Hybrid Inverter

SUN- 5 / 6 / 8 / 10 / 12 K-SG04LP3-EU

- 100% unbalanced output, each phase; Max. output up to **50%** rated power
- DC couple and AC couple to retrofit existing solar system
- Max. 16pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- Max. charging/discharging current of 240A
- 48V low voltage battery, transformer isolation design
- 6 time periods for battery charging/discharging
- Support storing energy from diesel generator

Deye

Stock Code: 605117.SH

ROWA Sonnenenergie GmbH;
Kürschnergasse 2/ 2.Stock, 1210 Wien
E-Mail: office@pv-sonnenenergie.at
Tel.: +43 681 81773362

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Technical Data

www.deyeinverter.com

Model	SUN-5K -SG04LP3-EU	SUN-6K -SG04LP3-EU	SUN-8K -SG04LP3-EU	SUN-10K -SG04LP3-EU	SUN-12K -SG04LP3-EU
PV String Input Data					
Max. DC Input Power (W)	6500	7800	10400	13000	15600
Rated PV Input Voltage (V)	550 (160~800)				
Start-up Voltage (V)	160				
MPPT Voltage Range (V)	200-650				
Full Load DC Voltage Range (V)	350-650				
PV Input Current (A)	13+13			26+13	
Max. PV ISC (A)	17+17			34+17	
Number of MPPT / Strings per MPPT	2/1+1			2/2+1	
AC Output Data					
Rated AC Output and UPS Power (W)	5000	6000	8000	10000	12000
Max. AC Output Power (W)	5500	6600	8800	11000	13200
AC Output Rated Current (A)	7.6	9.1	12.1	15.2	18.2
Max. AC Current (A)	11.4	13.6	18.2	22.7	27.3
Max. Continuous AC Passthrough (A)	45				
Peak Power (off grid)	2 time of rated power, 10 S				
Power Factor	0.8 leading to 0.8 lagging				
Output Frequency and Voltage	50/60Hz; 3L/N/PE 220/380, 230/400Vac				
Grid Type	Three Phase				
DC injection current (mA)	THD<3% (Linear load<1.5%)				
Efficiency					
Max. Efficiency	97.60%				
Euro Efficiency	97.00%				
MPPT Efficiency	99.90%				
Output Over Voltage Protection	DC Type II/AC Type III				
Certifications and Standards					
Grid Regulation	CEI 0-21, VDE-AR-N 4105, NRS 097, IEC 62116, IEC 61727, G99, G98, VDE 0126-1-1, RD 1699, C10-11				
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				
General Data					
Operating Temperature Range (℃)	-45~60℃,>45℃derating				
Cooling	Smrat cooling				
Noise (dB)	<45 dB				
Communication with BMS	RS485; CAN				
Weight (kg)	33.6				
Size (mm)	422W x 699.3H x279D				
Protection Degree	IP65				
Installation Style	Wall-mounted				
Warranty	5 years				

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Battery Input Data					
Battery Type	Lead-acid or Li-Ion				
Battery Voltage Range (V)			40~60		
Max. Charging Current (A)	120	150	190	210	240
Max. Discharging Current (A)	120	150	190	210	240
External Temperature Sensor	Yes				
Charging Curve	3 Stages / Equalization				
Charging Strategy for Li-Ion Battery	Self-adaption to BMS				
Integrated	PV Input Lightning Protection, Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge protection				

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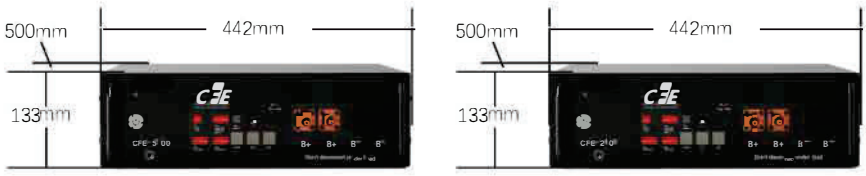
energy storage system

CNBM
Global Exclusive Distributor



Basic Parameters	CFE 5100	CFE2400
Nominal Voltage(V)	51.2	51.2
Nominal Capacity （Wh)	5120	2457
Usable Capacity(Wh)	4608	2211
Dimension(mm)	442*500*133	442*500*133
Weight(Kg)	42	27
Voltage(V)	48 ~ 56	48 ~ 56
Charge/Dischage Current(A)	60(Recommend)	30(Recommend)
	60(Max)	48(Max)
	100(Peak@15s)	60(Peak@15s)

Commucation Port	CAN / RS485
Single string quantity(pcs)	8
Working Temperature/℃(Charge)	0 ~ 45
Working Temperature/℃(Discharge)	-10 ~ 55
Shelf Temperature/℃	-20 ~ 60
Humidity	5 ~ 85%
Altitude(m)	< 2000
IP Rating	IP20
Warranty	10 years
Cycle life [1]	6000
Authentication Level	CE & TUV(IEC 62619, IEC 62040) UN38.3
Cooling Type	Ambient Cooling
Installation	Cabinet or Wall Mounting

[1] Test conditions: 0.2C Charging/Discharging, @25°C, 80% DoD

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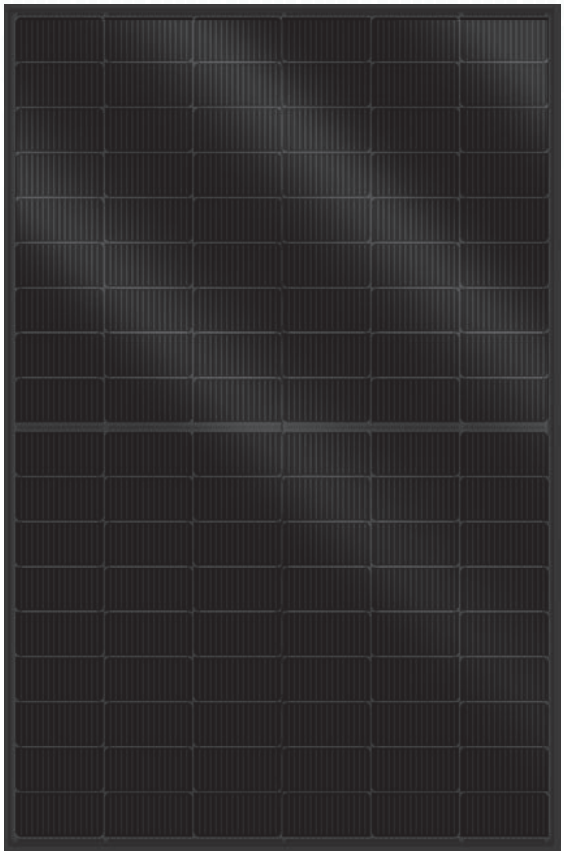
GreensunSolar



N-Type

GSM-M10/108H 420-440W

N-Type TOPCON All Black

Mono Silicon PV Module

440W	22.53%	0~+5W
Maximum Power Output	Maximum Module Efficiency	Power Output Guarantee

N-type Topcon technology for lower LCOE

The lower temperature coefficient and better low irradiance performance of Topcon technology can effectively reduce LCOE.

Ultra-low Degradation, longer warranty, higher output

- First-year degradation 1% and annual degradation at 0.4%
- Up to 25 years product warranty and 30 years power warranty

PID Resistance

Excellent Anti-PID performance guarantee via optimized mass-production process and materials control.

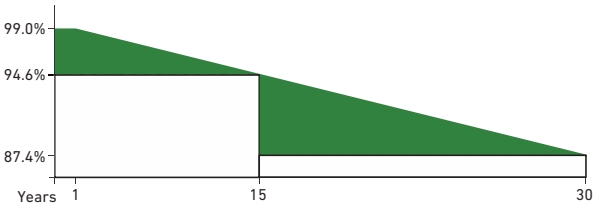
Universal solution for residential and C&I application

- Easy for integration, designed for compatibility with existing mainstream inverters and diverse mounting systems
- Perfect size and low weight for handling and installation
- Most valuable solution on low load capacity rooftops (weight similar to backsheet version)
- Mechanical performance up to 5400 Pa positive load and 4000 Pa negative load

Delivers Reliable Performance Over Time

- manufacturer of crystalline silicon photovoltaic modules
- Fully automatic facility and world-class technology
- Rigorous quality control to meet the highest standard: ISO9001:2015, ISO14001: 2015 and OHSAS: 18001 2007
- Tested for harsh environments (salt mist, ammonia corrosion and sand blowing test: IEC 61701, IEC 62716, DIN EN 60068-2- 68)
- Long term reliability tests
- 2×100% EL inspection ensuring defect-free modules

Linear Performance Warranty



15 years Product warranty on materials and workmanship

30 years Linear power output warranty

First-year degradation *1%* and annual degradation at *0.4%*

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GreensunSolar

Electrical Specification (STC*)

Maximum Power	Pmax(W)	420	425	430	435	440
Maximum Power Voltage	Vmp(V)	31.51	31.70	31.88	32.07	32.26
Maximum Power Current	Imp(A)	13.33	13.41	13.49	13.57	13.65
Open Circuit Voltage	Voc(V)	38.11	38.30	38.49	38.68	38.87
Short Circuit Current	Isc(A)	14.07	14.15	14.23	14.31	14.39
Module Efficiency	(%)	21.51	21.76	22.02	22.27	22.53
Power Output Tolerance	(W)			0~+5		

* Irradiance 1000W/m², Module Temperature 25°C, Air Mass 1.5

Electrical Specification (NOCT*)

Maximum Power	Pmax (W)	316	320	323	327	331
Maximum Power Voltage	Vmp (V)	29.34	29.50	29.63	29.78	29.92
Maximum Power Current	Imp (A)	10.76	10.83	10.91	10.98	11.06
Open Circuit Voltage	Voc(V)	36.20	36.38	36.56	36.74	36.92
Short Circuit Current	Isc (A)	11.36	11.42	11.49	11.55	11.62

* Irradiance 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s

Mechanical Data

Number of Cells	108 Cells (6×18)
Dimensions of Module L*W*H (mm)	1722×1134×30mm
Weight (kg)	22.0 kg
Front Side Glass	High transparency solar glass 3.2mm
Backsheet	Black
Frame	Black , anodized aluminium alloy
J-Box	IP68 Rated
Cable	4.0mm² (0.006 inches²), 300mm (11.8 inches)
Number of diodes	3
Wind/ Snow Load	4000Pa/ 5400Pa*
Connector	MC Compatible

* For more details please check the installation manual

Temperature Ratings

Nominal Operating Cell Temperature (NOCT)	45±2°C
Temperature Coefficient of Isc	+0.040%/°C
Temperature Coefficient of Voc	-0.240%/°C
Temperature Coefficient of Pmax	-0.300%/°C

Maximum Ratings

Operational Temperature	-40~+85°C
Maximum System Voltage	1500V DC
Max Series Fuse Rating	20A

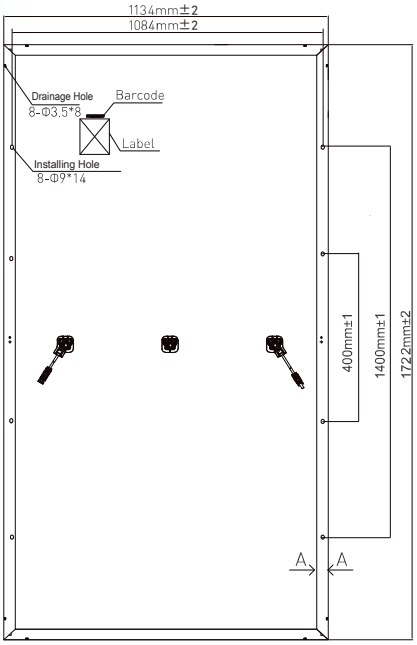
Packaging Configuration

Module per box	37 pieces
Module per 40' container	962 pieces

Optional

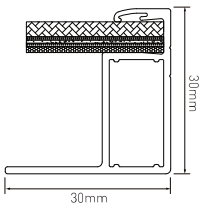
Connector	MC Original

Module Dimension

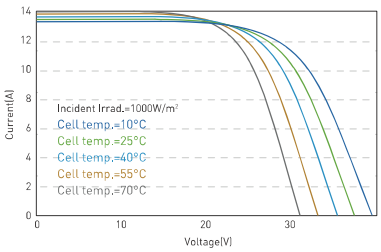


Back View

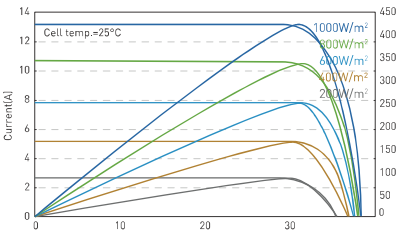
A-A



I-V Curve at Different Temperature (420W)



I-V/P-V Curve at Different Irradiation (420W)



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