

# Three

40KW  
to 70KW

## Solis Three PV Inverter

- ▶ Three phase output
- ▶ Max. efficiency 99%, EU efficiency 98.5%
- ▶ 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 < 3%, low harmonic distortion against grid
- ▶ Anti-resonance, single transformer can connect 6M+ in parallel
- ▶ Perfect commercial site monitoring solution
- ▶ Intelligent redundant fan-cooling



### Model:

Solis-40K

Solis-50K

Solis-50K -HV

Solis-60K-HV

Solis-70K-HV

### Leading Features:

Four

MPPT

Smart

Redundant  
fan-cooling

WiFi/GPRS

Real time  
monitoring

THDi

<3%

Available on the iPhone  
App Store

Available on the Android  
App Store

# Datasheet

Model	Solis-40K	Solis-50K	Solis-50K-HV	Solis-60K-HV	Solis-70K-HV
Energy Source	PV				
<b>Input Side(DC)</b>					
Max. DC input power(kW)	48	55	60	72	77
Max. DC input voltage(V)	1100				
Start-up voltage(V)	200				
MPPT voltage range(V)	200-1000				
Max. input current(A)	22A+22A+22A+22A	28.5A+28.5A+28.5A+28.5A	22A+22A+22A+22A	28.5A+28.5A+28.5A+28.5A	
MPPT number/Max input strings number	4/8	4/12	4/8	4/12	
<b>Output Side (AC)</b>					
Rated output power(kW)	40	50	50	60	70
Max. apparent output power(kVA)	44	55	55	66	77
Max. output power(kW)	44	55	55	66	77
Rated grid voltage(V)	380	380	500	500	540
Grid voltage range(V)	304-460	304-460	384-576	384-576	400-648
Rated grid frequency(Hz)	50/60				
Operation phase	Three				
Rated grid output current(A)	58	72.2	57.7	69.3	74.8
Max. output current(A)	66.9	83.3	66.2	80	82.3
Power Factor (at rated output power)	0.8...1...0.8				
THDi (at rated output power)	<3%				
DC injection current(mA)	<50				
Grid frequency range(Hz)	47-52 or 57-62				
<b>Efficiency</b>					
Max. efficiency	98.8%	98.8%	99.0%	99.0%	99.0%
EU efficiency	98.4%/98.4%	98.4%/98.4%	98.5%/98.5%	98.5%/98.5%	98.5%/98.5%
MPPTefficiency	99.9%				
<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				
Islanding protection	Yes				
temperature protection	Yes				
Integrated DC switch	Optional				
<b>General Data</b>					
Dimensions(mm)	630W*700H*357D (mm)				
Weight(kg)	63		68		
Topology	Transformerless				
Self consumption (night)	<1W(Night)				
Operating ambient temperature range	-25~60℃				
Ingress protection	IP65				
Noise emission{typical}	<30 dBA	<60 dBA	<30 dBA	<60 dBA	
Cooling concept	Natural convection	Intelligent redundant fan-cooling	Natural convection	Intelligent redundant fan-cooling	
Max. operation altitude	4000m				
Designed lifetime	>20years				
Grid connection standard	EN50438, G59/3, AS4777, VDE0126-1-1, IEC61727				
Relative humidity	0~100%				
Safety/EMC standard	IEC62109-1/-2, AS3100, EN61000-6-1, EN61000-6-3				
<b>Features</b>					
DC connection	MC-4mateable				
AC connection	Terminal connectors				
Display	LCD,2×20 Z.				
Communication connections	4 pins RS485 connector, 2 RJ45 connector, 2 group of terminal block				
Warranty	5 years standard (extend to 20 years)				