Single Phase Hybrid Inverter

SUN-7.6/8K-SG02LP1-EU-AM2
SUN-10/12K-SG02LP1-EU-AM3



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 250A
- Support storing energy from diesel generator

Technical Data

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Model	SUN-7.6K-SG02 LP1-EU-AM2	SUN-8K-SG02 LP1-EU-AM2	SUN-10K-SG02 LP1-EU-AM3	SUN-12K-SG02 LP1-EU-AM3
Battery Input Data				
Battery Type	Lead-acid or Lithium-ion			
Battery Voltage Range (V)	40-60			
Max. Charging/Discharging Current (A)	190	190	220	250
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	20000	24000
Max. PV Input Power (W)	12160	12800	16000	19200
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)	26+26		26+26+26	
Max. Input Short-Circuit Current (A)	44+44		44+44+44	
No. of MPP Trackers/ No. of Strings MPP Tracker	2/2+2		3/2+2+2	
AC Input/Output Data				
Rated AC Input/Output Active Power (W)	7600	8000	10000	12000
Max. AC Input/Output Apparent Power (VA)	8360	8800	11000	13200
Rated AC Input/Output Current (A)	34.6/33.1	36.4/34.8	45.5/43.5	54.6/52.2
Max. AC Input/Output Current (A)	38/36.4	40/38.3	50/47.9	60/57.4
Max. Continuous AC Passthrough (grid to load) (A)	50		60	
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)	<45			
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)	35.6			
Type of Cooling	Intelligent Air Cooling			
Warranty	5 Years / Up to 10 Years* *Warranty period varies by installation country. Refer to the Warranty Policy for details.			
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			