YP 5U-48200 YP 5U-51200
Voltage	25.6V	48V/51.2V			
Combination	8S1P	15S/16S 1-4P			
Capacity	100AH	50AH	100AH	150AH	200AH
Energy	2.56KWH	2.4KWH	5KWH	7KWH	10KWH
Weight	27KG	23/28KG	46/49KG	64/72KG	83/90KG
Cell	3.2V 50AH & 100AH UL1642				
BMS	Built - in Battery Management System				
Connectors	Waterproof connector				
Dimension	430*420*133mm	442x480x88mm	483x460x178mm	483x620x178mm	483x680x178mm
Cycles (80% DOD)	6000 cycles				
Depth of discharge	Upto 100%				
Lifetime	10 years				
Standard charge	20A	20A	50A	50A	50A
Standard discharge	20A	20A	50A	50A	50A
Maximum continuous charge	100A	50A	100A	100A	120A
Maximum continuous discharge	100A	50A	100A	100A	120A
Operation temperature	Charge: 0-45℃, Discharge: -20--55℃				
Storage temperature	Keep at -20 to 65℃				
Protection standard	Ip21				
Cut off voltage	45V				
Max.charging voltage	54V				
Memory effect	None				
Maintenance	Maintenance free				
Compatibility	Compatible with all standard oifgrid inverters and charge controllers. Battery to inverter output sizing keep 2:1 ratio.				
Warranty Period	5-10 Years				

Remarks
Youth Power rack battery BMS must be wired in parallel only.
Wiring in series will void the warranty.
Allow max, 14 units in parallel to expand more capacity.



LOW VOLTAGE UPS RACK CABINET BATTERY

- Offers up to 10 times longer cycle life and 5 times longer calendar life than lead acid.
- 40% of the weight of a comparable lead acid battery.
- Delivers twice power of lead acid battery, even higher discharge rate.
- Without risk of explosion or fire for safety use.
- No memory effect.



Product Specification

Model	YP LV20KWH ESS	YP LV30KWH ESS	YP LV40KWH ESS	YP LV50KWH ESS
Battery				
Normal Voltage	48V/51.2V	48V/51.2V	48V/51.2V	48V/51.2V
Single Battery Module	100-200AH	100-200AH	200AH	200AH
Typical Capacity	400AH	600AH	800AH	1000AH
Combination	2-4 Battery Modules	3 Battery Modules	4 Battery Modules	5 Battery Modules
Energy	20KWH	30KWH	40KWH	50KWH
Cycle Life	Over 5000 cycles @ 80% DOD, 0.5C, Over 4000 cycles @95% DOD, 0.5C			
Design Life	warranty 5-10 years			
Charge Cut-Off Voltage	56V	56V	56V	56V
Discharge Cut-Off Voltage	42V	42V	42V	42V
Maximum Continuous Charge Current	200A	300A	400A	500A
Maximum Continuous Discharge Current	200A	300A	400A	500A
Charge Temperature Range	0-60 Degree			
Discharge Temperature Range	-20-60 Degree			
System Parameters				
Dimension :	680*860*1000mm	680*860*1200mm	680*860*1600mm	680*860*1800mm
Net Weight (KG)	300KG	380KG	450KG	580KG
Protocol (Optional)	RS232-PC, RS485(B) - PC, RS485 (A) - Inverter, CANBUS-Inverter			
Certification	IEC62619, UN38.3, MSDS, UL1642			
Compatibility	Compatible with all standard offgrid inverters and charge controllers. Battery to inverter output sizing keep 2:1 ratio.			



YouthPOWER HV Rack Storage System Series- 20KWH~51.2KWH

- Convenient: 19" embedded design enables quick installation/maintenance.
- Safe & Stable: LiFePO4 tech, 6-month standby, partial charging supported.
- Smart BMS: Multi-protection with auto-balancing.
- Eco-Friendly: Non-toxic, pollution-free construction.
- Scalable: Parallel scalability, wireless/remote upgrades (Deye compatible).
- Wide Temp: Operates at -20°C~55°C with stable discharge & cycle life.

Product Specification

MODEL	YP-R-HV20	YP-R-HV25	YP-R-HV30	YP-R-HV35	YP-R-HV40	YP-R-HV45	YP-R-HV50
Cell chemistry	LiFePO4						
Module energy(kWh)	5.12						
Module nomina voltage(V)	51.2						
Module capacity(Ah)	100						
Cell model/ Configuration	3.2V100Ah /64SIP	3.2V100Ah /80SIP	3.2V100Ah /96SIP	3.2V100Ah /112SIP	3.2V100Ah /128SIP	3.2V100Ah /144SIP	3.2V100Ah /160SIP
System nominal voltage(V)	204.8	256	307.2	358.4	4096	460.8	512
System operating voltage(V)	172.8~224	215~280	259.2~336	302.4~392	345.6~448	388.8~504	432~560
System energy(kWh)	20.48	25.6	30.72	35.84	40.96	46.08	51.2
Charge/ Discharge Current(A)	Recommend						
	Max						
Working temperature	Charge:0C~55°C;Discharge: -20°C~55°C						
Communication port	CAN2.0/RS485/MFI						
Humidity	5~85%RH Humidity						
Altitude	2000 m						
IP rating of enclosure	IP20						
Dimension (W*D*H,mm)	538*492*791	538*492*941	538*492*1091	538*492*1241	538*492*1391	538*492*1541	538*492*1691
Weight approximate(kg)	195	240	285	330	375	420	465
Installation location	Rack Mounting						
Storage temperature(C)	0°C~35°C						
Recommend depth of discharge	90%						
Cycle life	25±2°C,0.5C/0.5C,EOL70%=6000						



YouthPOWER 520W Portable Power Bank 1.8KWH/2KWH

- The industry's first dual cell boost solution with lower cost.
- Plug and play, no installation.
- 500W/1.8kWh long-term energy storage backup, suitable for areas with no electricity or frequent power outages.
- Impressive lifespan up to 8,000 cycles.

Product Specification

Model. No	YP-1.8KW/ YP-2.0KW
Battery Chemistry	Lithium-iron phosphate (LiFePO4)
Battery Capacity	1792Wh & 2000Wh (optional)
Battery Lifespan	8000 cycles
Battery Level Indicator	Yes, four LEDs
AC Input (Grid)	220 Vac 50 / 60Hz
DC Input (Solar)	12-60 Vdc / 450W max
AC Output / Waveform	520W max / Pure sine-wave
Output Interface	AC 220V×2, USB3.0×1
Protection	Overcharge & over-discharge protection / Over-voltage & under-voltage protection / Over-current protection / High&low temperature protection / Overload protection / Shortcircuit protection / Fault protection
IP Protection Level	IP21
Operating/ Storage Temp.	0'cto +50°C/-20°c to +50°C
Net Weight	17.8 kg
Dimensions	250×180×305mm
Certification	UN38.3, MSDS



5KWH Mobile Energy Storage System

- All-In-One Design, 3.6kw/5kw High Capacity & Durability
- LED Display for Real-Time Battery Monitoring
- Multi-functional Outlets, Plug and Play, No Installation
- Wheeled Design for Easy Portability
- BT/WiFi Connectivity, Faster & Smarter
- Ideal Backup Power for Indoor & Outdoor Use



Product Specification

Model. No	YP-ESS5120US3600		YP-5.0KW
Weight	60Kg		
Size	700*450*280mm		
IP Level	IP20		
Battery			
Battery Voltage	51.2V		
Battery Energy	5.12kWh		
Cell Chemistry	LFP		
Battery Management System	Over Voltage Protection, Overload Protection, Over Temperature Protection, Short Circuit Protection, Low Temperature Protection, Low Voltage Protection, Over current Protection		
Max Charging Current(Icm)	150A	80A	
Limited Charging Voltage(Ucl)	58.4V		
Max Discharging Current	150±5A	80A	
Discharge Cut-off Voltage(Udo)	40.0V		
Inverter			
Rated Power	3600W	5000W	
Solar Charger Type	MPPT		
PV	Maximun PV Array Power:4500W		Maximun PV Array Power:5000W
	Maximun PV Array Open Circuit Voltage:300VDC		Maximun PV Array Open Circuit Voltage:500VDC
	MPPT Operating Voltage Range:90VDC~260VDC		MPPT Voltage Range:120~450Vdc
	Maximun PV Input Current :27A		Maximun PV Input Current :80A
Input			
Nominal Voltage	120VAC±5%	220VAC±5%	
Selectable Voltage Range	(90VAC~140VAC)±2%		90~280Vac, Settable
Output			
Nominal Voltage	120VAC (Settable)		220Vac
Surge Power	7200VA	130%<Load=150% ,3 seconds	
Frequency	50/60Hz		
Peak Efficiency (PV to INV)	94%		
Peak Efficiency(Battery to INV)	91%		
Transfer Time	10ms(UPS) 20ms(Appliances)		
Overload Protection	5min@102~110% Load 10s@110%~125% Load 5s@ 125% Load		
Communication Interface	RS232/RS485(BMS)		
Type of PV Connection	MC4		
Smart Control			
Connection	Bluetooth and Wi-Fi		
App Remote Control	Yes		



POWER TOWER ALL IN ONE – EU SERIES

- Safety with ANC LFP cell, safe and stable
- Module pack, IP 65 standard
- Plug and play, quick installation
- Hybrid inverter 5.5kva
- Global cloud platform with Mobile APP
- Open APL, support power internet applications
- Certifications : Battery --- CE, EMC, CB, TUV, UL1973,
Hybrid Inverter --- G99 EMC, CE,TUV

Product Specification			
MODEL	YP ESS3KLV05EU1	YP ESS5KLV10EU1	YP ESS6KLV20EU1
Recommend Max.PV Input Power	8700 Wp	10000 Wp	11000 Wp
Max. PV Voltage		600V	
Min. Operation Voltage / Start-Up Voltage		40V/50V	
Rated PV Input Voltage		360V	
No.of MPPT Strings		2/1	
Max. AC Input Power From Grid	8700V/A	10000VA	11000VA
Rated AC output Power	3680W	5000W	6000W
Max. PV input current		32A(16A/16A)	
Short-circuit current of PV input		40A(20A/20A)	
Max.AC Output Power	3680 VA	5000 VA	6000 VA
Rated AC output current	16 A	21.8 A	26.1 A
Max. AC output current	16.7 A	22.8 A	27.3 A
Rated Grid Frequency		50Hz/60Hz	
Grid Type		Single phase	
Max. Efficiency	97.50%	97.70%	97.70%
European Efficiency	97%	97.30%	97.30%
Protection	DC reverse polarity/ AC short circuit/Leakage/ Battery input reverse polarity		
Surge Protection	DC type II/AC type II		
DC switch(PV)/DC fuse(battery)	Yes		
Battery Input Reverse Polarity Protection	Yes		
Inverter Dimensions (W*H*D)	600*365*180mm		
Weight	About 25kg		
Degree of Protection	Ip65		
Operating Ambient Temperature Range	-25℃~60℃, 0~100%		
Max. Operating Altitude	4000m		
Rated Output Power for Backup Load	6000W		
Rated AC Voltage	220V/230V/240V		
Grid Frequency Range	45-55Hz/55-65Hz		
Battery Model	YP-51100-SP1	YP-51200-SP2	YP-51200-SP2*2
Battery Description	SP1 Series - 1 unit 5KWH Battery Model	SP2 Series - 1 unit 10KWH Battery Model	SP2 Series - 2 unit 10KWH Battery Model
Nominal DC Voltage	51.2V		
Battery Capacity	100Ah	200Ah	400Ah(200Ah*2)
Energy(KWh)	5.12KWh	10.24KWh	20KWh
Single Battery Module Dimension	640*340*205mm	621*550*214mm	621*550*214mm
Maximum Discharging Current	100A Continuous, 120A Peak		
Cycle Life	6000 Cycles (80% DOD)		
Certification	UN38.3,MSDS,CE-EMC, TUV IEC 62133, UL1642, UL1973		
Temperature Range	-20~60℃		
Environment Humidity	0-95%		
System Dimensions (H*W*D)	985*630*205mm	1316*630*214mm	1648*630*205mm
Net Weight (kg)	130kg	180kg	230kg
Communication Method	RS485/Can/WLAN/WIFI/4G		
Grid Connection Certification	CE-LVD;CE-EMC;EN50549;1/CEI-021;VDE4105/0124; G99;IEC61727/62116/61683;NA/EEA-NE7-CH2020;		



POWER TOWER ALL IN ONE – U.S. SERIES

- Safety with ANC LFP cell, safe and stable
- Module pack
- IP 65 standard
- Plug and play, quick installation
- Hybrid inverter 8kva – 10KW UL
- Global cloud platform with Mobile APP

Product Specification

Model	YP ESS0810US	YP ESS0820US	YP ESS0830US
On Grid AC Output			
Rate AC Output Power	8KVA		
AC Output Voltage	120/240vac (split phrase), 208Vac (2/3 phase), 230Vac (single phase)		
Ac Output Frenquency	50/60HZ		
Grid Type	Split Phase, 2/3 Phase, Single Phase		
Max Output Current	38.3A		
AC reverse charging	Yes		
Max Efficiency	Over 98%		
CEC Efficiency	Over 97%		
PV Input			
PV Input Power	12kw		
MPPT Number	4		
PV Voltage Range	350V / 85V - 500V		
MPPT Voltage Range	120-500V		
Single MPPT Input Current	12A		
Battery			
Normal Voltage	51.2V		
Full Charge Voltage	56V		
Full Discharge Voltage	45V		
Typical Capacity	200AH	400AH	600AH
Maximum Continuous Discharge Current	190A		
Protection	BMS & Breaker		
Protection Details			
Ground Protection	YES		
AFCI Protection	YES		
Islanding Protection	YES		
DC Disconnect Detection	YES		
Battery Reverse Protection	YES		
Insulation Testing	YES		
GFCI	YES		
DC Anti-Thunder	YES		
AC Anti-Thuner	YES		
Input Overvoltage & Under Voltage Protection	YES		
Output Overvoltage & Under Voltage Protection	YES		
AC & DC Over-Current Protection	YES		
AC Short-Circuit Current Protection	YES		
Overheating Protection	YES		
System Parameters			
Dimension :	570*600*1700mm (D*W*H)		
Net Weight (KG)	258	340	428
IP Standard	IP54		



OFF GRID INVERTER BATTERY AIO ESS- EU SERIES

- Simple integrated design
- Modular system for easy expansion
- Plug and play, quick installation
- Single phase inverter 6kva/8kva/10kva
- Built-in WiFi function



Product Specification

MODEL	YP-6KW-LV1	YP-6KW-LV2	YP-6KW-LV3	YP-6KW-LV4	MODEL	YP-6KW-LV1	YP-6KW-LV2	YP-6KW-LV3	YP-6KW-LV4	
Phase	1-phase				Two Load Output Power					
Maximum PV input power	6500W				Full load	6200W				
Rated output power	6200W				Maximum main load	6200W				
Maximum soor charging current	120A				Maximum second load (battery mode)	2067W				
PV Input(DC)					Main load cut off voltage					44VDC
Nominal DC voltage/Maximum DC voltage	360VDC/500VDC				Main load returnn voltage					52VDC
Start-up voltage/Initigl feeding voltage	90VDC				AC Input					
MPPT voltage range	60~450VDC				AC start-uo voltage/ Auto restart voltage	120-140WAC/80VAC				
Numnber of MPPT trackers/oximum input current	1/22A				Aoeptable input voltage range	90-280VAC or170-280VAC				
Grid Output(AC)					Maximum AC inout current					50A
Nominal output voltage	220/230/240VAC				Nominal ooerghting frequency					50/60H2
Outout voltage range	195.5~253VAC				Surge powver					10000W
Nominal output ourrent	27.0A				Battery Mode Output(AC)					
Power factor	> 0.99				Nominal output voltage					220/230/240VAC
Feed-in grid frequency range	49~51±1Hz				Outout waveform					Pure sine wave
Battery Data					Efficiency (DC to AC)					94%
Rate voltage(vdc)	51.2				Charger					
Cell combination	16S1P*1	16S1P*2	16S1P*3	16S1P*4	Maximum charging current (solar to AC)					120A
Rate capacity(AH)	100	200	300	400	Maximum AC charging current					100A
Energy storage(KWH)	5.12	10.24	15.36	20.48	Physical					
Discharge cut-off voltage(VDC)	43.2				Dimension D*W*H(mm)	192*640*840	192*640*1180	192*640*1520	192*640*1860	
Charge cut-off voltage(VDC)	58.4				Weight(kg)	64	113	162	211	
Efficiency					Interface					
Maximum conversion efficiency(sloar to AC)	98%				Communication port	RS232WWIFIGPRS/LITHIUM BATTERY				



3-PHASE HV INVERTER BATTERY AIO ESS

- Elegant modular and unified design
- Safety & reliability
- Smart and easy operation
- Flexible and easy to expansion
- Global cloud platform with Mobile APP
- Open APL, support power internet applications



Product Specification

MODEL	YP-ESSIO-8HVST	ESSIV-OTVOL
PV Specifications		
Max. PV input power	15000W	
Nominal DC voltage/ Voc	180Voc	
Start-up/ Min. operation voltage	250Vdc/ 200Vdc	
MPPT voltage range	150-950Vdc	
No. of MPPTs/ Strings	1/2	
Max. PV input/ Short circuit current	48A(16A/32A)	
Input/ Output (AC)		
Max. AC input power from grid	20600VA	
Rated AC output power	10000W	
Max. AC output apparent power	11000VA	
Rated/ Max. AC output current	15.2A/16.7A	
Rated AC voltage	3/N/PE 220V/380V230V/400V 240V/415V	
AC voltage range	270-480V	
Rated grid frequency	50Hz/60Hz	
Grid frequency range	45~55Hz/55~65Hz	
Harmonic (THD)(of rated power)	<3%	
Power factor at Rated power	>0.99	
Adjustable power factor	0.8 leading to 0.8 lagging	
AC type	Three phase	
Battery Data		
Rate voltage(Vdc)	172.8	345.6
Cell combination	54S1P*1	54S1P*2
Rate capacity(AH)	50	
Energy storage(KWH)	8.64	17.28
Cycle life	6000 cycles @80% DOD, 0.5°C	
Charge voltage	189	378
Max. charge/discharge current(A)	30	
Discharge cut-off voltage(VDC)	135	270
Charge cut-off voltage(VDC)	197.1	394.2
Enviornment		
Charge temperature	0°C to 50°C@60±25% Relative Humidity	
Discharge temperature	-20°Cto 50°C@ 60±25% Relative Humidity	
Storage temperature	-20°Cto 50°C@ 60±25% Relative Humidity	
Mechanical		
IP class	IP65	
Material system	LiFePO4	
Case material	Metal	
Case type	All in One Stack	
Dimension L*W*H(mm)	Inverter high-voltage box: 770*205*777 / Battery box:770*188*615(single)	
Package dimension L*W*H(mm)	Inverter high-voltage box: 865*290*870	
	Inverter high-voltage box:865*290*870	
	Battery box:865*285*678(single)*2	
	Battery box:865*285*678(single)	
	Accessory box:865*285*225	
	Accessory box:865*285*225	
Net weight(kg)	Inverter high-voltage box: 65kg	
	Inverter high-voltage box: 65kg	
	Battery box: 88kg	
Gross weight(kg)	Battery box: 88kg*2	
	Accessory box: 9kg	
	Accessory box: 9kg	
Protocol(Optional)	Inverter high-voltage box: 67kg/Battery box: 90kg/Accessory box: 11kg	
	Communication	
	RS485/RS232/WLAN Optional	
System	Certificates	
	UN38.3,MSDS,EN,IEC,NRS,G99	
	UN38.3,MSDS,IEC62619,CE,UL1973,UL2054	
Cell		



COMMERCIAL BATTERY SYSTEM 280 HV SERIES 85KWH-143KWH

- Use EVE 3.2V 280Ah LiFePO4 cells
- Support max. of 15 modules (240S) in series
- Modular system for easy expansion
- Built-in BMU collector
- Compatible inverters: GOODWE ET, GROWATT SPH, Deye, Megarevo, Solis

Product Specification

Model	YP-280HV 307V-85KWH	YP-280HV 358V-100KWH	YP-280HV 409V-114KWH	YP-280HV 460V-129KWH	YP-280HV 512V-143KWH
Combination method	96S1P	112S1P	128S1P	144S1P	160S1P
Rated Capacity	Typical:280Ah Minimum:276Ah	Typical:280Ah Minimum:276Ah	Typical:280Ah Minimum:276Ah	Typical:280Ah Minimum:276Ah	Typical:280Ah Minimum:276Ah
Factory Voltage	307.2-316.8V	358.4-369.6V	409.6-422.3V	460.8V-475.2V	512-528V
Voltage at end of Discharge	≤259.2V	≤302.4V	≤345.6V	≤388.8V	≤432V
Charging Voltage	336V	392V	448V	504V	560V
Internal Impedance	≤100mΩ	≤110mΩ	≤120mΩ	≤120mΩ	≤130mΩ
Max Charging Current(Icm)	140A	140A	140A	140A	140A
Limited Charging Voltage(Ucl)	350.2V	408.8V	467.2V	525.6V	584V
Max Discharging current	140A	140A	140A	140A	140A
Discharge Cut-o? voltage(Udo)	240V	280V	320V	360V	400V
Operation Temperature Range	Charge:0~55°C Discharge: -20~55°C	Charge:0~55°C Discharge: -20~55°C	Charge:0~55°C Discharge: -20~55°C	Charge:0~55°C Discharge: -20~55°C	Charge:0~55°C Discharge: -20~55°C
Storage Temperature Range	-20°C~25°C	-20°C~25°C	-20°C~25°C	-20°C~25°C	-20°C~25°C
Single module Size/weight	778.5*442*230mm /About 125Kg	778.5*442*230mm /About 125Kg	778.5*442*230mm /About 125Kg	778.5*442*230mm /About 125Kg	778.5*442*230mm /About 125Kg
Main control box size/weight	620*442*222mm /About 22Kg	620*442*222mm /About 22Kg	620*442*222mm /About 22Kg	620*442*222mm /About 22Kg	620*442*222mm /About 22Kg
System size/weight	550*776*1985mm /About 850Kg	550*776*1985mm /About 850Kg	550*780*1450mm /About 1110Kg	555*776*1700mm /About 1450Kg	550*780*1690mm /About 1400Kg



COMMERCIAL BATTERY SYSTEM 280 HV SERIES 157KWH-215KWH

- Use EVE 3.2V 280Ah LiFePO4 cells
- Support max. of 15 modules (240S) in series
- Modular system for easy expansion
- Built-in BMU collector
- Compatible inverters: GOODWE ET, GROWATT SPH, Deye, Megarevo, Solis

Product Specification

Model	YP-280HV 563V-157KWH	YP-280HV 614V-172KWH	YP-280HV 665V-186KWH	YP-280HV 716V-200KWH	YP-280HV 768V-215KWH
Combination method	176S1P	192S1P	208S1P	224S1P	240S1P
Rated Capacity	Typical:280Ah Minimum:276Ah	Typical:280Ah Minimum:276Ah	Typical:280Ah Minimum:276Ah	Typical:280Ah Minimum:276Ah	Typical:280Ah Minimum:276Ah
Factory Voltage	563.2V-580.8V	614.4-633.6V	665.6-686.4V	716.8-739.2V	768-792V
Voltage at end of Discharge	≤475.2V	≤537.6V	≤582.4V	≤604.8V	≤648V
Charging Voltage	616V	672V	728V	784V	840V
Internal Impedance	≤140mΩ	≤150mΩ	≤160mΩ	≤170mΩ	≤180mΩ
Max Charging Current(Icm)	140A	140A	140A	140A	140A
Limited Charging Voltage(Ucl)	642.4V	700.8V	759.2V	817.6V	876V
Max Discharging current	140A	140A	140A	140A	140A
Discharge Cut-o? voltage(Udo)	440V	480V	520V	560V	600V
Operation Temperature Range	Charge:0~55°C Discharge: -20~55°C	Charge:0~55°C Discharge: -20~55°C	Charge:0~55°C Discharge: -20~55°C	Charge:0~55°C Discharge: -20~55°C	Charge:0~55°C Discharge: -20~55°C
Storage Temperature Range	-20°C~25°C	-20°C~25°C	-20°C~25°C	-20°C~25°C	-20°C~25°C
Single module Size/weight	778.5*442*230mm /About 125Kg	778.5*442*230mm /About 125Kg	778.5*442*230mm /About 125Kg	778.5*442*230mm /About 125Kg	778.5*442*230mm /About 125Kg
Main control box size/weight	620*442*222mm /About 22Kg	620*442*222mm /About 22Kg	620*442*222mm /About 22Kg	620*442*222mm /About 22Kg	620*442*222mm /About 22Kg
System size/weight	555*776*1700mm /About 1560Kg	550*776*1960mm /About 1708Kg	550*776*1960mm /About 1833Kg	550*776*2250mm /About 1978Kg	550*776*2250mm /About 2100Kg



YouthPOWER 100KWH Commercial Solar Battery System

- Easy to install and deploy with large space utilization
- Unique modular design & flexible function configuration
- With self-use, peak shifting, forced charging & discharging and other working modes
- Strong scalability, simple & convenient expansion on both AC and DC sides

Product Specification

Module	YP-ESS-100KWH
Battery parameters	
Number of battery packs	7
Rated voltage	358.4V
Voltage range	280~408.8V
Rated energy	100kWh
Max. continuous charging and discharging current	140A
Discharge Depth	90%
Cycle life	8000 times
System parameters	
Dimension W*H*D	W750*H2000*D1000mm
Weight	about 1200kg
Communication	CAN/RS485/WiFi/ETH
Design Life	10 years+
Expansion	Support in parallel
Enclosure protection rating	IP54
Cooling	Air cooling
Environment temperature	-30~50℃
Humidity	10%~95%RH
Altitude	<2000m



YouthPOWER Commerical BESS 280AH Series 125KWH 215KWH

- High Efficiency:Transformer-less design, wide voltage, smart cooling, single-battery optimization.
- Safety & Reliability: Multi-layer protection, thermal/fire safety, integrated BMS/PCS/MPPT/EMS.
- Flexible Application: Modular N+1 redundancy, compact all-in-one, effortless deployment.
- Full Functionality: Instant grid switching, dynamic power control, EMS-driven energy savings.

Product Specification

MODEL	YP-ESS-W125-TD	YP-ESS-W215-TD
Battery specification		
Battery type	LFP	
cell capacity	3.2V/280Ah	
PACK Config	IP20S	
PACK Qty	7	12
Rated capacity	125kwh	215kwh
Rated voltage	448V	768V
voltage range	392 - 504vdc	636 - 864vdc
charge/Discharge rate	0.5C Rated	
DOD	95%	
cooling system	Air cooling	
Fire fighting system	Two Level protection. standard: Aerosol+HFC-227ea. Optional :PERFLUORO	
AC Specifications		
Rated voltage	400Vac	
voltage range	320Vac-460Vac	
Frequency range	50/60±2.5Hz (50/60Hz self-adaption)	
Grid system	3P+N+PE	
Isolation transformer	No	
Rated power	50kw	100kw
peak power	55kw	110kw
Rated current	72A	144A
Over load capacity	≤110% Continues Running. ≤120% 1 Min	
Power foactor	-0.99~+0.99	
On grid THDI/THDV(off grid)	<3% , Full load	
STS module power capacity	200kW	
Transfer time(on-off Grid)	≤20ms	
Pv Specification		
Max. Pv input voltage	650Vdc	
Max. Pv input power	55kW	110kW
No. of MPPT/String per MPPT	1/1	2/1
MPPT Current	100A	200A(100A-100A)
MPPT efficiency	99%	
system specification		
Temperature range	-25~65℃ , >45℃ Power derating	
storage temperature	-40~75℃	
Noice	<70 dB	
Dimension(W*D*H)	1850*1355*2150mm	
weight	1800kg	2270kg
Protection level	IP54	
Cooling type	Industry level Air Conditional.	
EMS	Manual Mlode, Peak saving, virtual enlargement, New Energy power absorption, Anti-flow mode. Support remote management and control	
communication protocol	Modbus RTU, MedbUs TCP, IEC104, MOTT, EtC.	
communication port	RS485/RJ45/4GMMIFU/DIDO	



YouthPOWER Commercial Storage ESS 85KWH-173KWH

- Working with a grade BYD blade cells
- Small space for easy install and maintain
- Triple BMS & EMS protection with safety performance
- Advanced temperature control system with high efficient rate.

Product Specification

Model Number	YP ESS01-L85KW	YP ESS01-L100KW	YP ESS01-133KW	YP ESS01-160KW	YP ESS01-173KW
Nominal Voltage	656.6V	768V	512V	614.4V	656.6V
Rated Capacity	130AH	130AH	260AH	260AH	260AH
Rated Energy	85KWH	100KWH	133KWH	160KWH	173KWH
Combination	1P208S	1P240S	2P160S	2P192S	2P208S
IP Standard	IP54				
Cooling System	AC Coolig				
Standard charge	26A	26A	52A	52A	52A
Standard discharge	26A	26A	52A	52A	52A
Max Charging Current(lcm)	100A	100A	150A	150A	150A
Max continuous Discharging current	100A	100A	150A	150A	150A
Upper limit charging voltage	730V	840V	560V	672V	730V
Discharge Cut-off voltage(Udo)	580V	660V	450V	540V	580V
Communication	Modbus-RTU/TCP				
Operating temperature	-20-50°C				
Operating humidity	=95% (No condensation)				
Highest work altitude	=3000m				
Dimension	1280*1000*2280mm	1280*1000*2280mm	1280*920*2280mm	1280*920*2280mm	1280*920*2280mm
Weight	1150kg	1250kg	1550kg	1700kg	1800kg

YouthPOWER Factory & Production



YouthPOWER Factory & Production



YouthPOWER Projects Around the World



YouthPOWER Projects Around the World

