



# Solis Three-phase (50-60)K

## Three-phase string Inverter

### Features:

- Max. Efficiency at 98.8%;
- 5/6 independent MPPT with fast and accurate MPPT algorithm;
- Fuse-free design to avoid the risk of fire;
- Type II surge protectors for DC / AC;
- “Zero entry” function (with accessory);
- IP66;
- DC polarity inversion alarm;
- 5 or 10 year warranty, extendable up to 20;
- Energy Srl assistance.

### Models:

Solis-50K-5G  
Solis-60K-5G

### Dimensions:

Height: 500 mm  
Width: 700 mm  
Depth: 300 mm  
Weight: 60 kg



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Model	Solis-50K-5G	Solis-60K-5G
<b>INPUT DC</b>		
Max. Recommended PV power [kW]	84	
Max. DC input voltage [V]	1100	
Rated DC voltage [V]	600	
Start-up DC voltage [V]	195	
MPPT voltage range [V]	180-1000	
Full load MPPT voltage range [V]	340-850	
Max. input current [A]	5*30A	6*30A
Max. short circuit current [A]	5*40A	6*40A
MPPT number/Max. input strings number	5/10	6/12
<b>OUTPUT AC</b>		
Rated output power [kW]	50	60
Max. apparent output power [kVA]	55	66
Max. output power [kW]	55	66
Rated grid voltage and frequency [V-Hz]	220/380V - 50/60Hz	
Grid voltage range	304-437V	
Grid frequency range	45-55Hz/ 55-65Hz	
Rated grid output current [A]	76.0A	91.2A
Max. output current [A]	83.6A	100.3A
Output Power Factor	>0.99 (0.8 leading ... 0.8 lagging)	
THDi	<3%	
DC injection current	<0.5% In	
<b>EFFICIENCY</b>		
Max. efficiency	≥98.8%	
EU efficiency	≥98.3%	
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	Type DC II / AC II (AC Type I optional)	
Grid monitoring	Yes	
Anti-islanding protection	Yes	
Thermal protection	Yes	
Strings Monitoring	Yes	
I/V Curve scanning	Yes	
Anti-PID function	Optional	
Integrated AFCI [DC ari-fault circuit protection]	Yes	
Integrated AC switch	Yes	
Integrated DC switch	Optional	
<b>GENERAL DATA</b>		
Dimensions [WxHxD]	700x500x300 mm	
Weight [kg]	60	
Topology	Transformer less	
Self consumption [night]	<1W	
Operating ambient temperature range	-25°C ~ + 60°C	
Relative humidity	0-100%	
Ingress protection	IP66	
Noise emission	<55 dB (A)	
Cooling concept	Intelligent redundant fan cooling	
Max. operation altitude	4000m	
Grid connection standard	CEI 0-21, VDE-AR-N N4105, VDE V 0124, VDE V 0126-1-1, UTE C15-712-1, NRS 097-1-2, G98, G99, EN 50549-1/-2, RD 1699, UNE 206006, UNE 206007-1, IEC61727, DEWA	
Safety/EMC standard	IEC 62109-1/-2, IEC 62116, EN 61000-6-1/-2/-3/-4	
Connection type AC / DC	OT terminal (max. XX mm <sup>2</sup> / MC4 connector	
Display	LCD color display	
Communication	CAN/RS485/USB - WiFi/GPRS, PLC optional	
Warranty	5 years standard (extendable to 20 years if monitoring)	

## Energy Srl

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## Energy Srl

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