

# Solis-3P12K-4G

## Solis 4G Three Phase Inverters



### Features:

- ▶ Solis 3P 4G Three Phase Range
- ▶ 160V-850V MPPT voltage range-ultra low startup
- ▶ Dual MPPT design with precise MPPT algorithm
- ▶ THDi<1.5%, low harmonic distortion against grid
- ▶ Over 98.7% Max. efficiency
- ▶ Multiple protections levels
- ▶ RS485, WiFi/LAN/GPRS (optional) interface
- ▶ WiFi monitoring available-Android and Apple App store available



**Model:**  
Solis-3P12K-4G

### Datasheet

Model Name	Solis-3P12K-4G
<b>Input DC</b>	
Max. DC input power(kW)	14.5
Max. DC input voltage(V)	1000
Start-up voltage(V)	180
MPPT voltage range(V)	160-850
Max. input current(A/B)	22A+22A
Max. Short Circuit current for each MPPT	34.3A+34.3A
MPPT number/Max input strings number	2/A:2; B:2
<b>Output AC</b>	
Rated output power(kW)	12
Max. apparent output power(kVA)	13.2
Max. output power(kW)	13.2
Rated grid voltage(V)	400
Rated grid frequency(Hz)	50/60
Grid frequency range(Hz)	47-52 or 57-62
Operation phase	Three Phase
Rated grid output current(A)	17.3
Max. output current(A)	19.1
Power Factor (at rated output power)	0.8leading ... 0.8lagging
THDi (at rated output power)	<1.5%
DC injection current	<0.5%In
<b>Efficiency</b>	
Max. efficiency	98.7%
EU efficiency	98.1%
MPPT efficiency	>99.5%
<b>Protection</b>	
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
<b>General Data</b>	
Dimensions(mm)	310W*563H*219D
Weight (kg)	18.9
Topology	Transformer less
Self consumption (night)	<1W (Night)
Operating ambient temperature range	-25~60°C
Relative humidity	0~100%
Ingress protection	IP65
Noise emission(typical)	<30 dBA
Cooling concept	Natural convection+Redundancy Fan
Max. operation altitude	4000m
Designed lifetime	>20 years
Grid connection standard	EN50438, AS4777, VDE0126-1-1, IEC61727, G98, G99
Saftey/EMC standard	IEC62109-1/-2, AS3100, EN61000-6-1, EN61000-6-3
<b>Features</b>	
DC connection	MC4
AC connection	Terminal connectors
Display	LCD, 2x20 Z.
Communication connections	4 pins RS485 connector
Monitoring	WiFi or GPRS
Warranty	5/ 10/ 15/ 20 Years