

DL5.0C

DL5.0C is designed for residential and small commercial applications, with up to 50 units in parallel and an energy range from 5.12 kWh to 256 kWh. It supports 1C discharge rate. With high cycle times and a long lifespan, it ensures worry-free electricity consumption.



Flexible Expansion

Up to 50 units in parallel,
5.12kWh--256kWh capacity



1C Discharge

Simultaneously supplying power
to multiple loads, no need to
worry about power outages



Automatic Self-heating

-20°C to 55°C operating tempera-
ture (optional)



Easy Installation

Support wall-mounted, floor-mount-
ed, stacked and rack-mounted
installations, high space utilization



Long-term Reliability

LFP cells, 6000+ cycles, 10
years warranty



All-round Safety

Short-circuit lockout, surge-resistant,
safe and reliable

Model	DL5.0C
Battery Type	LiFePO ₄
Nominal Battery Energy	5.12 kWh
Nomina Capacity	100Ah
Nominal Voltage	51.2V
Operating Voltage	44.8~57.6V
Recomended Charge & Discharge C Rate	0.5C
Maximum Discharge Crate	1C
Recommended Charge/Discharge Current	50A
Max. Charge/Discharge Current	Charge 75A Discharge 100A
Peak Discharge Current	110A(15s)
Depth of Discharge (DOD)	90%
Net Weight	54kg
Dimension[W/D/H](mm)	558/545/150
Charging Temp. Range	0~55°C/-20~55°C (with heating function)
Discharging Temp. Range	-20~55°C
Communication	CAN/RS485/RS232
Cycle Life *	≥6000 Cycles
Protection Level	IP20
WIFI Module	Optional
Expansion	Up to 50 units in parallel
Certification & Safety Standard	UN38.3/CE-EMC/IEC62619/CEI-021/GOST-R
Compatible Inverterst	SMA/Schneider/Victron energy/Ingeteam/Solis/GoodWe/Growatt/Soplanet/Luxpower/DEYE etc.

* Test conditions: 0.2C Charging & Discharging. @25°C, 90% DOD



SNA 3-6k Monofase

- Commutazione da off-grid alla rete senza interruzione di fornitura di energia
- Ampio intervallo di tensione di ingresso fotovoltaico
- Monofase/Trifase sbilanciata
- Supporto fino a 16 unità in parallelo
- L'inverter principale viene generato automaticamente per gestire l'intero sistema
- Porta del generatore separata disponibile



Eccellente
prestazione



Commutazione
senza interruzione



Garanzia



Monitoraggio
tramite APP



SpecifiCation

Ingresso (DC fotovoltaico)	SNA 3000W		SNA 4000W	SNA 5000W	SNA 6000W
Potenza massima dell'array fotovoltaico (W)	6000 (3000/3000)		8000 (4000/4000)	8000 (4000/4000)	8000 (4000/4000)
Tensione nominale di ingresso fotovoltaico (V)	320				
Numero di ingressi MPPT indipendenti	2				
Intervallo di tensione di ingresso fotovoltaico (V)	100~480				
Intervallo di tensione MPPT (V)	120~385				
Tensione di avviamento (V)	100				
Corrente massima di ingresso fotovoltaico per MPPT (A)	17/17				
Corrente massima di cortocircuito dell'ingresso fotovoltaico per MPPT (A)	25/25				
Batteria					
Tipo di batteria compatibile	Ioni di litio / Piombo acido				
Tensione nominale della batteria (V)	48				
Intervallo di tensione della batteria (V)	38.4~60				
Corrente massima di carica/scarica (A)	70	90	110	140	
Potenza massima di scarica/scarica (W)	3000	4000	5000	6000	
Capacità consigliata della batteria per inverter	>100AH	>200AH	>200AH	>200AH	
Risveglio forzato della batteria dalla funzione fotovoltaica	Sì				
Risveglio forzato della batteria dalla funzione di rete	Sì				
Rete					
Tensione nominale AC (V)	230				
Frequenza nominale AC (Hz)	50/60				
Corrente nominale in uscita AC (A)	13.5	17.5	22	26.5	
Potenza nominale in uscita AC (W)	3000	4000	5000	6000	
Corrente massima di ingresso AC	26	35	35	39.5	
Potenza massima di ingresso AC	6000	8000	8000	9000	
Fattore di potenza (PF)	0.99				
Distanza armonica totale di corrente (THDI)	<5%				
Corrente AC nominale dei relè di BYPASS (A)	40				
UPS					
Potenza nominale un uscita (W)	3000	4000	5000	6000	
Tensione nominale in uscita (V)	230				
Corrente nominale in uscita (A)	13.5	17.5	22	26.5	
Frequenza nominale in uscita (Hz)	50/60				
Potenza di picco, durata	2Pn, <2S				
Tempo di commutazione	<15ms@Singolo/ <30ms@In parallelo				
Forma d'onda	Onda sinusoidale				
THDV	3%				
Efficienza					
Efficienza massima di MPPT	0.99				
Efficienza massima	0.93				
Efficienza UE	/				
Efficienza massima di carica	0.93				
Efficienza massima di scarica	0.93				
Protezione					
Protezione da sovracorrente/sovratensione	Sì				
Protezione da corrente di cortocircuito AC	Sì				
Monitoraggio della rete	Sì				
Protezione da sovratensioni AC Tipo III	Sì				
Protezione dalla polarità inversa della batteria	Sì				
Generale					
Dimensioni (L*A*P)	330*505*135mm/13*19.9*5.3inch				
Peso	14.5kg/32lbs				
Grado di protezione	IP20				
Intervallo di temperatura ambiente operativa	0~50°C				
Intervallo di temperatura di conservazione	-15~60°C				
Umidità relativa	5%~95%				
Display e interfaccia di comunicazione	LCD+LED, RS485/Wi-Fi/CAN				
Garanzia	2 anni				
Metodo di raffreddamento	Raffreddamento Intelligente				
Topologia	Senza trasformatore				
Altitudine	<2000m				
Emissioni sonore (tipiche)	<50dB				
Standard e Certificazioni					
IEC 62109-1, IEC 61000, IEC62040/EN62040, IEC62109, NRS 097-2-1					



Tier1

BloombergNEF



ISO 9001
ISO 45001

ISO 14001
OHSAS 18001



M10 TOPCON BIFACIAL

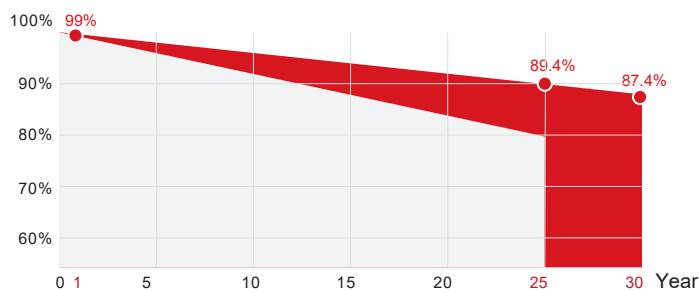
SPDGxxx-N108M10

410~440W

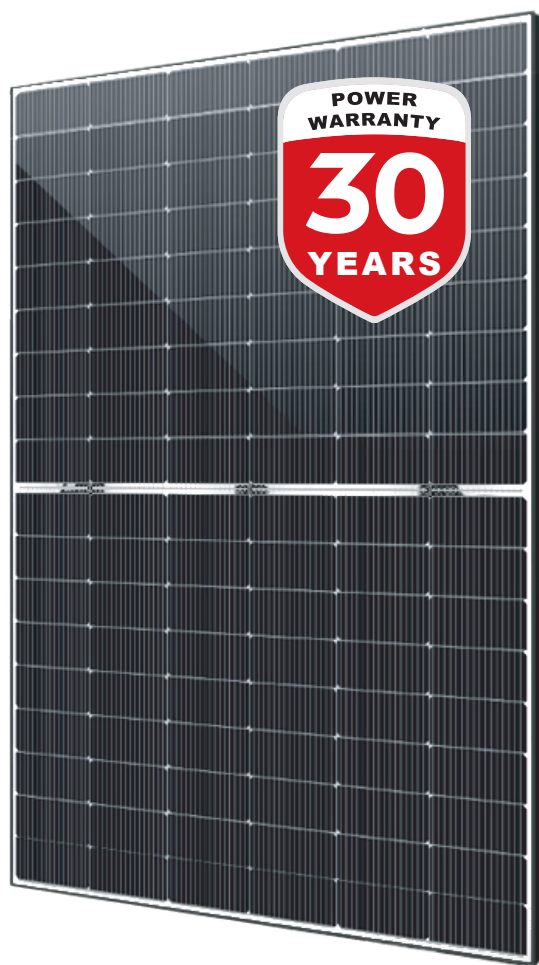
- Double glass
- Black frame
- Bifacial Transparent

25 Yr quality guarantee | 30 Yr power warranty

SUNPRO TOPCon module (Additional value from 30-year warranty)
Common module



*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 Temperature 25 °C)

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						

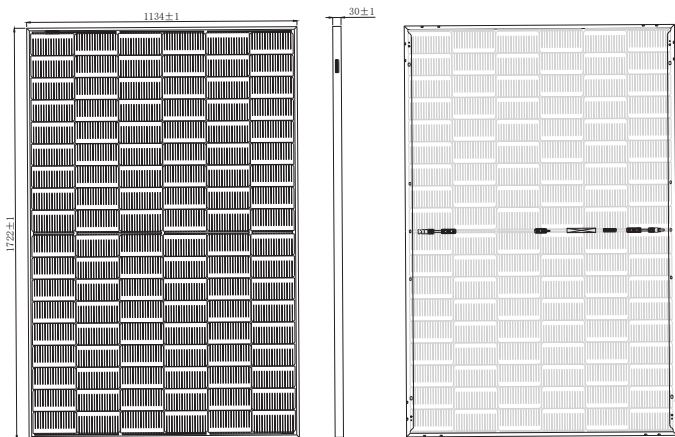
Electrical Characteristics with 15% Rear Side Power Gain (Take 420W as an example)

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	4mm ² , symmetrical lengths 1100mm
Connectors	MC4 compatible IP68
Cell type	Mono-Crystalline, N type Bifacial, 182x91mm
Number of cells	108cells(Half-Cell)

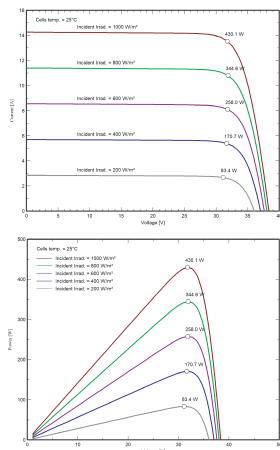
Temperature Characteristics

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

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