14.34kWh

WHITE BODY

BLACCK BODY

MAIN PARAMETER

Rated capacity (Ah)	280
Nominal voltage (V)	51.2
Nominal Energy(Kwh)	14.33
Standard Charge Current (A)	140
Standard Discharge Current (A)	140
Maximum continuous charge current (A)	150
Maximum continuous discharge current (A)	150
Communication	CAN
Internal resistance (in Ω)	18mΩ
Dimension(D*W*H)	500*237*870mm
Protection Level	IP20
Charge temperature Range (°C)	0 ~ 55
Discharge temperature Range (°C)	-20 ~ 60
Standard Charge Voltage (V)	58.4
Upper limit Charging Voltage (V)	58.4
End-of-discharge Voltage (V)	43.2
Structure	16 series & 1 parallel

Recommend charging method declared by the manufacturer

Charge the battery at constant current 140A until voltage reaches 58.4V, then charge at constant voltage 58.4V till charge current is 14A

10.24kWh

WHITE BODY

BLACCK BODY

MAIN PARAMETER

Rated capacity (Ah)	200
Nominal voltage (V)	51.2
Nominal Energy(Kwh)	10.24
Standard Charge Current (A)	90
Standard Discharge Current (A)	90
Maximum continuous charge current (A)	100
Maximum continuous discharge current (A)	100
Communication	CAN
Internal resistance (in Ω)	16mΩ
Dimension(D*W*H)	420×237x775mm
Protection Level	IP20
Charge temperature Range (°C)	0 ~ 55
Discharge temperature Range (°C)	-20 ~ 60
Standard Charge Voltage (V)	58.4
Upper limit Charging Voltage (V)	58.4
End-of-discharge Voltage (V)	43.2
Structure	16 series & 1 parallel

Recommend charging method declared by the manufacturer

Charge the battery at constant current 90A until voltage reaches 58.4V, then charge at constant voltage 58.4V till charge current is 10.3A

5.12kWh

WHITE BODY

BLACCK BODY

MAIN PARAMETER

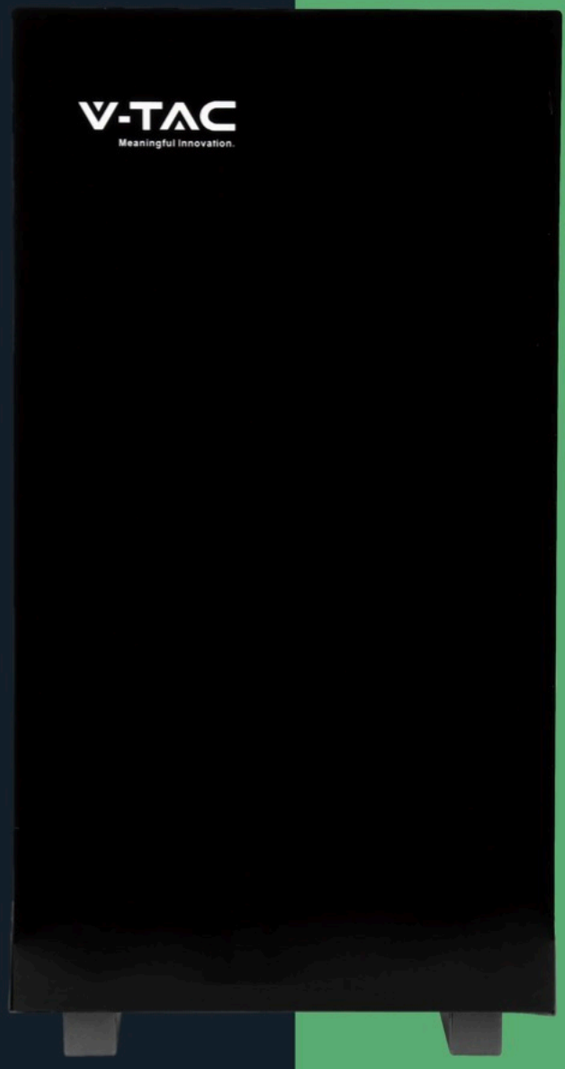
Rated capacity (Ah)	100
Nominal voltage (V)	51.2
Nominal Energy(Kwh)	5.12
Standard Charge Current (A)	90
Standard Discharge Current (A)	90
Maximum continuous charge current (A)	100
Maximum continuous discharge current (A)	100
Communication	CAN
Internal resistance (in Ω)	18mΩ
Dimension(D*W*H)	400*163*710mm
Protection Level	IP20
Charge temperature Range (°C)	0 ~ 55
Discharge temperature Range (°C)	-20 ~ 60
Standard Charge Voltage (V)	58.4
Upper limit Charging Voltage (V)	58.4
End-of-discharge Voltage (V)	43.2
Structure	16 series & 1 parallel

Recommend charging method declared by the manufacturer

Charge the battery at constant current 90A until voltage reaches 58.4V, then charge at constant voltage 58.4V till charge current is 10.3A

V-TAC

Meaningful Innovation.



Lithium Ion Batteries

5.12kWh

10.24kWh

14.33kWh

10 YEAR WARRANTY

TW SOLAR

TWMNH

N-type Half-cell
Bifacial Module (54)

54HD495-515W

Certisolis

TIER 1 Bloomberg NEW ENERGY FINANCE

Residential Rooftop

15 YEAR Materials Warranty

30 YEAR Power Warranty

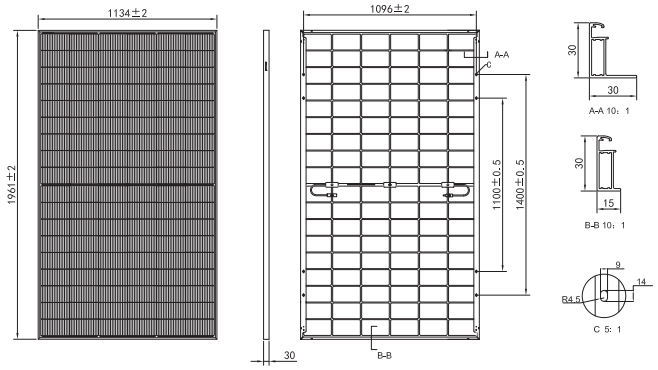
en.tongwei.com.cn

Learn More

TWMNH N-type Half-cell Bifacial Module (54)

54HD495-515W

DRAWINGS (Unit: mm)



ELECTRICAL CHARACTERISTICS (STC)

Module Type: TWMNH-54HDXXX					
Maximum Power: Pmax [W]	495	500	505	510	515
Open Circuit Voltage: Voc [V]	39.88	40.06	40.24	40.42	40.60
Short Circuit Current: Isc [A]	15.86	15.89	15.92	15.95	15.98
Voltage at Maximum Power: Vmp [V]	33.45	33.70	33.94	34.19	34.43
Current at Maximum Power: Imp [A]	14.80	14.84	14.88	14.92	14.96
Module Efficiency: η [%]	22.3	22.5	22.7	22.9	23.2

* STC: Irradiance 1000W/m², Cell Temperature 25℃, Air Mass1.5

ELECTRICAL CHARACTERISTICS (NMOT)

Maximum Power: Pmax [W]	374	378	381	385	389
Open Circuit Voltage: Voc [V]	37.97	38.14	38.31	38.48	38.65
Short Circuit Current: Isc [A]	12.80	12.83	12.85	12.88	12.90
Voltage at Maximum Power: Vmp [V]	31.30	31.56	31.73	31.96	32.21
Current at Maximum Power: Imp [A]	11.95	11.98	12.01	12.05	12.08

* NMOT: Irradiance 800W/m², Ambient Temperature 20℃, Air Mass1.5, Wind Speed 1m/s

Electrical characteristics with different rear side power gain

5%	Maximum Power: Pmax [W]	519	525	530	535	540
	Module Efficiency: η [%]	23.3	23.6	23.8	24.1	24.3
15%	Maximum Power: Pmax [W]	569	575	580	586	592
	Module Efficiency: η [%]	25.6	25.9	26.1	26.4	26.6
25%	Maximum Power: Pmax [W]	618	625	631	637	643
	Module Efficiency: η [%]	27.8	28.1	28.4	28.6	28.9

TEMPERATURE RATING

Temperature Coefficient of Pmax	-0.28%/℃
Temperature Coefficient of Voc	-0.24%/℃
Temperature Coefficient of Isc	+0.046%/℃
NMOT	45±2℃

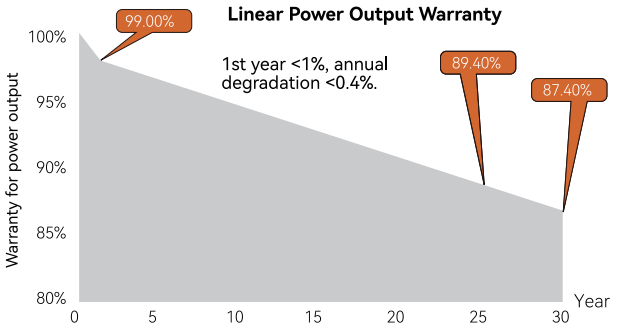
OPERATING PARAMETERS

Operating Temperature	-40℃~+85℃
Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	30A
Power Output Tolerance	0~+3%

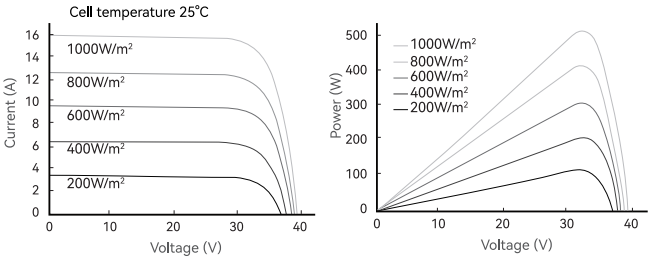
MECHANICAL PARAMETERS

Cell Type	TNC (N Type Monocrystalline Cell)
Cell Orientation	108[6×18]
Dimensions	1961±2×1134±2×30mm
Weight	27.4 kg
Front Glass	2.0mm AR coated heat strengthened glass
Rear Glass	2.0mm heat strengthened glass
Frame	Anodized aluminum alloy frame
Junction Box	IP68, 3 diodes
Cable	4.0mm²
Cable length	±1200mm, length can be customized
Wind/Snow load	2400Pa/5400Pa
Packaging	36pcs per pallet, 864pcs per 40'HC

WARRANTY



I-V CURVE



CERTIFICATIONS

Quality Management System and Product Certification

ISO 9001: 2015/Quality management system
ISO 14001: 2015/Environmental management system
ISO 45001: 2018/Occupation health safety management system
ISO 50001: 2018/Energy management system
IEC 62941: 2019/Quality system for PV module manufacturing
IEC 61215/61730, IEC 62804(PID), IEC 61701(Salt),
IEC 62716 (Ammonia), IEC 60068-2-68(Sand)

CE (Europe) CQC(China) TÜV NORD MCS (UK) KS (Korea) INMETRO (Brazil) JPEA (Japan) CEC (Australia) CSI (Italy)

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solis

GINLONG TECHNOLOGIES CO.,LTD.

S6-EH1P(3-8)K-L-PLUS

Solis Single Phase Low Voltage Energy Storage Inverters

New PLUS model provides solutions for demanding power scenarios

Features:

- Generator-compatible to extend backup duration during grid power outage
- Multiple inverters can operate together to form a microgrid
- Supports dual backup ports for intelligent control of critical and non-critical loads
- 10 seconds of 200% overload capability
- Automatic switchover time is <4ms, providing seamless transitions from grid to backup
- Ensures excellent power supply stability, keeping the load unaffected by a weak grid or generator supply fluctuations

Models:

S6-EH1P3K-L-PLUS / S6-EH1P3.6K-L-PLUS

S6-EH1P5K-L-PLUS / S6-EH1P6K-L-PLUS

S6-EH1P8K-L-PLUS

DATASHEET

S6-EH1P(3-8)K-L-PLUS

Models	3K	3.6K	5K	6K	8K
Input DC (PV side)					
Recommended max. PV array size	6 kW	7.2 kW	10 kW	12 kW	16 kW
Max. usable PV input power	4.8 kW	5.76 kW	8 kW	9.6 kW	12.8 kW
Max. input voltage	500 V				
Rated voltage	330 V				
Start-up voltage	90 V				
MPPT voltage range	90-435 V				
Max. input current	16 A / 16 A				32 A / 32 A
Max. short circuit current	20 A / 20 A				40 A / 40 A
MPPT number/Max. input strings number	2/2				2/4
Battery					
Battery type	Li-ion / Lead-acid				
Battery voltage range	40-60 V				
Max. charge / discharge power	3 kW	3.6 kW	5 kW	6 kW	8 kW
Max. charge / discharge current	70 A	80 A	112 A	135 A	190 A
Communication	CAN/RS485				
Output AC (Grid side)					
Rated output power	3 kW	3.6 kW	5 kW	6 kW	8 kW
Max. apparent output power	3 kVA	3.6 kVA	5 kVA	6 kVA	8 kVA
Operation phase	L/N/PE				
Rated grid voltage	220 V / 230 V				
Rated grid frequency	50 Hz / 60 Hz				
Rated grid output current	13.7 A / 13.1 A	16.4 A / 15.7 A	22.8 A / 21.8 A	27.3 A / 26.1 A	36.4 A / 34.8 A
Max. output current	13.7 A / 13.1 A	16.4 A / 15.7 A	22.8 A / 21.8 A	27.3 A / 26.1 A	36.4 A / 34.8 A
Power factor	>0.99 (0.8 leading - 0.8 lagging)				
THDi	<2%				
Input AC (Grid side)					
Input voltage range	187-253 V				
Max. input current	21 A	25 A	32 A	40 A	50 A
Frequency range	45-55 Hz / 55-65 Hz				
Output AC (Back-up)					
Rated output power	3 kW	3.6 kW	5 kW	6 kW	8 kW
Max. apparent output power	2 times of rated power, 10 s				
Back-up switch time	<4 ms				
Rated output voltage	L/N/PE, 220 V / 230 V				
Rated frequency	50 Hz / 60 Hz				
Rated output current	13.7 A / 13.1 A	16.4 A / 15.7 A	22.8 A / 21.8 A	27.3 A / 26.1 A	36.4 A / 34.8 A
Max. AC Passthrough current	35 A	35 A	40 A	40 A	50 A
THDv (@linear load)	<2%				
Efficiency					
Max. efficiency	96.2%				
EU efficiency	96.1%				
BAT charged by PV/AC Max. efficiency	95.3%/93.9%				
BAT discharged to AC Max. efficiency	93.8%				
Protection					
Ground fault monitoring	Yes				
DC reverse-polarity protection	Yes				
Integrated AFCI 2.0	Optional				
Protection class/Over voltage category	I / II (PV and BAT), III (MAINS and BACKUP and GEN)				
General Data					
Dimensions (W*H*D)	335*560*227 mm				
Weight	21.6 kg				22.2 kg
Topology	High frequency isolation (for battery)				
Operating ambient temperature range	-40 ~ +60°C				
Ingress protection	IP66				
Cooling concept	Natural convection			Intelligent redundant fan-cooling	
Max. operation altitude	3000 m				
Grid connection standard	NRS 097-2-1, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA, NBR 16149, NBR 16150				
Safety/EMC standard	IEC/EN 62109-1/-2, EN 61000-6-2/-3				
Features					
DC connection	MC4 plug (PV port) / Terminal Block (BAT port)				
AC connection	Terminal Block				
Display	LCD + Bluetooth + APP				
Communication	RS485, CAN, Optional: Wi-Fi, GPRS, LAN				