



# Three Phase Hybrid Inverter

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



- 100** 100% unbalanced output, each phase
-  AC couple to retrofit existing solar system
- 10** Max. 10 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 75** Max. charging/discharging current of 75A
- H** High voltage battery, higher efficiency
- 6** 6 time periods for battery charging/discharging
-  Support storing energy from diesel generator

# Technical Data

Model	SUN-25K-SG02HP3 -EU-AM3	SUN-29.9K-SG02HP3 -EU-AM3	SUN-30K-SG02HP3 -EU-AM3
<b>Battery Input Data</b>			
Battery Type	Lithium-ion		
Battery Voltage Range (V)	160-700		
Max. Charging Current (A)	75		
Max. Discharging Current (A)	75		
Charging Strategy for Li-ion Battery	Self-adaption to BMS		
Number of Battery Input	1		
<b>PV String Input Data</b>			
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		
<b>AC Input/Output Data</b>			
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/Range (V)	220/380V, 230/400V 0.85Un-1.1Un		
Rated Input/Output Grid Frequency/Range(Hz)	50/45-55, 60/55-65		
Grid Connection Form	3L+N+PE		
Total Current Harmonic Distortion THDi	<3% (of nominal power)		
DC Injection Current	<0.5% In		
<b>Efficiency</b>			
Max. Efficiency	98.50%		
Euro Efficiency	98.0%		
MPPT Efficiency	>99%		
<b>Equipment Protection</b>			
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 (optional), Anti-islanding Protection, DC Switch, Insulation Impedance Detection, Residual Current Detection		
Surge Protection Level	TYPE II(DC), TYPE II(AC)		
<b>Interface</b>			
LCD/LED Display	LCD+LED		
Communication Interface	RS485/RS232/CAN		
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)		
<b>General Data</b>			
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)	448x688x 270(Excluding Connectors and Brackets)		
Weight (kg)	46		
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		