

SL30-50KRG-W

Three Phase Grid-tied Inverter



reddot design award



High Yield & Efficiency

- SiC power components to increase power generation;
- 150% PV array oversizing, 110% AC output overloading, 16 A input current per string to compatible with bifacial and large PV modules;
- Integrated anti-PID (Potential Induced Degradation) functions, Significantly reduce the negative effect of PID;
- Low start-up voltage and wide MPP voltage for more power generation time;



Safe & Reliable

- Type II AC&DC Surge Protection;
- Adapt film bus capacitors to improve reliability of system;
- IP66 protection rating, C5 anti-corrosion rating, high environmental adaptability system Integration;
- Supports AFCI Protection, preventing sparking or arcing that may potentially cause an electrical fire;
- Built in RS485, supports WiFi and 4G, Firmware update remotely or by USB interface;
- LED indicators for different status, LCD display for realtime data read;



Aesthetic & Compact

- Screw free cover design, Integrated molding box without welding, good aesthetic & product stability and consistency;
- Light weight, small volume and compact size;
- Aluminum die casting shell with reinforcing bars, 3 layer effective waterproof design, to resist harsh environment;



Smart Management

- Support intelligent automatic I-V curve scanning for fault diagnosis, precise positioning of the abnormal string;
- Free online real-time monitoring of system power generation and energy management for end user, installer and retailer;

Model	SL30KRG-W	SL33KRG-W	SL36KRG-W	SL40KRG-W	SL50KRG-W
Input Data (DC)					
Max. Input Power	45 kW	49.5 kW	54 kW	60 kW	75 kW
Max. DC Voltage	1100 V				
Start-up Voltage	180 V				
Nominal Voltage	600 V				
MPPT Voltage Range	200-1000 V				
No. of MPP Trackers	3	3	3	4	4
No. of PV Strings per MPP Tracker	2				
Max. Input Current per MPP Tracker	32 A				
Max. Input Short-circuit Current per MPPT	40 A				
Output Data (AC)					
Nominal Output Power	30 kW	33 kW	36 kW	40 kW	50 kW
Max. AC Apparent Power	33 kVA	36 kVA	39.6 kVA	44 kVA	55 kVA
Nominal AC Voltage	230/400 V, 3L/N/PE or 3L/PE				
AC Grid Frequency	50/60 Hz				
Frequency Range	(45-55)/(55-65) Hz				
Max. Output Current (PF=0.9)	48.3 A	54.5 A	60 A	66.7 A	84.1 A
Power Factor	> 0.99				
Adjustable Power Factor Range	0.8 leading...0.8 lagging				
Max. Total Harmonic Distortion	<3% (Rated Power)				
Efficiency					
Max. Efficiency	98.4%				
European Efficiency	98.2%				
MPPT Efficiency	99.9%				
Protection					
Anti-flow Protection	Optional				
DC Reverse Polarity Protection	Yes				
DC Switch	Yes				
DC Surge Protection	Type II				
Insulation Resistance Monitoring	Yes				
Residual-current Monitoring Unit (GFCI)	Yes				
AC Short-circuit Protection	Yes				
AC Surge Protection	Type II				
Grid Monitoring	Yes				
Anti-islanding Protection	Yes				
String Fault Monitoring	Yes				
AFCI Protection	Optional				
General Data					
Dimensions (W×H×D)	590 x 480 x 237 mm				
Weight	32 kg	32 kg	32 kg	34 kg	35kg
Operating Temperature Range	-25°C~+60°C (45°C derating)				
Relative Humidity	0-100%				
Altitude	4000 m (> 2000 m derating)				
Self-consumption at Night	<1 W				
Topology	Transformerless				
Cooling	Intelligent Air Cooling				
Protection Rating	IP66				
Guarantee Period	5 Years / 10 Years (Optional)				
Display	LED & LCD				
Communication	Yes: RS485/USB, Optional: 4G/WiFi				
Standards Compliance					
Grid Connection	NB/T 32004, G98/G99, VDE 0126/4105/0124, EN 50549-1/2, CEI0-21/CEI0-16, AS 4777.2, IEC 61727/62116, PEA, MEA, RD1699/661/413/244/2019, UNE 206006/206007, NTS Type A&B, UNE 217002/217001				
Safety Standards	IEC 62109-1/2				
Others	EN 61000-6-1/2/3/4, IEC 61683, IEC 60068(1,2,14,30)				