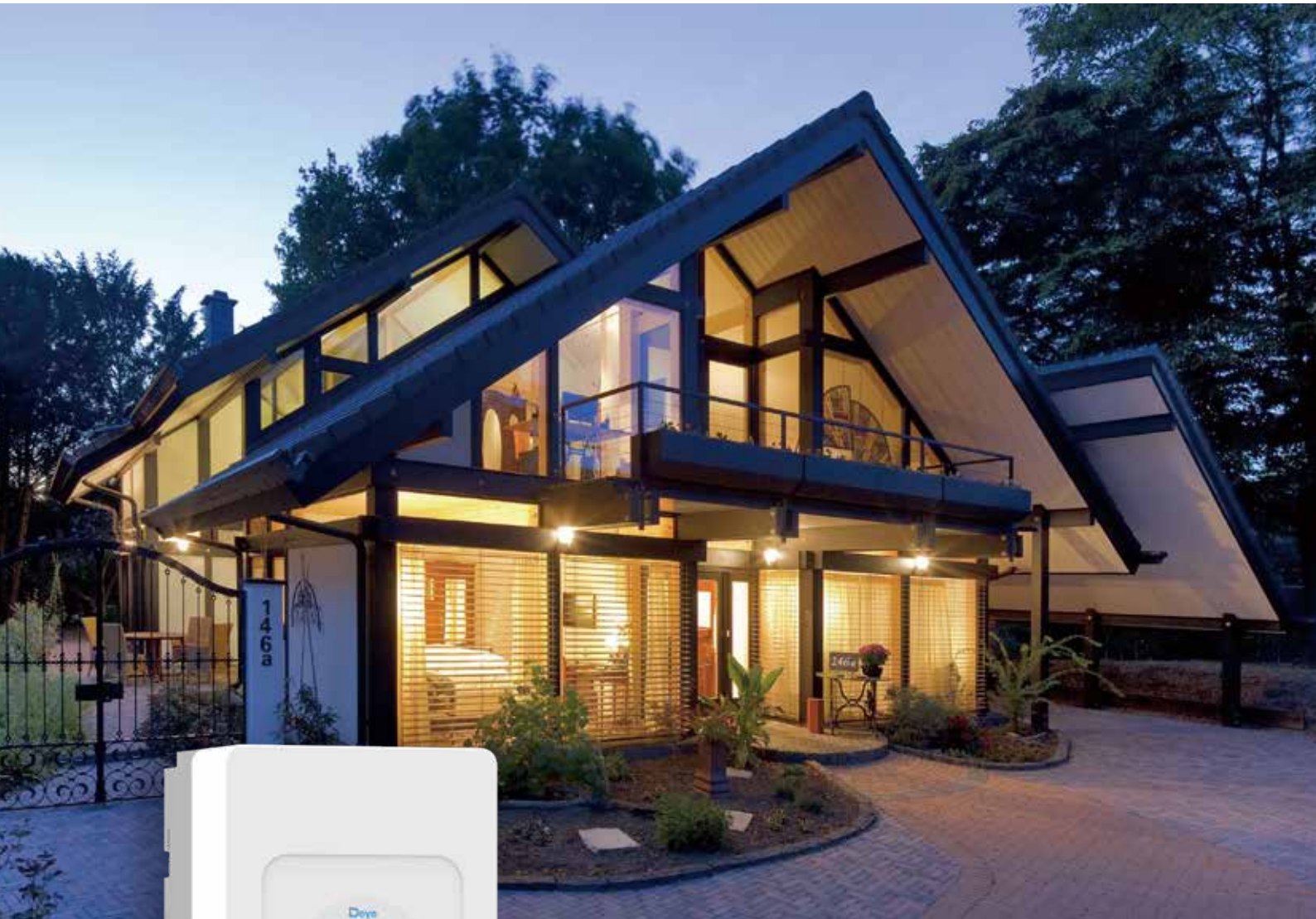


# Single Phase Hybrid Inverter

SUN-3.6/5/6K-SG03LP1-EU



Colorful touch LCD, IP65 protection degree



AC couple to retrofit existing solar system



Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel



Max. charging/discharging current of 135A



6 time periods for battery charging/discharging



Support storing energy from diesel generator

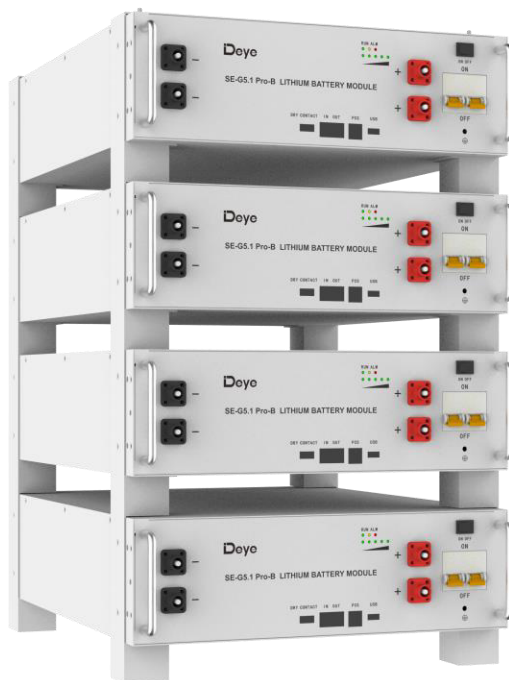
**Deye**

Stock Code: 605117.SH

Model	SUN-3.6K -SG03LP1-EU	SUN-5K -SG03LP1-EU	SUN-6K -SG03LP1-EU
Battery Input Data			
Battery Type	Lead-acid or Lithium-ion		
Battery Voltage Range (V)	40-60		
Max. Charging Current (A)	90	120	135
Max. Discharging Current (A)	90	120	135
Charging Strategy for Li-ion Battery	Self-adaption to BMS		
Number of Battery Input	1		
PV String Input Data			
Max. PV Input Power (W)	4680	6500	7800
Max. PV Input Voltage (V)	500		
Start-up Voltage (V)	125		
MPPT Voltage Range (V)	150-425		
Rated PV Input Voltage (V)	370		
Max. Operating PV Input Current (A)	13+13		
Max. Input Short-Circuit Current (A)	17+17		
No. of MPP Trackers/ No. of Strings per MPP Tracker	2/1+1		
AC Input/Output Data			
Rated AC Input/Output Active Power (W)	3600	5000	6000
Max. AC Input/Output Apparent Power (VA)	3960	5500	6600
Rated AC Input/Output Current (A)	16.4/15.7	22.7/21.7	27.3/26.1
Max. AC Input/Output Current (A)	18/17.2	25/23.9	30/28.7
Max. Continuous AC Passthrough (grid to load) (A)	35		40
Peak Power (off-grid) (W)	2 times of rated power, 10s		
Power Factor Adjustment Range	0.8 leading to 0.8 lagging		
Rated Input/Output Voltage/Range (V)	220/230 0.85Un-1.1Un		
Rated Input/Output Grid Frequency/Range(Hz)	50/45-55, 60/55-65		
Grid Connection Form	L+N+PE		
Total Current Harmonic Distortion THDi	<3% (of nominal power)		
DC Injection Current	<0.5% In		
Efficiency			
Max. Efficiency	97.6%		
Euro Efficiency	96.5%		
MPPT Efficiency	>99%		
Equipment Protection			
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection AC Output Overvoltage Protection, AC Output Short Circuit Protection, Thermal Protection DC Terminal Insulation Impedance Monitoring, DC Component Monitoring, Ground Fault Current Monitoring Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch Overvoltage Load Drop Protection, Residual Current (RCD) Detection, Surge protection level		
Surge Protection Level	TYPE II(DC), TYPE II(AC)		
Interface			
Communication Interface	RS485/RS232/CAN		
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)		
General Data			
Operating Temperature Range (°C)	-40 to +60°C, >45°C Derating		
Permissible Ambient Humidity	0-100%		
Permissible Altitude	2000m		
Noise (dB)	<30		
Ingress Protection(IP) Rating	IP 65		
Inverter Topology	Non-Isolated		
Over Voltage Category	OVC II(DC), OVC III(AC)		
Cabinet Size (WxHxD mm)	330×580×232 (Excluding Connectors and Brackets)		
Weight (kg)	25		
Type of Cooling	Intelligent Air Cooling		
Warranty	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy		
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105		
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2		



# SE-G5.1 Pro-B



## ◆ Safer

Cobalt Free Lithium Iron Phosphate (LFP) Battery: Safety and long Lifespan, high efficiency and high power density. Intelligent BMS, providing complete protection.

## ◆ Reliable

Support high discharge power. IP20, natural cooling, wide temperature range: -20°C to 55°C.

## ◆ Flexible

Modular design, easy to expand, Max. 64 units in parallel, Max. capacity of 327kWh. Suited to residential and commercial applications for increasing the self-consumption ratio.

## ◆ Convenient

Battery module auto networking, easy maintenance, support remotely monitoring and upgrade, support USB drive upgrade the firmware.

## ◆ Eco-Friendly

Use environmental protection materials, the whole module non-toxic, pollution-free.

## ◆ Three Mounting Methods

19inch Standard design, support rack-mounted, wall-mounted, and floor-mounted, saving installation space.



Stock Code: 605117.SH

Model		SE-G5.1 Pro-B
Main Parameter		
Battery Chemistry		LiFePO <sub>4</sub>
Capacity (Ah)		100
Scalability		Max. 64 pcs pack (327kWh) in parallel (Max. 32 pcs no external setup)
Nominal Voltage (V)		51.2
Operating Voltage(V)		43.2~57.6
Nominal Energy (kWh)		5.12
Usable Energy (kWh) <sup>[1]</sup>		4.6
Charge/Discharge Current (A) <sup>[2]</sup>	Recommend	50
	Max.	100
	Peak(2mins,25°C)	150
Other Parameter		
Recommend Depth of Discharge		90%
Dimension (W/H/D, mm)		440*133*540
Weight Approximate(kg)		45
Master LED Indicator		5LED(SOC:20%~SOC100%),3LED (working, alarming, protecting)
IP Rating of Enclosure		IP20
Operating Temperature		Charge: 0~55°C ( Optional heating: -20°C~55°C ), Discharge: -20°C~55°C
Storage Temperature		0~35°C
Humidity		5%~95%
Altitude		≤2000m
Cycle Life		≥6000(25°C±2°C,0.5C/0.5C,90%DOD,70%EOL)
Installation		Wall-Mounted, Floor-Mounted, Rack-Mounted (19-inch standard cabinet, cabinet depth ≥600mm )
Communication Port		CAN2.0, RS485
Warranty Period <sup>[3]</sup>		10 years
Energy Throughput		16MWh@70%EOL
Certification		UN38.3, IEC62619, CE,UK, VDE2510-50, CEI 0-21, FCC, UL1973, UL9540A

[1] DC Usable Energy, test conditions: 90% DOD, 0.5C charge & discharge at 25°C. System usable energy may vary due to system configuration parameters.

[2] The current is affected by temperature and SOC.

[3] Conditions apply, refer to Deye Warranty Letter.

## Introduction

This series lithium iron phosphate battery is one of new energy storage products developed and produced by Deye , it can be used to support reliable power for various types of equipment and systems.

This series is especially suitable for application scene of high power, limited installation space, restricted load-bearing and long cycle life.

This series has built-in BMS battery management system, which can manage and monitor cells information including voltage, current and temperature. What's more, BMS can balance cells charging to extend cycle life. Multiple batteries can connect in parallel for larger capacity and longer power supporting.

Model	Accessories Parts Description	Remark
3U-LBCable150	Battery Parallel Cable (Included)	Battery power and communication parallel connection cable (when using the 3U-bracket floor mount)
3U-LPCable1500	Hybrid inverter Cable (Included)	Battery power and communication cable connect with hybrid inverter
3U-LRfe	Battery Rack Fixed Ears (Included)	Used for battery fixing with 19inch rack or cabinet
3U-Bracket	Battery Brackets (Included)	Simple stacking bracket, 1 unit including 4 pcs brackets, Max. stacking 4 floors
3U-W-Bracket	Battery Wall-Mounted Brackets and screws (Included)	Simple wall hanging support.



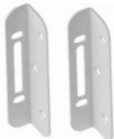
**Model: 3U-LBCable150**

**Details:** Pair of 150mm 4AWG Battery power cable (both ends have waterproof terminals) and one 250mm RJ45 communication cable for battery parallel.



**Model: 3U-LPCable1500**

**Details:** Pair of 4AWG DC power cable (one end has a waterproof terminal, the other end is M10 copper terminal) and one RJ45 communication cable connect with hybrid inverter. The default length is 1500mm.



**Model: 3U-LRfe**

**Details:** Pair of rack fixed ears used for battery fixing with 19inch rack or cabinet.



**Model: 3U-Bracket**

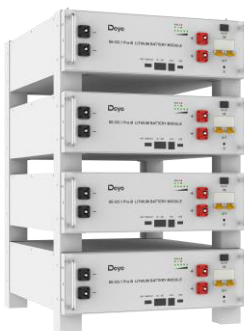
**Details:** Simple stacking bracket, height 187mm, 1 set including 4 pcs brackets, Max. stacking 4 floors.



**Model: 3U-W-Bracket**

**Details:** Pair of simple wall hanging support, included 4 sets of M6 expansion screws.

## Mounting example



Floor-Mounted



Wall-Mounted



Rack-Mounted