

Three Phase Hybrid Inverter

SUN-60/70/75/80K-SG02HP3-AU-EM6



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 160A
- Support storing energy from diesel generator

Model	SUN-60K-SG02HP3 -AU-EM6	SUN-70K-SG02HP3 -AU-EM6	SUN-75K-SG02HP3 -AU-EM6	SUN-80K-SG02HP3 -AU-EM6
Battery Input Data				
Battery Type	Lithium-ion			
Battery Voltage Range (V)	160-1000			
Max. Charging/Discharging Current (A)	80+80			
Charging Strategy for Li-ion Battery	Self-adaption to BMS			
Number of Battery Input	2			
PV String Input Data				
Max. PV access power (W)	120000	140000	150000	160000
Max. PV Input Power (W)	96000	112000	120000	128000
Max. PV Input Voltage (V)	1000			
Start-up Voltage (V)	180			
MPPT Voltage Range (V)	150-850			
Rated PV Input Voltage (V)	650			
Max. Operating PV Input Current (A)	36+36+36+36+36+36			
Max. Input Short-Circuit Current (A)	54+54+54+54+54+54			
No. of MPP Trackers/ No. of Strings MPP Tracker	6/2+2+2+2+2			
AC Input/Output Data				
Rated AC Input/Output Active Power (W)	60000	70000	75000	80000
Rated/Max. AC Input/Output Apparent Power (VA)	60000	70000	75000	80000
Rated AC Input/Output Current (A)	87	101.5	108.7	116.0
Max. AC Input/Output Current (A)	87	101.5	108.7	116.0
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	230/400V 240/415V 0.85Un-1.1Un 3L+N+PE			
Rated Input/Output Grid Frequency/Range(Hz)	50/45-55			
Total Current Harmonic Distortion THDi	<3% (of nominal power)			
DC Injection Current	<0.5% In			
Generator Data				
Nominal Input Voltage (V)	230/400V, 240/415V			
Rated Input Current (A)	200			
Power Factor	0.8 leading-0.8 lagging			
Frequency	50Hz			
Backup Data				
Nominal Output Voltage (V)	230/400V,240/415V			
Rated Output Current (A)	87	101.5	108.7	116
Rated Apparent Power (VA)	60000	70000	75000	80000
Power Factor	0.8 leading-0.8 lagging			
Frequency	50Hz			
Efficiency				
Max. Efficiency	98.7%			
Euro Efficiency	98.1%			
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(Active Frequency shift), 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			
General Data				
Operating Temperature Range (°C)	-40 to +60°C, >45°C Derating			
Permissible Ambient Humidity	0-100%			
Permissible Altitude	3000m			
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)	606×927×314 (Excluding Connectors and Brackets)			
Weight (kg)	105			
Type of Cooling	Smart 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			