

Company Profile

Haitai Solar is a high-tech enterprise focus on Renewable Energies, established in 2006 and successful made its IPO in Aug 2022 (Stock Code 835985.BJ). Its business scope covers six divisions: Photovoltaic modules, Utility Scale Power Plant, Energy Storage System, Mounting System, Wind Energy and Hydrogen Energy.

Haitai Digital company is a 100% subsidiary of Haitai solar, we can offer reliable, flexible and cost-effective energy storage solutions for various application scenarios.

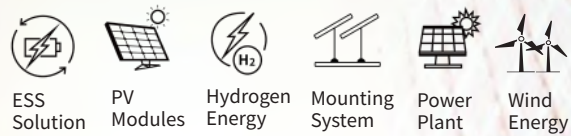
Establishment

2006

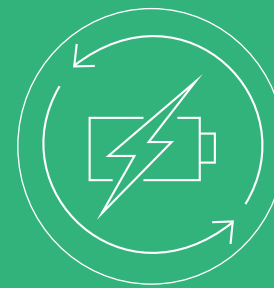
Headquarters

TangShan, China

Main Business



ESS Solution



 **Haitai Solar**

Stock Code: 835985.BJ

Tangshan Haitai Digital Energy Technology Co., Ltd

Email: dess@htsolargroup.com

Tel: +86-315-5051809

Web: www.haitai-solar.com

Add: No.88 Haomen Road, Yutian County, Tangshan City, Hebei Province, China

 **Haitai Solar**



BLUE CRYSTAL 1.0

HTDESS H5-10

All-in-One Residential Energy Storage System

Tangshan Haitai Digital Energy Technology Co., Ltd



Features: All-in-One Residential Energy Storage System



Safe:

- LFP (LiFePO4) battery, 10000 Cycles ,stable and safe.
- Three levels safety design (Module, Pack, System).
- IP65 protection class ,Outdoor installation, far away from living room.



Smart:

- Modular design, easy to be expanded or decreased module amount .
- Plug & Play, One person can install it within 30 minutes.
- Space saving, only 0.15sqm area is occupied.



Saving:

- Store low cost electricity generated by solar PV to meet household power load.
- Peak shifting function can help to cut utility bills.



Sapiential:

- Monitoring the Ess through global cloud platform and mobile App.
- Clear display for system working status.

Battery Specifications	PACK5.1	PACK10.2	PACK20.4
Electrical			
Energy Capacity	5.12kWh	10.24kWh	20.48kWh
Battery type	LFP (LiFePO4)		
Depth of Discharge (DoD)	90%		
Rated voltage	51.2V		
Operating Voltage Range	44.8~56.5Vdc		
Operation			
Maximum Charging Current	50A (0.5C)	100A (0.5C)	100A (0.5C)
Maximum Discharging Current	80A (0.8C)	100A (0.5C)	100A (0.5C)
Operating temperature range	-10°C ~+50°C		
Storage temperature range	-20°C ~+50°C		
Humidity	0% ~ 90%		
BMS			
Modules Connection	Max.4 batteries in parallel		
Monitoring Parameters	System voltage, current, cell voltage,cell temperature, PCBA temperature measurement		
Communication	CAN and RS-485 compatible		
Ventilation type	Passive and Active Cooling		
Physical			
Weight (Kg)	58	116	232
Dimension (W×H×D)mm	540×530×240	540×1020×240	2× (540×1020×240)
IP Protection	IP65		
Warranty	5 Year Product Warranty, 10 Year Performance Warranty		
Certificate			
Safety(Cell)	IEC 62619、UL 1973、UN 38.3		

Model	3680D-M1	5000D-M1	6000D-M1
PV terminal			
Vmax. PV	580Vd.c.		
Rated Voltage	400Vd.c.		
MPPT Voltage Range	80~550Vd.c.		
MPPT Range (full load)	165~520Vd.c.	210~520Vd.c.	250~520Vd.c.
MPPT Tracker / Strings	2		
Max. continuous PV input current	15Ad.c. ×2		
Isc PV	18Ad.c. ×2		
Max. back feed current	0Ad.c.		
Max. continuous PV input power	4800W	6500W	7500W
Battery terminal			
Battery type	Lithium		
Voltage range	40~60Vd.c.		
Rated voltage	48Vd.c.		
Maximum charge/discharge current	50Ad.c./80Ad.c.	80Ad.c./100Ad.c.	
Maximum charge/discharge power	3000W/4000W	4600W/5000W	

Grid terminal parameter			
Rated voltage	230Va.c.		
Rated frequency	50Hz/60Hz		
Rated input Current	31Aa.c.		
Maximum continuous input current	32Aa.c.		
Maximum continuous input power	7360VA		
Rated output Current	16Aa.c.	22Aa.c.	25Aa.c.
Maximum continuous output current	16Aa.c.	22Aa.c.	25Aa.c.
Power factor (Cos phi), adjustable	0.8 leading ~ 0.8 lagging (0.95 leading ~ 0.95 lagging for Germany)		
Maximum continuous output power	3680W	5000W	6000W
Max. output fault current	102Apeak		
Grid port inrush current	less than 22Apeak		
Grid port overcurrent protection	40A		
Backup load terminal parameter			
Rated voltage	230Va.c.		
Rated frequency	50Hz		
Rated output Current	16Aa.c.	20Aa.c.	
Maximum continuous output current	16Aa.c.	20Aa.c.	
Rated frequency	50/60Hz (Fluctuation range±0.2%)		
Rated continuous output power	3680W	4600W	
Maximum output apparent power	4000VA	5000VA	
Max. output fault current	99Apeak		
Backup load overcurrent protection	32A		
General parameters			
Temperature	-25° C to +60° C, derating above 45° C		
Protective class	Class I		
Overvoltage Category	II(DC side), III(AC side)		
Ingress protection	IP65		
Altitude	≤ 2000m		
Dimension (W×H×D)mm	540×590×240		
Weight (Kg)	32		
Relative Humidity	0~95% (No condensation)		
Topology	High Frequency Isolation		
Cooling	Natural Convection		
Display	LCD/APP		
Communication Interface	RS485/CAN2.0/WIFI		
Max. Conversion Efficiency (From Battery)	94.0%		
Max. Conversion Efficiency (From PV)	97.6%		
Euro Efficiency	97.0%		
MPPT Efficiency	99.5%		
Protection Function	Short Circuit Protection, AC Leakage Fault Protection, Grounding Fault Protection, Anti-islanding Protection, Overload Protection、 Surge Protection 、 DC Polarity Protection		
Certification& Standard			
Grid Regulation	AS/NZS 4777.2, VDE-AR-N4105, VDE0126-1-1		
Safety Regulation	IEC/EN 62109-1&2, IEC62040-1		
EMC	EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4, EN61000-4-16, EN61000-4-18, EN61000-4-29		

*1. Nominal AC output power is 4999W for Australia and 4600W for Germany and South Africa.

*2. Maximum output current is 21.7A for Australia and 20A for Germany and South Africa.