BATTERY STORAGE

TECHNICAL DATA

Battery type	LFP
Rated capacity of battery pack	200Ah
Rated voltage of battery pack	51.2V
Maximum charging voltage	57.6V
Minimum discharge voltage	40V
Rated charge/discharge current	100A
Maximum charge/discharge current	120A
Charging temperature range	0 to +45°C
Discharge temperature range	-20°C to +50°C
Depth of discharge	＞80%
Discharge magnification	＜1C
Self-discharge (25°C)	＜3%/Month
Cycle life	＞5000 times（＜0.5C）
Interactive mode (APP)	LCD+Button+Bluetooth
Dimension	750*515*250mm (±2mm)
Weight	91.0KG

solis

GINLONG TECHNOLOGIES CO.,LTD.

S6-EH3P(8-15)K02-NV-YD-L

Solis Three Phase Low Voltage Energy Storage Inverters

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
- Supports a maximum input current of 20A, making it ideal for all high-power PV modules of any brand
- Ensures excellent power supply stability, keeping the load unaffected by a weak grid or generator supply fluctuations
- The battery's DC side can handle a maximum charge/discharge current of up to 290A, allowing it to store more surplus energy generated by PV systems
- Supports Unbalanced and Half-Wave Loads on both the Grid and Backup Port

Models:

S6-EH3P8K02-NV-YD-L

S6-EH3P10K02-NV-YD-L

S6-EH3P12K02-NV-YD-L

S6-EH3P15K02-NV-YD-L

DATASHEET

S6-EH3P(8-15)K02-NV-YD-L

Models	8K	10K	12K	15K
Input DC (PV side)				
Max. usable PV input power	12.8 kW	16 kW	19.2 kW	24 kW
Max. input voltage	1000 V			
Rated voltage	550 V			
Start-up voltage	160 V			
MPPT voltage range	200-850 V			
Max. input current	20 A / 40 A			40 A / 40 A
Max. short circuit current	30 A / 50 A			50 A / 50 A
MPPT number/Max. input strings number	2/3			2/4
Battery				
Battery type	Li-ion / Lead-acid			
Battery voltage range	40 - 60 V			
Max. charge / discharge current	180 A	220 A	250 A	290 A
Communication	CAN/RS485			
Output AC (Grid side)				
Rated output power	8 kW	10 kW	12 kW	15 kW
Max. apparent output power	8 kVA	10 kVA	12 kVA	15 kVA
Operation phase	3/N/PE			
Rated grid voltage	380 V / 400 V			
Rated grid frequency	50 Hz / 60 Hz			
Rated grid output current	12.2 A / 11.5 A	15.2 A / 14.4 A	18.2 A / 17.3 A	22.8 A / 21.7 A
Max. output current	12.2 A / 11.5 A	15.2 A / 14.4 A	18.2 A / 17.3 A	22.8 A / 21.7 A
Power factor	>0.99 (0.8 leading - 0.8 lagging)			
THDi	<3%			
Input AC (Grid side)				
Input voltage range	323-460 V			
Max. input current	18.3 A / 17.3 A	22.8 A / 21.7 A	27.3 A / 26.0 A	34.2 A / 32.5 A
Frequency range	45-55 Hz / 55-65 Hz			
Input Generator				
Max. input power	8 kW	10 kW	12 kW	15 kW
Max. input current	12.2 A	15.2 A	18.2 A	22.8 A
Rated input voltage	3/N/PE, 380 V / 400 V			
Rated input frequency	50 Hz / 60 Hz			
Output AC (Back-up)				
Rated output power	8 kW	10 kW	12 kW	15 kW
Max. apparent output power	2 times of rated power, 10 s			
Back-up switch time	<10 ms			
Rated output voltage	3/N/PE, 380 V / 400 V			
Rated frequency	50 Hz / 60 Hz			
Rated output current	12.2 A / 11.5 A	15.2 A / 14.4 A	18.2 A / 17.3 A	22.8 A / 21.7 A
Max. Continuous output current	12.2 A	15.2 A	18.2 A	22.8 A
Max. Continuous AC Passthrough current	50 A			
THDv (@linear load)	<3%			
Efficiency				
Max. efficiency	97.6%			
EU efficiency	97.0%			
Protection				
Anti-islanding protection	Yes			
Output over current protection	Yes			
Short circuit protection	Yes			
DC reverse-polarity protection	Yes			
Surge protection	Yes			
General Data				
Dimensions (W*H*D)	430*660*295 mm			
Weight	42 kg			
Topology	Non-isolated			
Operating ambient temperature range	-40 ~ +60°C			
Ingress protection	IP66			
Cooling concept	Intelligent redundant fan-cooling			
Max. operation altitude	4000 m			
Grid connection standard	NRS 097-2-1, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, SriLanka, EN 50438L, Vietnam, PEA\MEA			
Safety/EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-3			
Features				
DC connection	MC4 Quick connection plug (PV) & Screw terminal (Battery)			
AC connection	Screw terminal			
Display	LCD + Bluetooth + APP			
Communication	CAN, RS485, Ethernet, Optional: Wi-Fi, Cellular, LAN			

Tier1

BloombergNEF

YHSUNPRO POWER

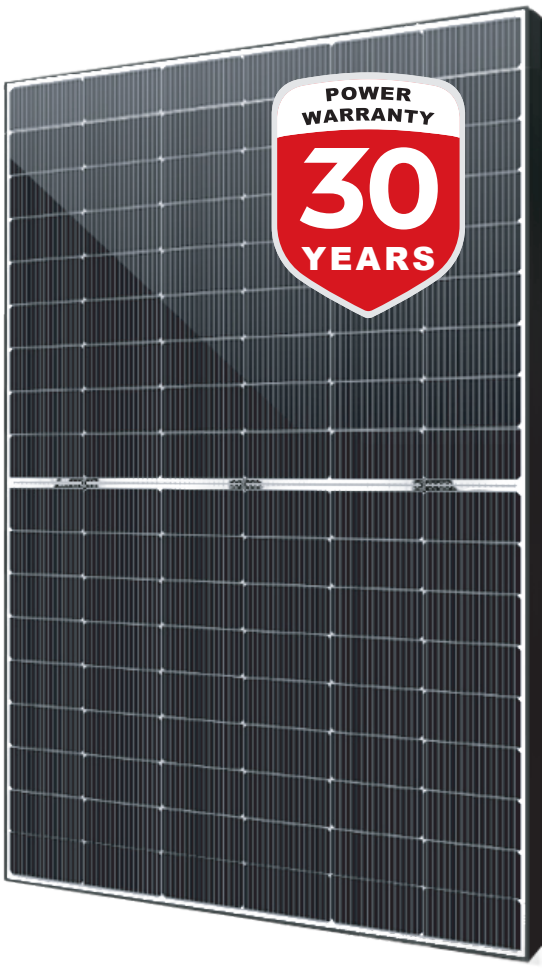
CLEAN ENERGY COUNCIL PV CYCLE ISO 9001 ISO 14001 SA 8000 ISO 45001 OHSAS 18001

M10 TOPCON BIFACIAL

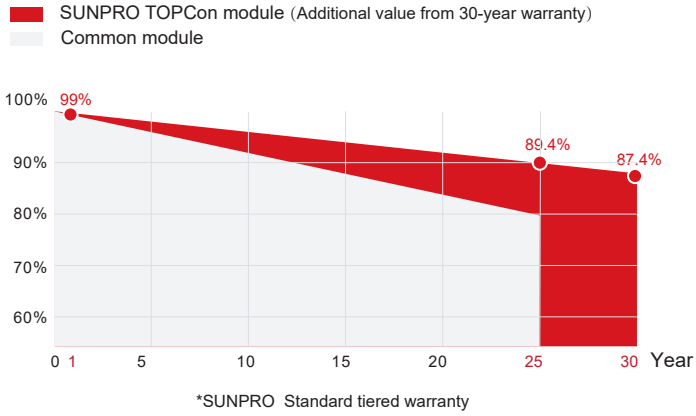
SPDGxxx-N108M10

410~440W

- Double glass
- Black frame
- Bifacial Transparent



25 Yr quality guarantee | 30 Yr power warranty



*SUNPRO Standard tiered warranty

WARRANTY & GUARANTEE

Linear output power guarantee
25 years: 89.4% power output
30 years: 87.4% power output

WITHSTAND STRONG

Snow load 5400Pa
Wind load 2400Pa

PID RESISTANCE

Power positive tolerance：0~+5W.
The attenuation probability of PID phenomenon is minimized through battery production technology optimization and material control

R&D AND PRODUCTION

Advanced production line. Bifaciality>80%,effectively improves backside power generation.The leading solar cell cutting process and multi busbar design with SUNPRO Technology.

HIGH EFFICIENCY

N-type , Components have better reliability and lower LID/LETID attenuation. Efficiency can reach 22.53%. Excellent low light performance. Higher power output under the conditions of haze, overcast, etc.

Electrical parameters at standard test conditions (STC:AM=1.5, 1000W/m² ,Cells Temperature25)

Typical type	410W	415W	420W	425W	430W	435W	440W
Max power(Pmax)	410	415	420	425	430	435	440
Max power voltage(Vmp)	31.25	31.37	31.49	31.64	31.79	31.94	32.09
Max power current(Imp)	13.12	13.23	13.34	13.44	13.53	13.62	13.72
Open circuit voltage(Voc)	37.94	38.04	38.13	38.24	38.34	38.43	38.53
Short circuit current(Isc)	13.85	13.96	14.07	14.16	14.25	14.34	14.43
Module Efficiency(%)	21.00	21.25	21.51	21.76	22.02	22.28	22.53
Max system voltage	DC 1500V (TÜV,UL)						
Maximum Series Fuse Rating	30A						

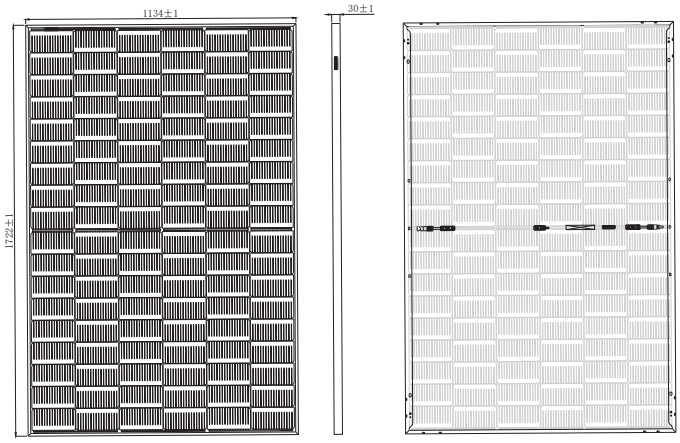
Electrical Characteristics with 15% Rear Side Power Gain
(Take 420W as an example)

Front power Pmax/W	410W	415W	420W	425W	430W	435W	440W
Total power Pmax/W	471.50	477.25	483.00	488.75	494.50	500.25	506
Max power voltage(Vmp)	31.25	31.37	31.49	31.64	31.79	31.94	32.09
Max power current(Imp)	15.09	15.21	15.34	15.45	15.56	15.66	15.77
Open circuit voltage(Voc)	37.94	38.04	38.13	38.24	38.34	38.43	38.53
Short circuit current(Isc)	15.93	16.05	16.18	16.28	16.39	16.49	16.59

Electrical parameters at NMOT test conditions
(Irradiance 800W/m²,Ambient Temperature 20°C,AM 1.5,Wind Speed 1m/s)

Typical type	410W	415W	420W	425W	430W	435W	440W
Max power(Pmax)	308	312	316	320	324	325	329
Max power voltage(Vmp)	29.4	29.5	29.6	29.7	29.9	29.80	29.90
Max power current(Imp)	10.49	10.58	10.67	10.75	10.84	10.91	11.00
Open circuit voltage(Voc)	35.7	35.8	35.9	36	36.1	36.00	36.10
Short circuit current(Isc)	11.16	11.25	11.34	11.41	11.48	11.56	11.63

DIMENSIONS AND STRUCTURE



Mechanical Data

Dimensions	1722x1134x30mm
Weight	23.3kg
Glass	(F) 2.0mm ultra clear embossed double layer colorless glass (B) 2.0mm semi-tempered glass
Output cables	4mm² , symmetrical lengths 1100mm
Connectors	MC4 compatible IP68
Cell type	Mono-Crystalline, N type Bifacial, 182x91mm
Number of cells	108cells(Half-Cell)

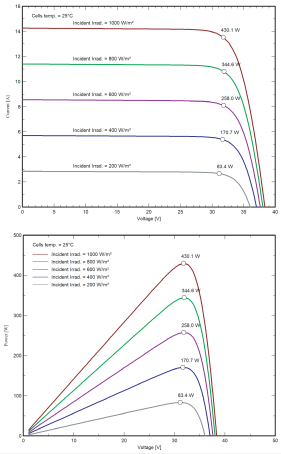
Temperature Characteristics

Temp.Coeff.of Isc(TK Isc)	0.045% / ℃
Temp.Coeff.of Voc(TK Voc)	-0.25%/℃
Temp.Coeff.of Pmax(TK Pmax)	-0.30%/℃
Operating temperature	-40~+85 ℃
Normal operating cell temperature	42±2℃

Packing Configuration

Container	40'HQ
Pieces per pallet	72
Pallets per container	13
Pieces per container	936

I-V CHARACTERISTICS AT DIFFERENT IRRADIATION



Tests, Certifications and Warranties

Standard tests	IEC 61215, IEC 61730, IEC 61701, IEC 62716, PPP 58042
System certs	ISO 9001, ISO14001, ISO45001
Certifications	TÜV, CE, CEC, UL, WEEE
Extreme wind and snow loads testing	Withstand extreme wind(2400 Pascal) and snow loads(5400 Pascal)
Power tolerance	0~+5W
Junction box	IP 68
Warranties	25 years product warranty and 30 years 87.4% of power

ADD.: QINGGANG TECHNOLOGICAL IND. ZONE, YUHUAN CITY, ZHEJIANG PROVINCE, CHINA
TEL: +86 0576-80730906 E-MAIL: info@sunpropower.com WEBSITE: www.sunpropower.com