

## 5KW DEYE HYBRID INVERTER



Max. Efficiency  
97.6%



2 MPPT



RS485/CAN



Internal SPD



Zero Export



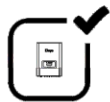
IP65  
Ingress Protection



High Power  
Factor



High Surge  
Endurance



AC Coupled



Support Generator  
Connection

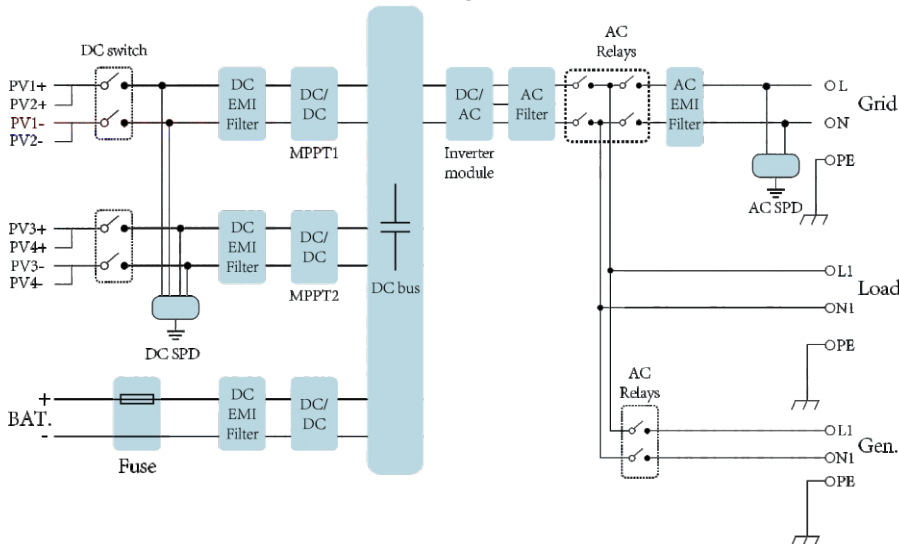


Six Time of  
Use Setting

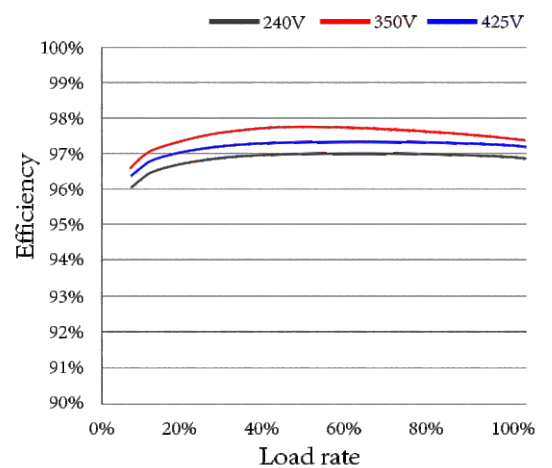


Support Multiple  
Parallel

Circuit block diagram



Efficiency curve



**\* HIGHER YIELDS**

Improve self-consumption ratio up to 80%, reducing your electricity bill  
DC/AC ratio up to 1.3, completely suitable for double-side PV modular  
Two MPPT design, Max. efficiency of 97.6%

**\* USER-FRIENDLY**

LCD Touch screen and buttons, easy operation  
Compatible with lithium-ion battery and lead acid battery  
Web browser and mobile App monitoring supported

**\* RELIABLE**

PV lighting protection, Anti-islanding protection, Leakage current protection etc  
Support store energy from DG when needed, ensure the system working within 7\*24H  
IP65 protection degree, adapt to indoor and outdoor using  
Automatically switch from on-grid to off-grid mode within 5ms  
Zero exporting function, fast reaction within 200ms in zero export mode

**\* SMART**

Programmable charging and discharging schedule  
Both wind turbines and solar panels can be connected as DC input power  
Max. 16 units can be paralleled for higher system power  
Retrofitting of existing solar system to energy storage system

# Deye 德業



## SPECIFICATIONS

Model	SUN-5K-SG01LP1
<b>Battery Input Data</b>	
Battery Type	Lead-acid or Li-Ion
Battery Voltage Range (V)	40-60V
Max. Charging Current (A)	120A
Max. Discharging Current (A)	120A
Charging curve	3 Stages/Equalization
External Temperature Sensor	Optional
Charging Strategy for Lithium Battery	Self-adaption to BMS
<b>PV String Input Data</b>	
Max. DC Input Power (W).	6500W.
PV input Voltage (V).	370V (100V-500V).
MPPT Range (V).	125-425V.
Full Load DC Voltage Range.	240V-425V.
Start-up Voltage (V)	150V.
PV Input Current (A).	11A + 11A.
No. of MPPT Trackers.	2
No. of Strings Per MPPT Tracker.	1+1.
<b>AC Output Data</b>	
Rated AC Output and UPS Power ( W).	5000W.
Max AC Output Power (W).	5500W.
Peak Power(off grid).	2 times of rated power, 10 S.
AC Output Rated Current(A).	21.7A.
Max.AC Current(A).	25A.
Max Continuous AC Pass through(A).	35A.
power factor.	0.8 leading to 0.8 lagging.
Output Frequency and Voltage.	50/60Hz; 220/230/240Vac(split phase).
Grid Type.	single phase.
Current Harmonic Distortion.	THD<3% (Linear<1.5%).
<b>Efficiency</b>	
Max. Efficiency	97.60%
Euro Efficiency	96.50%
MPPT Efficiency	99.90%
<b>Protection</b>	
PV Input Lightning Protection	Integrated
Anti -islanding Protection	Integrated
PV String Input Reverse Polarity Protection	Integrated
Insulation Resistor Detection	Integrated
Residual Current Monitoring Unit	Integrated
Output over Current Protection	Integrated
Output Shorted Protection	Integrated
Output over Voltage Protection	Integrated
<b>Certifications and Standards</b>	
Grid Regulation	UL1741, IEEE1547, RULE21, VDE0126, AS4777, NRS2017, G98, G99, IEC61683, IEC62116, IE61727
Safety Regulation	IEC62109-1, IEC62109-2
EMC	EN61000-6-1, EN61000-6-3, FCC 15 class B
<b>General Data</b>	
Operating Temperature Range ( C )	-25—60 C , >45 C Derating
Cooling	Fan
Noise (dB)	<30
Communication with BMS	RS485; CAN
Weight (kg)	20.5
Size mm)	580 X 330 X 208mm
Protection Degree	IP65
Installation Style	Wall mounted
Warranty	5 years

