Single Phase Hybrid Inverter

SUN-7.6/8K-SG01LP1-EU



Intuitive

- Colorful touch LCD, IP65 protection degree

Intelligent

- 6 time periods for battery charging/discharging

Flexible

- AC couple to retrofit existing solar system
- Max. 16 pcs parallel for on-grid and off-grid operation; support multiple batteries parallel

Reliable

- Max. charging/discharging current of 190A
- Support storing energy from diesel generator

Technical Data

Model	SUN-7.6K-SG01LP1-EU	SUN-8K-SG01LP1-EU
Battery Input Data		
Battery Type	Lead-acid or Lithium-ion	
Battery Voltage Range (V)	40-60	
Max. Charging/Discharging Current (A)	190	190
Charging Strategy for Li-ion Battery	Self-adaption to BMS	
Number of Battery Input	1	
PV String Input Data		
Max. PV access power (W)	15200	16000
Max. PV Input Power (W)	9880	10400
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)	22+22	
Max. Input Short-Circuit Current (A)	28+28	
No. of MPP Trackers/ No. of Strings MPP Tracker	2/2+2	
AC Input/Output Data		
Rated AC Input/Output Active Power (W)	7600	8000
Max. AC Input/Output Apparent Power (VA)	8360	8800
Rated AC Input/Output Current (A)	34.5/33	36.4/34.8
Max. AC Input/Output Current (A)	38/36.3	40/38.3
Max. Continuous AC Passthrough (grid to load) (A)	50	
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	220/230V 0.85Un-1.1Un L+N+PE	
Rated Input/Output Grid Frequency/Range(Hz)	50/45-55, 60/55-65	
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 Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Arc Fault Circuit Interrupter (AFCI) (optional), Anti-islanding Protection, DC Switch, Insulation Impedance Detection, Residual Current Detection	
Surge Protection Level	TYPE II(DC), TYPE II(AC)	
Interface		
LCD/LED Display	LCD	
Communication Interface	WIFI, RS485, CAN	
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 (solar), Isolated (battery)	
Over Voltage Category	OVC II(DC), OVC III(AC)	
Cabinet Size (WxHxD mm)	420×670×233 (Excluding Connectors and Brackets)	
Weight (kg)	30	
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, G98, G99, VDE-AR-N 4105	
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2	

Deye
Ningbo Deye Inverter Technology Co., Ltd.
Address: No. 26 South YongJiang Road, Daqi, Beilun, NingBo, Zhejiang, China. | Tel: +86 (0)574 86228841 | E-mail: market@deye.com.cn