

Three Phase Hybrid Inverter

SUN-5/6/8/10/12K-SG02HP3-EU-DM2



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 55A
- Support storing energy from diesel generator
- 100% unbalanced output

Model	SUN-5K-SG02HP3 -EU-DM2	SUN-6K-SG02HP3 -EU-DM2	SUN-8K-SG02HP3 -EU-DM2	SUN-10K-SG02HP3 -EU-DM2	SUN-12K-SG02HP3 -EU-DM2
Battery Input Data					
Battery Type	Lithium-ion				
Battery Voltage Range (V)	130-700				
Max. Charging/Discharging Current (A)	37		55		
Charging Strategy for Li-ion Battery	Self-adaption to BMS				
Number of Battery Input	1				
PV String Input Data					
Max. PV access power (W)	10000	12000	16000	20000	24000
Max. PV Input Power (W)	8000	9600	12800	16000	19200
Max. PV Input Voltage (V)	1000				
Start-up Voltage (V)	130				
MPPT Voltage Range (V)	150-850				
Rated PV Input Voltage (V)	600				
Max. Operating PV Input Current (A)	20+20				
Max. Input Short-Circuit Current (A)	30+30				
No. of MPP Trackers/ No. of Strings MPP Tracker	2/1+1				
AC Input/Output Data					
Rated AC Input/Output Active Power (W)	5000	6000	8000	10000	12000
Max. AC Input/Output Apparent Power (VA)	5500	6600	8800	11000	13200
Rated AC Input/Output Current (A)	7.6/7.3	9.1/8.7	12.2/11.6	15.2/14.5	18.2/17.4
Max. AC Input/Output Current (A)	8.4/8.0	10/9.6	13.4/12.8	16.7/16	20/19.2
Max. Continuous AC Passthrough (grid to load) (A)	35				
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%				
DC Injection Current	<0.5% In				
Efficiency					
Max. Efficiency	97.6%				
Euro Efficiency	97.0%				
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	2000m				
Noise (dB)	≤45				
Ingress Protection(IP) Rating	IP 65				
Inverter Topology	Non-Isolated				
Over Voltage Category	OVC II(DC), OVC III(AC)				
Type of Cooling	Natural 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				