

Three Phase Hybrid Inverter

SUN-25/29.9/30K-SG02HP3-EU-AM3



Efficient

- High voltage battery, higher efficiency



Intelligent

- 6 time periods for battery charging/discharging



Flexible

- AC couple to retrofit existing solar system
- Max. 10 pcs parallel for on-grid and off-grid operation; support multiple batteries parallel



Reliable

- Max. charging/discharging current of 75A
- Support storing energy from diesel generator
- 100% unbalanced output

Model	SUN-25K-SG02HP3-EU-AM3		SUN-29.9K-SG02HP3-EU-AM3		SUN-30K-SG02HP3-EU-AM3	
Battery Input Data						
Battery Type	Lithium-ion					
Battery Voltage Range (V)	160-700					
Max. Charging/Discharging Current (A)	75					
Charging Strategy for Li-ion Battery	Self-adaption to BMS					
Number of Battery Input	1					
PV String Input Data						
Max. PV access power (W)	50000	59800	60000			
Max. PV Input Power (W)	40000	47840	48000			
Max. PV Input Voltage (V)	1000					
Start-up Voltage (V)	180					
MPPT Voltage Range (V)	150-850					
Rated PV Input Voltage (V)	600					
Max. Operating PV Input Current (A)	36+36+36					
Max. Input Short-Circuit Current (A)	54+54+54					
No. of MPP Trackers/ No. of Strings MPP Tracker	3/2+2+2					
AC Input/Output Data						
Rated AC Input/Output Active Power (W)	25000	29900	30000			
Max. AC Input/Output Apparent Power (VA)	27500	29900	33000			
Rated AC Input/Output Current (A)	37.9/36.3	45.4/43.4	45.5/43.5			
Max. AC Input/Output Current (A)	41.7/39.9	45.4/43.4	50/47.9			
Max. Continuous AC Passthrough (grid to load) (A)	80					
Peak Power (off-grid) (W)	1.5 times of rated power, 10s					
Power Factor Adjustment Range	0.8 leading to 0.8 lagging					
Rated input/output voltage	220/380V, 230/400V 0.85Un-1.1Un 3L+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	98.5%					
Euro Efficiency	98.0%					
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+LED					
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	3000m					
Noise (dB)	≤55					
Ingress Protection(IP) Rating	IP 65					
Inverter Topology	Non-Isolated					
Over Voltage Category	OVC II(DC), OVC III(AC)					
Cabinet Size (WxHxD mm)	448×688×270 (Excluding Connectors and Brackets)					
Weight (kg)	46					
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					