

# Stacked ALL-IN-ONE ESS



**10KW+20-  
50KWH**

## Contact Information

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## 1. Scope of application

This product is a 51V stacked all-in-one home energy storage system, which is floor-standing. It can supply power to household TV, computer, air conditioner, lighting lamp, etc. It can also be used as an uninterruptible power supply. It is suitable for off-grid energy storage system and outputs AC power with stable frequency and constant voltage. During normal operation, it provides singlephase AC power; In case of failure, the battery pack will provide rated power supply to the inverter without interruption.

## 2. The main features of the product are as follows:

1. Easy installation, easy to move, stable and firm structure;
2. Stackable energy storage LFP battery, maximum capacity 50kwh;
3. Integrated 10kw power high-frequency inverter, 120-450V wide range MPPT
4. All-in-one integrated system, power supply can be used immediately after startup
5. Intelligent communication management chip, efficient, stable and safe power supply system
6. Global cloud platform & mobile APP access

## 3. ALL-IN-ONE ESS Specifications

General Technical Characteristics				
General specification				
Model	DDYTJSG51400-10K-R	DDYTJSG51600-10K-R	DDYTJSG51800-10K-R	DDYTJSG511000-10K-R
The layer number	Layer 4 (Including base)	Layer 5 (Including base)	Layer 6 (Including base)	Layer 7 (Including base)
Capacity	20.48kWh	30.72kWh	40.96kWh	51.20kWh
Size (L*W*H)	L750*W510*H698mm	L750*W510*H913mm	L750*W510*H1128mm	L750*W510*H1343mm
Weight	203KG	288KG	373KG	458KG
Storage temperature	-20°C ~ 45°C			
Relative humidity	5% ~ 95%			
Operating temperature	-10°C ~ 55°C			
Class of protection	IP21 (Indoor)			
Topology structure	Natural convection and fan cooling			
Display	LCD			
Communication interface	USB/RS485/WIFI			
Installation Mode	Floor/mobile			
Max. efficiency (battery)	94%			
Max. efficiency (PV)	97%			
Max. efficiency (AC)	95%			

Protection Function	Short circuit protection, overload protection, AC leakage protection, ground fault protection, surge protection, DC polarity protection
<b>Battery pack Specifications</b>	
Rated battery voltage	51.2V
Battery voltage range	40-60V
Max. discharge current	200A
Max. charging current	200A
Capacity of energy	10.24KWh
Battery Type	Lithium iron phosphate (LiFePO4)
Life of cycle	6000 times (25°C, 0.3C, 80%DOD, > 60%C25°C)
Operating voltage	44.8-57.6V
Internal impedance	≤ 20 mΩ
Operating temperature	-20°C ~ 40°C (charging temperature) / -40°C ~ 45°C (discharging temperature)
Storage temperature	-20°C ~ 45°C
Storage humidity	5% ~ 95%
Module connection	Maximum 5 batteries in parallel (10.24 KWH per module)
Monitoring parameters	System voltage, current, battery voltage
Communication interface	CAN/RS485
Weight	85KG
Size (L*W*H)	L750*W510*H215mm
Class of protection	IP21 (Indoor)
The quality assurance	5 years
Security Certification	IEC62619、IEC61000、UN38.3
<b>Inverter Specifications</b>	
Rated output voltage	230Vac

Ac input voltage	220/230Vac
Rated output power	10000VA
Ac output power	10000W
Ac output frequency	50/60Hz
Ac Max. charging current	60A
Max. PV input current	44A
Max. PV input power	10000W
Max. PV charging current	200A
PV voltage range	120V-500Vdc
MPPT voltage range	120V-450Vdc
Ac input frequency	50/60Hz (Automatic detection)
Conversion time (invert)	10ms
Operating temperature	-15°C ~ 55°C
Storage temperature	-25°C ~ 60°C
Storage humidity	5% ~ 95%
Weight	30KG
Size (L*W*H)	L750*W510*H215mm
Class of protection	IP21 (Indoor)
The quality assurance	5 years
EMC Certification Level	EN61000
Certification	CE (IEC 62619-1)
Battery carton packaging size (L*W*H)	About 855+-mm*610+-mm*350+-mm
Inverter&Base carton packaging size (L*W*H)	About 845+-mm*600+-mm*355+-mm
Parts List	AC mains input connector 1 PCS; Wifi Module 1PCS; Desiccant 3 BAG; Use Manual 1 PCS; EU Plug 1PCS; PV input connector 1PCS