

YouthPOWER Commercial ESS Catalogue



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

YouthPOWER Commercial ESS Catalog



YouthPOWER Rack HV Storage Battery

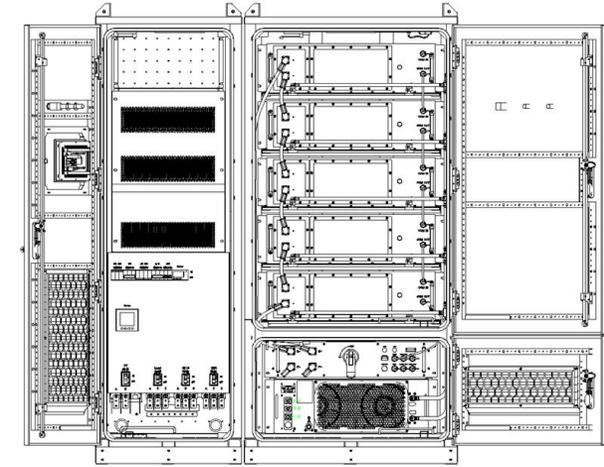
Indoor Installation
Hybrid Inverter: 30-50kW
Storage Battery : 20-107kWh



YouthPOWER Air Cooling ESS

Outdoor Installation with
Wall Inverter Solution
Hybrid Inverter : 30-50kW
Battery: 60-107kWh

Outdoor Installation AIO Solution
Hybrid Inverter : 100kW
Battery : 215/232kWh



YouthPOWER Liquid Cooling ESS

Pack: 1P52S 280Ah/314Ah
Cluster: 1P52*5S 832V233/261KWh
PCS: 100kW/400VAC

YouthPOWER Rack HV Storage Battery

Indoor Installation Rack HV Series

The system is designed for high-voltage battery systems used indoors and has a fan cooling device to maintain the entire system at a lower operating temperature. Benefiting from the larger capacity of each module, it is more suitable for medium-sized industrial and commercial application scenarios, such as increasing solar self-consumption, providing backup power or peak load regulation.



30kW/50KW Inverter

High Voltage Control Box

Battery Module

YouthPOWER Rack HV Storage Battery - Indoor Rack Battery Cluster



UL1973、CE-EMC &
IEC62619 Certificated



750V Battery Cluster YP-RHV 20-60KWH

Small Indoor Commercial Application

Pack : 51.2V 100AH (UL1973, CE-EMC &
IEC62619 Certificated)

Pack:1P16S 100Ah

Hybrid Inverter : 30-50kW

Cluster Max :1P16S*13Series 665.6V/66KWh

19 Inch Rack Design with most hybrid 3P Inverters

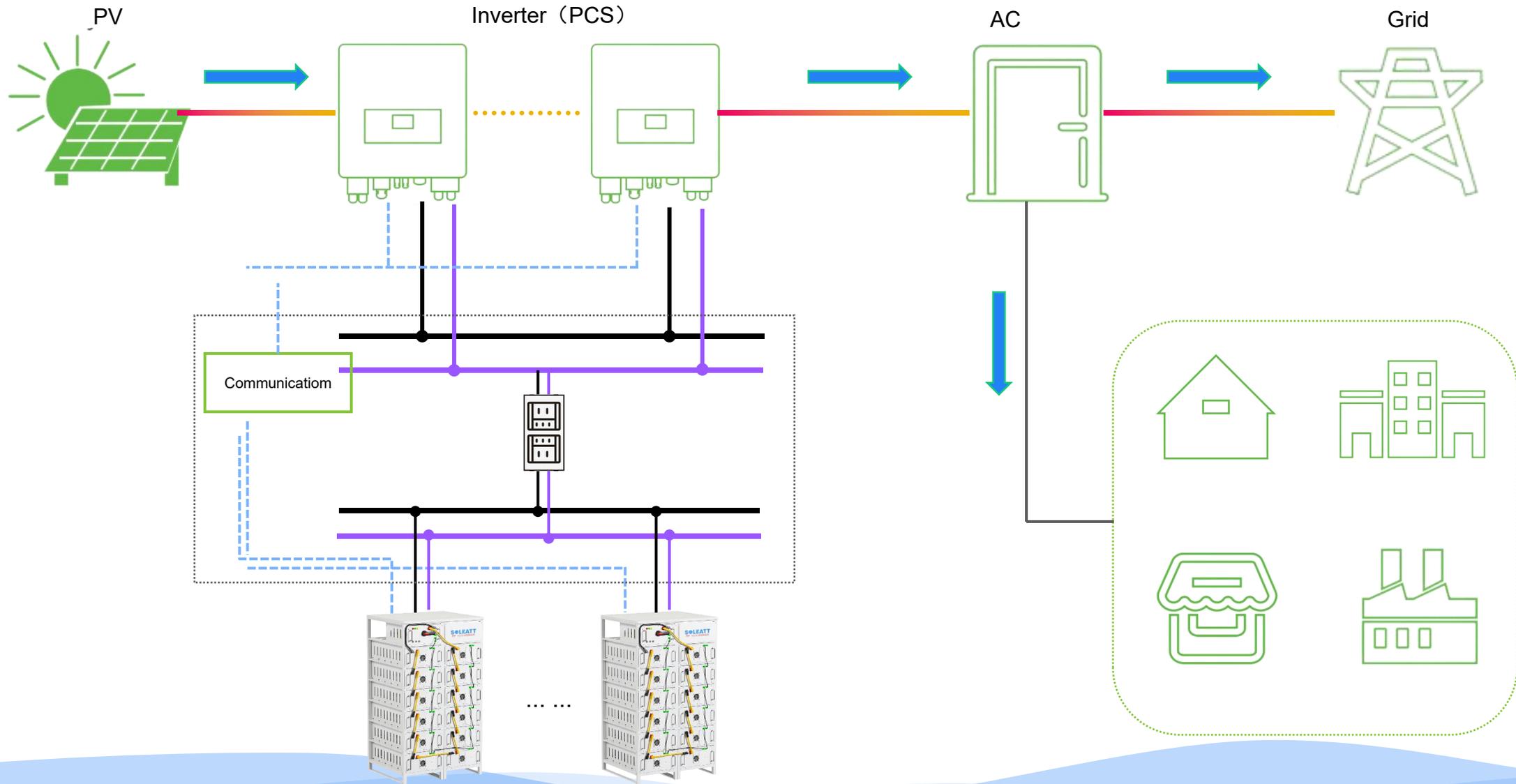
1000V-1500V Rack Battery Cluster YP-280HV-768-280/314

Medium-sized Industrial and Commercial Application Scenarios, Indoor or outdoor cabinet
Pack: 64V 280Ah/314Ah, Each battery pack has a built-in fan cooling device to maintain the
entire system at a reasonable operating temperature. Lithium iron phosphate + BMS + Pack
fire protection

Cluster:1P20*20S 1280V358.4/401.9kWh

Applied for ≤10ft &20ft 2.5MWh Air-cooled energy storage container DC side solution (+400V /
690Vac PCS)

System Working Principle Diagram



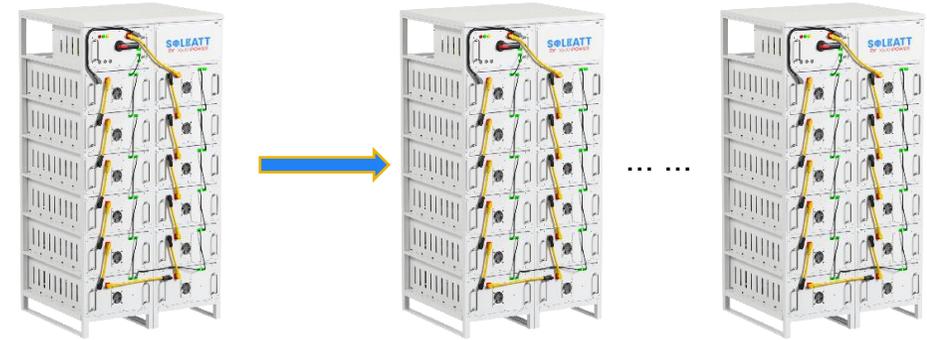
YP-280HV 1#

YP-280HV n#

YP-280HV Introduction



YP-HV280 64V



Model No.	YP-HV280 64V
Material	Lifepo4
Voltage	64V
Rated Capacity	280Ah
Power	17.92kWh
Cut Off Voltage	56V
Charge End Voltage	72V
Rated Working Power	140A
Cycle	6000 Cycle /25°C, 70%EOL
Max. Series	Allow max. 20 Units Series
Dimension	W460*D940*H230mm
Weight	150±5kg
IP Grade	IP20
Certification	IEC62619/CE/UN38.3

Model No.	YP-HV280 384V	YP-HV280 768V
Module	YP-HV280 64V	YP-HV280 64V
Module Qty	6	12
Rated Power	107.52kWh	215kWh
Cell Capacity	280Ah	280Ah
End Discharge Voltage	336V	672V
End Charge Voltage	432V	864V
Voltage	384V	768V
Rated/Max.Current	140A/200A	140A/200A
Rated Output Power	53.76kW	107.52kW
Max Output Power	76.8kW	153.6kW
N.W.	1025kg	1970kg
Certification	UN38.3/IEC62619/EMC	
Max. Series	≤12 Clusters	

YouthPOWER Air Cooling ESS



YouthPOWER Air Cooling ESS



Outdoor Installation with Wall Inverter Solution

Product features:

- Easy to install and deploy with high space utilization.
- Unique modular design and flexible functional configuration;
- Working modes such as self-generation and self-use, peak shaving and valley filling, and time-sharing charging and discharging;
- Supports AC and DC side parallel operation;
- External inverter, compatible with multi-brand protocols



Fire detection system

HV Smart Box

BMS Monitor

Wall Mounted Inverter

1.5kW Smart AC

64V280Ah Battery Modules

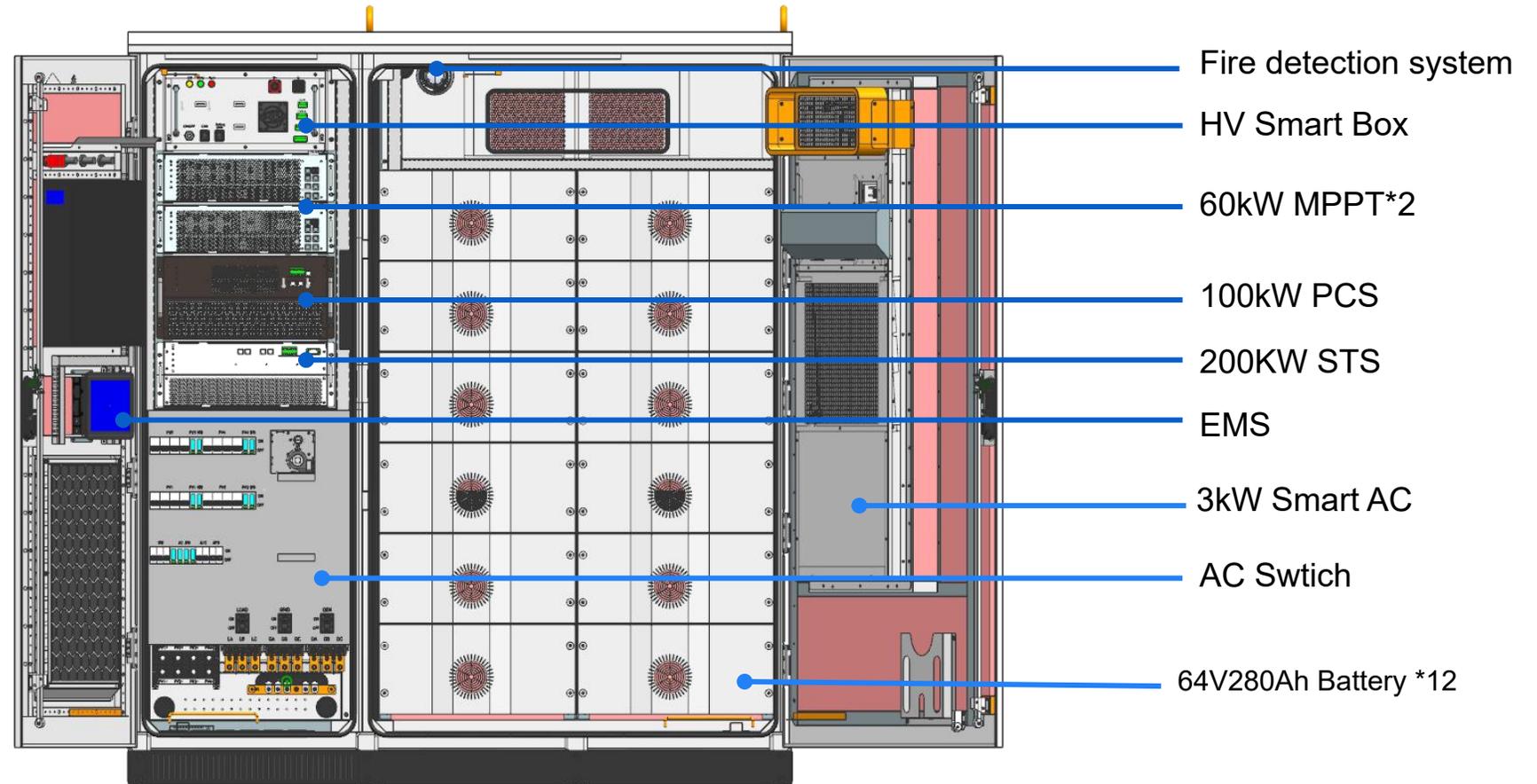
YouthPOWER Air Cooling ESS

Outdoor Installation AIO Solution

Product features:

Based on the integrated design concept, large-capacity batteries, high-performance power conversion systems (PCS), smart energy management systems (EMS) and battery management systems (BMS) are integrated into a single cabinet to form an easily expandable smart outdoor energy storage system suitable for a variety of small and medium-sized industrial and commercial energy storage power station application scenarios.

- All in one Design
- Temperature Difference for cell at less 6°C
- Supports extended on/off-grid use
- Support reactive power compensation
- Support three-phase unbalanced regulation
- Equipped with high-performance lithium iron phosphate battery
- Single cabinet capacity 215kwh
- Grid-connected application capacity can be expanded to MWh level

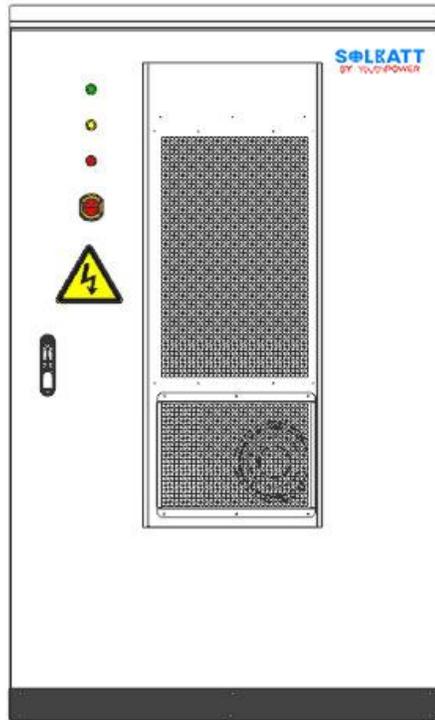


YouthPOWER Air Cooling ESS - 100KWH



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°C
Humidity	10%~95%RH
Altitude	<2000m

YouthPOWER Air Cooling ESS - 215/241KWH



YP ESS W215 / 241-TD

500KW PCS WITH 964KWH STORAGE

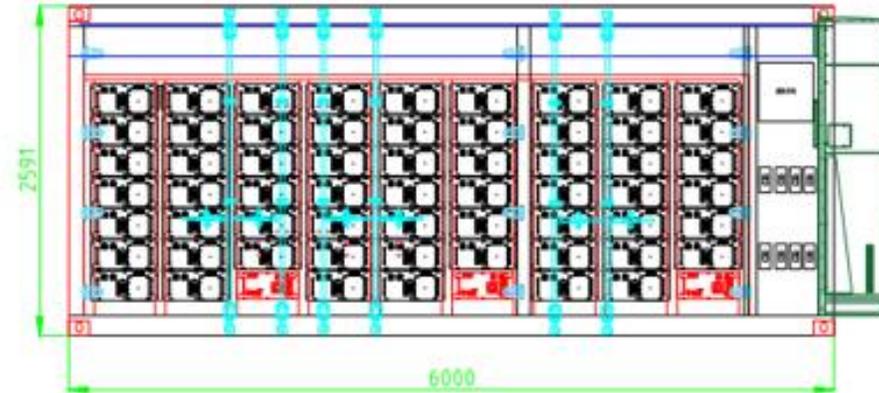
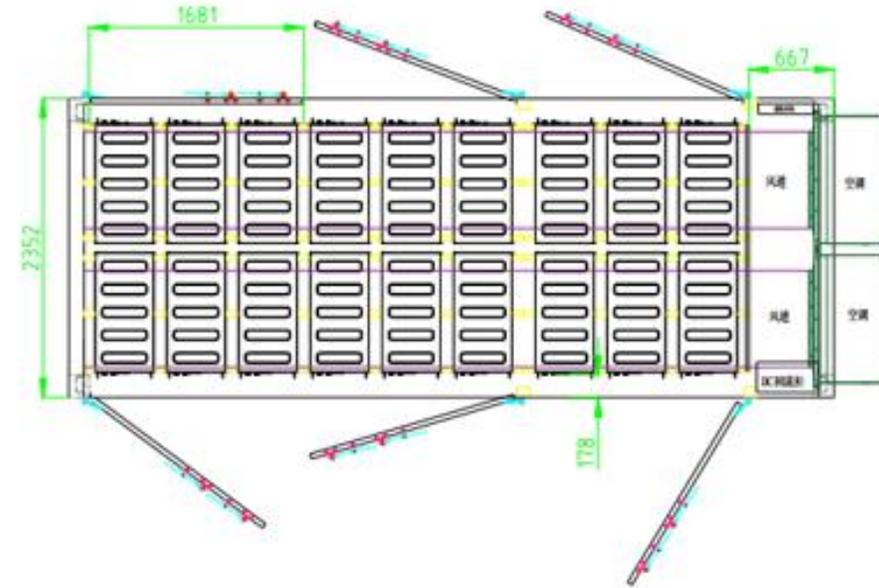


Pack: 1P20S 280Ah

Cluster: 1P20*12S 768V215/241kWh

Applied for 400V PCS, mostly used in long-term energy storage application scenarios or distributed solutions for photovoltaic storage. The inverter can be mounted outside the cabinet or combined inside with the energy cabinet.

YouthPOWER Air Cooling ESS - 2MW



Pack:1P20S 64Vdc 280Ah 17.92KWH

Cluster:1P20*20S 1280V 358.4kWh

System:6P20*20S 1280V 2150KWh

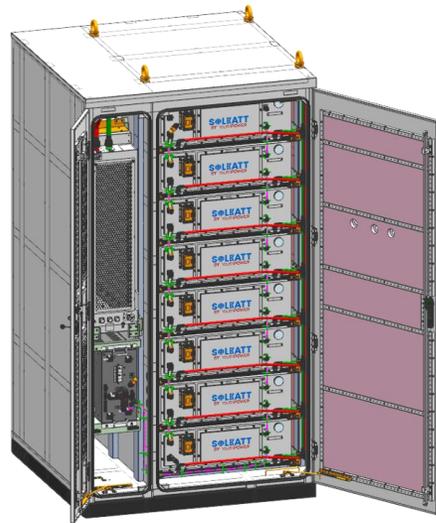
20 Feet Container Design

● YouthPOWER Liquid Cooling ESS



YouthPOWER Liquid Cooling ESS

Distributed Liquid Cooling Cabinet



417KWH with 8 Modules

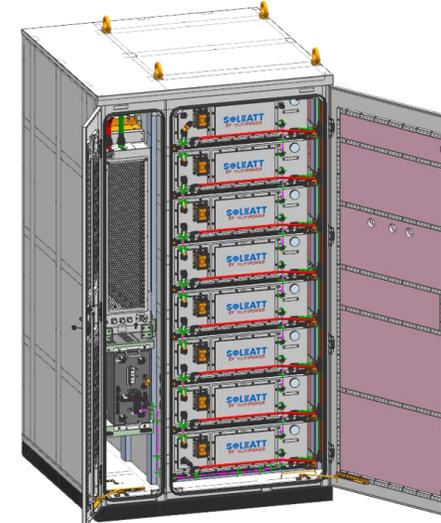
YP-Cube-417L

IP 54

Pack:1P52S 314Ah

Cluster:1P52*8S 1331.2V 417kWh

Applied for 690V PCS, 1500V System



261KWH With 5 Modules

YP-Cube-261L

IP 54

Pack:1P52S 314Ah

Cluster:1P52*5S 832V 261kWh

Applied for 400V PCS, 1000V System

YouthPOWER Liquid Cooling ESS

Applied for 1000V Distributed Liquid Solution

PCS : 125kW*4

Battery : 1MW



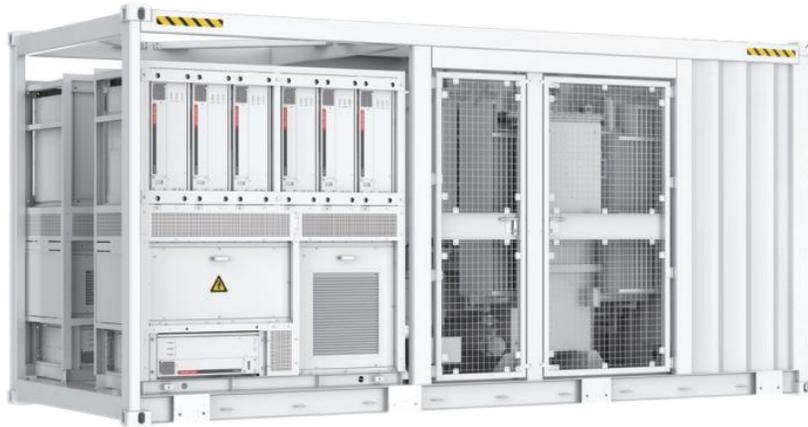
AC : 500kW, Including
PCS, MPPT, STS,
EMS etc.

DC : 215 / 232 / 261kWh*4

YouthPOWER Liquid Cooling ESS

Distributed Liquid Cooling Cabinet - 1500V

Distributed Layout, each management for each cluster



2.5MW Energy storage
conversion and boosting
integrated cabin



5MWh ESS

20ft 5MWh Liquid Cooling ESS





YouthPOWER—Provide One Stop Energy Storage Solutions