

# Three

## 20kW

### Solis Three PV Inverter

- ▶ Three phase output
- ▶ Over 98.8% Max. efficiency
- ▶ 200V-1000V input voltage range
- ▶ 7.0" LCD color screen display
- ▶ Four MPPT design with precise MPPT algorithm
- ▶ Compact and light design, easy installation
- ▶ IP65 rated for outdoor installation
- ▶ RS485, WiFi/GPRS (optional) interface
- ▶ Anti-resonance, single transformer can connect 6M+ in parallel
- ▶ Multiple protection functions
- ▶ WiFi and monitoring app available
- ▶ 5 years standard warranty, 20 years optional upgrade



#### Model:

Solis-20K

#### Features:

Fanless  
Cooling  
Concept

Four  
MPPT

7"  
LCD

WiFi/GPRS  
Real time  
monitoring

Available on the iPhone  
App Store  
Available on the Android  
App Store

IP65

# Datasheet

Model	Solis-20K
Energy Source	PV
<b>Input Side(DC)</b>	
Max. DC input power(kW)	23
Max. DC input voltage(V)	1000
Start-up voltage(V)	350
MPPT voltage range(V)	200-800
Max. input current(A)	18A+18A+18A+18A
MPPT number/Max input strings number	4/8
<b>Output Side (AC)</b>	
Rated output power(kW)	20
Max. apparent output power(kVA)	22
Max. output power(kW)	22
Rated grid voltage(V)	400
Grid voltage range(V)	304-460
Rated grid frequency(Hz)	50/60
Operation phase	Three
Rated grid output current(A)	28.7
Max. output current(A)	33.3
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	98.6%
EU efficiency	98.3%/98.3%
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>	
Dimensins(mm)	530W*700H*356.5D (mm)
Weight(kg)	57.2
Topology	Transformerless
Self consumption (night)	<1W(Night)
Operating ambient temperature range	-25~60°C
Ingress protection	IP65
Noise emission{typical}	<30 dBA
Cooling concept	Natural convection
Max. operation altitude	4000m
Designed lifetime	>20years
Grid connection standard	EN50438, G59/3, AS4777, VDE0126-1-1, IEC61727
Relative humidity	0~100%
Safty/EMC standard	IEC62109-1/-2, AS3100, EN61000-6-1, EN61000-6-3
<b>Features</b>	
DC connection	MC-4mateable
AC connection	Terminal connectors
Display	7.0"LCD color screen display
Communication connections	4 pins RS485 connector , 2 RJ45 connector
Warranty	5 years standard (extend to 20 years)