

Solis-(40-60)K, Solis-(50-70)K-HV

Solis Three Phase Inverters



Features:

- ▶ Solis Three Phase Range
- ▶ Over 99.0% Max. efficiency
- ▶ High precise, high speed MPPT algorithm
- ▶ Four MPPT input, each rated current is 28.5A, compatible with high power module
- ▶ Compact and light design for two-person easy installation
- ▶ IP65, visually pleasing for domestic environment
- ▶ THDi<2%, low harmonic distortion against grid
- ▶ Anti-resonance, single transformer can connect 6M+ in parallel
- ▶ Perfect commercial site monitoring solution
- ▶ Intelligent redundancy fan
- ▶ 5 years standard warranty, 20 years optional upgrade



Model:

400V: Solis-40K Solis-50K Solis-60K-4G

480V: Solis-50K-HV Solis-60K-HV Solis-70K-HV-4G

Datasheet

Model Name	Solis-40K	Solis-50K	Solis-60K-4G	Solis-50K-HV	Solis-60K-HV	Solis-70K-HV-4G
Input DC						
Max. DC input power(kW)	48	60	72	60	72	84
Max. DC input voltage(V)				1100		
Start-up voltage(V)				200		
MPPT voltage range(V)				200-1000		
Max. input current(A/B/C/D)	22A+22A+22A+22A	28.5A+28.5A+28.5A+28.5A	22A+22A+22A+22A	28.5A+28.5A+28.5A+28.5A		
Max. Short Circuit current for each MPPT	34.3A+34.3A+34.3A+34.3A	44.5A+44.5A+44.5A+44.5A	34.3A+34.3A+34.3A+34.3A	44.5A+44.5A+44.5A+44.5A		
MPPT number/Max input strings number	4/A:2; B:2; C:2; D:2	4/A:3; B:3; C:3; D:3	4/A:2; B:2; C:2; D:2	4/A:3; B:3; C:3; D:3		
Output AC						
Rated output power(kW)	40	50	60	50	60	70
Max. apparent output power(kVA)	44	55	66	55	66	77
Max. output power(kW)	44	55	66	55	66	77
Rated grid voltage(V)		400			480	
Rated grid frequency(Hz)			50/60			
Grid frequency range(Hz)			47-52 or 57-62			
Operation phase			Three Phase			
Rated grid output current(A)	58	72.2	86.6	60.2	72.2	84.2
Max. output current(A)	66.9	83.3	100	66.2	80	92.6
Power Factor (at rated output power)			0.8leading ... 0.8lagging			
THDi (at rated output power)			<3%			
DC injection current			<0.5%In			
Efficiency						
Max. efficiency	98.8%		99.0%	99.0%	99.0%	
EU efficiency	98.4%		98.5%	98.72%	98.5%	
MPPT efficiency			>99.9%			
Protection						
DC reverse-polarity protection			Yes			
Short circuit protection			Yes			
Output over current protection			Yes			
Output over voltage protection			Yes			
Insulation resistance monitoring			Yes			
Residual current detection			Yes			
Surge protection			Yes			
Grid monitoring			Yes			
Islanding protection			Yes			
Temperature protection			Yes			
Integrated DC switch			Optional			
General Data						
Dimensions(mm)			630W*700H*357D			
Weight (kg)	61	63		61	63	
Topology			Transformerless			
Self consumption (night)			<1W (Night)			
Operating ambient temperature range			-25~60°C			
Relative humidity			0~100%			
Ingress protection			IP65			
Noise emission(typical)	<30 dBA	<60 dBA	<30 dBA	<60 dBA		
Cooling concept	Natural convection	Natural convection+ Redundancy Fan	Natural convection	Natural convection+ Redundancy Fan		
Max. operation altitude			4000m			
Designed lifetime			>20 years			
Grid connection standard			EN50438, AS4777, VDE0126-1-1, IEC61727, G99			
Safty/EMC standard			IEC62109-1/-2, AS3100, EN61000-6-2, EN61000-6-4			
Features						
DC connection			MC4			
AC connection			OT Terminal connectors			
Display			LCD, 2x20 Z.			
Communication connections			4 pins RS485 connector, 2 RJ45 connector, 2 group of terminal block			
Monitoring			WiFi or GPRS			
Warranty			5 years standard (extend to 20 years)			