# 100KWh /358.4V280Ah Specification

No	Item		General	Remark	
•			parameter		
1	Nominal capacity		280Au	$(25 \pm 2)$ °C, standard charge	
2	Rated voltage		3.2V	discharge (25 ± 2)	
3	Internal resistance(	1KHz )	ÿ0.5mÿ	°C,	
	Standard	Charge/discharge current 0.5	C/0.5C	(25±2)°C	
4	load and discharge	Loading / discharge voltage	3.65V/2.5V		
5	Max load and discharge	Continuous loading / discharge	1c/1c		
		Pulse charge / discharge(10s)	1c/2c		
6	Recommended SO	С	10%~90%		
7	Loading operation temperature		0°C~55°C		
8	Discharge operation temperature		-20°C~55°C		
9	Storage Temperature	Short term (within 1 month)	-20°C~45°C		
		Long term (within 1 year)	0°C~35°C		
10 Sto	10 Storage humidity		ÿ95%		
11	Self-discharge/ month		ÿ3%/	(25 ± 2) °C,30% ~ 50% SOC storage	
12		W	173.7±0. 5mm		
13		T(30%-40% SOC)	72.0±1mm	2	
14	_ Size	ТН	207.5±0.5mm		
15		н	204.6±0.5mm		
16.		Pole center distance	123±0.3mm		
17 cell weight			5.42±0.3kg		

## **Battery Box specifications**

No. Item		General parameter		Note
				g
1 Nominal capacity		280Ah		
2 Rated voltage		51.2V(16 cells in series )		16s
3	Rated power	14336wh		
4	Series and parallel mode 1P16S			
5	Cycle life	>5000(20~80%SOC,20±5°C,		
6	Operating temperature	Charging temperature	0°C~55°C	
		Discharge temperature	-20°C~55°C	
7 Operating voltage		40V~58.4V		
8	Charging current	150A		
9	discharge current	150A		
10 Cooling mode		Natural cooling		
11	Battery weight	About 114kg		
12 Communication mode		RS485ÿCAN		
13 Size W * D * H		(482.6*754*265.9) ±2mm		

## **Battery System Specifications**

No. Item		General parameter		Note
				g
1	Nominal capacity	280Ah		
2	Rated voltage	358.4V(7 batteries in series)		51.2V <sup>*</sup> 7
3	Rated power	100352wh		
4	Series and parallel mode 1P112S	>5000 ÿ		
5	Cycle life	(20~80%SOC,20±5°C,		
6	Operating temperature	Charging temperature	0°C~55°C	
		Discharge temperature	-20°C~55°C	
7	Operating voltage	280V~408.8V		
8	Charging current	150A		
9	discharge current	150A		
10 Cooling mode		Natural cooling		
11	Battery weight	Approx 492 +477kg		2 cabinets
12 Communication mode		RS485ÿCAN		
13 Size W <sup>*</sup> D <sup>*</sup> H		(600*800*1380)mm*2		2 closets

### Requirements for using the battery system

1) The external ambient temperature requirements for battery system operation: charging:

0° C~55°C; discharge: -20° C~55°C.

- 2) It is strictly forbidden to force work when the battery system short-circuited, overcharged or high temperature alarm
- 3) The external environment humidity requirements for battery system work: 10%ÿhumidityÿ95%RH.
- 4) When the battery system is running, try to achieve a SOC above 20%

to prevent complete discharge .

5) The battery system will not be used for a long time (>3 months) and it is required to have a SOC of more than 60%, store it in a dry, clean and well

ventilated place at 5° C~45° C and charge and discharge it every 3 months.

6) During the process of packing and charging the battery, care is required

handle and prevent it from falling, rolling and colliding.

7) Do not store the battery in a location prone to exposure to the sun, rain or

water.

- 8) Ensure that the battery system is kept away from flammable and explosive materials and high temperature environments under working or storage conditions.
- 9) It is strictly forbidden for customers to use the battery system without permission disassemble. ÿ

#### Battery management system specification

#### **BMS** function introduction

1)The BMS is designed for 112 series lithium battery.

2)The BMS has all functions: Overload detection function - Over discharge detection function Overcurrent detection function - Temperature detection function - Display function

## **BMS Protect parameter**

No. Item		General parameter	Remarki
			ng
1	Auxiliary power 24	/DC, range 19V-36V	
2	power dissip	Total power<90W	
	ation		
3	Operating temperature	-30°C-75°C	
_	Communicationm	CAN/RS485	
5	odus		
		(Cell) accuracy ± 0.5%, range 0 ~ 4.5V, sampling	
	Tension mo	period 360 ms.	
6	setting	(Total voltage) accuracy ± 1%, range 0 ~ 800 V, sampling	
		period 360 Ms.	
7	current	Accuracy ± 1%, range -300A ~ 300A, sampling	
	sampling	period 20ms.	
8	Temperature	Accuracy ± 1 °C, range -40 ~ 120 °C,	
	sampling	sampling period 1 s, sampling points 3 per	
		module.	
9	SOC calculation	8%	
	accuracy		
10		3.65V request to stop, 3.75V cut off.	
	Outlink off	When an error occurs (overload, leakage, etc.), request	
	Switch off	to stop and then	
		disconnect automatically	
		· ·	

## Appearance of the battery system



358.4V280Ah battery system (7 batteries in series)

358.4V280Ah (600 \* 800 \*1380) mm\*2

# hybrid inverter specifications

Fashion model	HYD-10KTL-3PH		
AC input			
Rated power	10 kW		
Rated voltage	AC 400V		
Nominal current	16 Amp		
voltage range	AC360-440V		
ratedfrequency	50/60 Hz		
Frequency range	47-51.5/57-61.5 Hz		
THDI	<3%		
Mains connection type	3I + N + PE		
AC output (off grid)			
Rated power	10kVA		
Rated voltage	AC 400V/ (230V L +N)		
Nominal current	16 Amp		
Nominal frequency	50/60 Hz		
THDU	ў3%		
Automatic switching time	ÿ20ms		
Type of output connection	3I + N + PE		
PV input			
Maximum PV input voltage	1000 VDC		
Rated voltage	600 VDC		
Maximum PV power	15000 (7500/7500) Wp		
Maximum input current	25A/25A		
Starting voltage	200 volts		
MPPT range	180-960 VDC		

Number of MPPT	2		
Battery			
Battery Voltage Range	180-800 VDC		
Nominal charge/discharge capacity	10 kW		
Nominal charge/discharge current	50A (25A/25A)		
Communication	BE ABLE TO		
General data			
Size	B 571.4 D264.1 H515mm		
Weight	37kg		
Working temperature	-30-+60°C		
IP	IP65		
Noise	<45dB		
Cooling method	An IR		
MPPT efficiency	99%		
On-Off Grid switching time	20ms		
Communication			
display	LCD		

#### **Technical Support**

When the system is installed and used, it is necessary to guide with remote technical support and, if necessary, the installation of users on site; to assist users in diagnosing and resolving technical issues while using the product.

#### Employ

In order to install, debug, operate, maintain and overhaul the equipment normally, our company can provide the corresponding technical training. The content of the training must be in line with the scope of the project.

The specific content, such as the time and location of the training, is negotiated between the buyer and the seller.

#### NO Quantity unity Name Comments . 51.2V280Ah battery 1 7 PCS 2 2 PCS 2 battery cabinet 358.4V280Ah battery box 3 1 PCS control box 4 1 PCS HYD-10KTL-3PH/AC380V Hybrid inverter 1 5 Wiring harness pks 1 PCS 6 factory inspection report 7 PCS 1 **Product Certification**

## List of product configurations