

Three Phase Hybrid Inverter

SUN-29.9/35K-SG01HP3-AU-BM3

SUN-40/50K-SG01HP3-AU-BM4



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

Model	SUN-29.9K-SG01HP3 -AU-BM3	SUN-30K-SG01HP3 -AU-BM3	SUN-35K-SG01HP3 -AU-BM3	SUN-40K-SG01HP3 -AU-BM4	SUN-50K-SG01HP3 -AU-BM4
Battery Input Data					
Battery Type	Lithium-ion				
Battery Voltage Range (V)	160-800				
Max. Charging Current (A)	50+50				
Max. Discharging Current (A)	50+50				
Charging Strategy for Li-ion Battery	Self-adaption to BMS				
Number of Battery Input	2				
PV String Input Data					
Max. PV access power(W)	59800	60000	70000	80000	100000
Max. PV Input Power (W)	44850	45000	52500	60000	75000
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			36+36+36+36	
Max. Input Short-Circuit Current (A)	55+55+55			55+55+55+55	
No. of MPP Trackers/ No. of Strings MPP Tracker	3/2+2+2			4/2+2+2+2	
AC Input/Output Data					
Rated AC Input/Output Active Power (W)	29900	30000	35000	40000	50000
Max. AC Input/Output Apparent Power (VA)	29900	30000	35000	40000	50000
Rated AC Input/Output Current (A)	43.4	43.5	50.8	58	72.5
Max. AC Input/Output Current (A)	43.4	43.5	50.8	58	72.5
Max. Continuous AC Passthrough (grid to load) (A)	200				
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)	230/400V 240/415V 0.85Un-1.1Un				
Rated Input/Output Grid Frequency/Range(Hz)	50Hz/45Hz-55Hz				
Grid Connection Form	3L+N+PE				
Total Current Harmonic Distortion THDi	<3%				
DC Injection Current	<0.5% In				
Efficiency					
Max. Efficiency	97.60%				
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, Insulation Impedance Detection, Arc Fault Circuit Interrupter (optional),DC Switch, Anti-islanding Protection(Active Frequency shift) , Residual Current Detection				
Surge Protection Level	TYPE II(DC), TYPE II(AC)				
Interface					
Communication Interface	WIFI,RS485,CAN				
LCD/LED Display	LCD				
General Data					
Operating Temperature Range (°C)	-40°C to +60°C, >45°C Derating				
Permissible Ambient Humidity	0-100%				
Permissible Altitude	2000m				
Noise (dB)	≤65				
Ingress Protection(IP) Rating	IP 65				
Protection Level	Class I				
Inverter Topology	Non-Isolated				
Over Voltage Category	OVC II(DC), OVC III(AC)				
Cabinet Size (WxHxD mm)	527×894×294 (Excluding Connectors and Brackets)				
Weight (kg)	80				
Type of Cooling	Intelligent Air Cooling				
Warranty	10 Years				
Grid Regulation	AS/NZS 4777.2				
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				