



Three-Phase Hybrid Inverter

DATASHEET



Full back-up power



10-year warranty



SoliTek support



Asymmetric loads

Inverter Model	SUN-30K-SG01HP3-EU-BM3	SUN-40K-SG01HP3-EU-BM4	SUN-50K-SG01HP3-EU-BM4
Battery Input Data			
Battery Type	Lithium-ion		
Battery Voltage Range (V)	160-800		
Max. Charging/Discharging Current (A)	50+50		
Charging Curve	3 Stages/Equalization		
Charging Strategy for Li-ion Battery	Self-adaption to BMS		
Number of Battery Input	2		
PV String Input Data			
Max. DC Input Power (W)	48000	64000	80000
Max. DC Input Voltage (V)	1000		
Start-up Voltage (V)	180		
MPPT Voltage Range (V)	150-850		
Rated DC 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 MPPT Trackers/ No. of String Per MPPT Tracker	3/2+2+2	4/2+2+2+2	
AC Input/Output Data			
Rated AC Input/Output Active Power (W)	30000	40000	50000
Max. AC Input/Output Apparent Power (VA)	33000	44000	55000
Rated AC Input/Output Current (A)	45.5/43.5	60.7/58	75.8/72.5
Max. AC Input/Output Current (A)	50/47.9	66.7/63.8	83.4/79.8
Max. Three-phase Unbalanced Output Current (A)	60	70	83.3
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)	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 Component of Grid	<0.5% In		

Efficiency		Equipment Protection	
Max. Efficiency	97.60%	Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, Thermal Protection, DC Terminal Insulation Impedance Monitoring, DC Component Monitoring, Ground Fault Current Monitoring, Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch Overvoltage Load Drop Protection, Residual Current (RCD) Detection, Surge protection level
Euro Efficiency	97.0%		
MPPT Efficiency	>99%		
Interface		Surge Protection Level	TYPE II(DC), TYPE II(AC)
Communication Interface	WIFI, RS485, CAN		
General Data			
Operating Temperature Range (°C)	-40 to +60°C, >45°C Derating	Type of Cooling	Intelligent Air Cooling
Permissible Ambient Humidity	0-100%	Warranty	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy
Permissible Altitude	2000m		
Noise	≤65 dB(A)	Grid Regulation	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2
Ingress Protection(IP) Rating	IP 65	Safety / EMC Standard	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105
Inverter Topology	Non-Isolated		
Over Voltage Category	OVC II(DC), OVC III(AC)		
Cabinet Size (WxHxD mm)	527x894x294 (Excluding Connectors and Brackets)		
Weight (kg)	80		