

Residential Single Phase Inverter



HIGH YIELD

- Higher yield with Max. efficiency 98.5 %, European efficiency 98.0 %
- 12.5 A MPPT current, and compatible with bifacial modules
- Flexible PV string configurations, DC/AC ratio up to 1.4

SAFE AND DURABLE

- Quick Arc Fault Circuit Interrupter
- Built-in Type II DC&AC surge protection device
- Built-in certified PV isolator

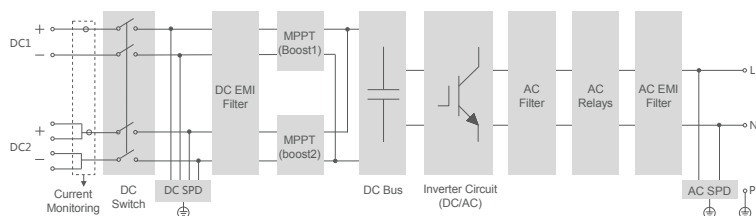
SMART MANAGEMENT

- 24H real-time loads monitoring
- Easy local and online monitoring via App or Web

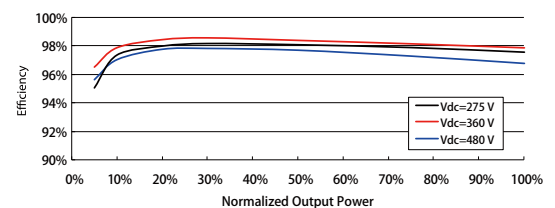
EASY AND USER FRIENDLY

- 15.5 kg compact design, plug and play installation
- Fast commissioning via App

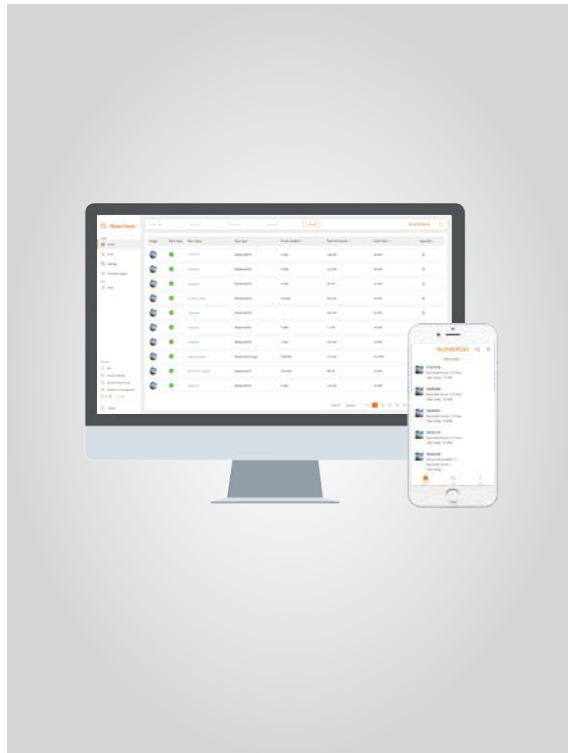
CIRCUIT DIAGRAM



EFFICIENCY CURVE



Type designation	SG8K-D
Input (DC)	
Max. PV input voltage	600 V
Min. PV input voltage / Startup voltage	90 V / 120 V
Nominal input voltage	360 V
MPP voltage range	90 V – 540 V
MPP voltage range for nominal power	275 V – 480 V
No. of MPPTs	2
Max. number of PV strings per MPPT	1 / 2
Max. PV input current	12.5 A / 25 A
Max. PV short-circuit current	15 A / 30 A
Output Side Data	
AC output power	8000 VA
Max. AC output current	34.8 A
Nominal AC voltage	230 Vac
AC voltage range	180 Vac – 276 Vac
Nominal grid frequency	50 Hz / 60 Hz
Grid frequency range	45 Hz – 55 Hz / 55 Hz – 65 Hz
Total harmonic distortion (THD)	< 3 % (of nominal power)
Power factor	> 0.99 / 0.8 leading – 0.8 lagging
Feed-in phases / Connection phases	1 / 1
Efficiency	
Max. efficiency	98.5 %
European efficiency	98.0 %
Protection	
PV reverse connection protection	Yes
AC short circuit protection	Yes
Leakage current protection	Yes
Grid monitoring	Yes
PV string current monitoring	Yes
DC switch	Yes (meet AS60947.3:2018)
AFCI	Yes
Overvoltage protection	DC Type II/AC Type II
General Data	
Dimensions (W*H*D)	360*390*148 mm
Weight	15.5 kg
Isolation method	Transformerless
Ingress protection rating	IP65
Power loss in night mode	< 3 W
Operating ambient temperature	-25 °C to 60 °C (>45 °C derating)
Allowable relative humidity	0 – 100 %
Cooling method	Natural cooling
Max. operating altitude	4000 m (> 2000 m derating)
Display / Communication	LCD / WLAN
PV connection type	MC4 (max. 6 mm ²)
AC connection type	Plug and play connector (max. 6 mm ²)
Certification	IEC62109-1, IEC62109-2, EN 61000-6-2, EN 61000-6-3, AS / NZS 4777.2



SAFE AND RELIABLE

- Hierarchical access management
- Cyber security and redundant data storage over the lifecycle of plants, certified data security
- Full log for trace and audit



SIMPLE AND EFFICIENT

- Scan QR to create plant or get support, devices automatic access
- Accurate positioning of faults, quick trouble shooting, real-time push of information, reducing time to resolve faults
- Parameter setting, firmware updates, IV curve diagnosis, data analysis and automated reports



FLEXIBLE AND FRIENDLY

- Centralized power plant management, optimized OPEX
- Flexible data access, Web portal and App, remote or local maintenance
- Easy account management, share plants with co-workers and friends

Type designation	iSolarCloud
Monitoring Device	
Device type	Inverter, combiner box, meteo station, energy meter, transformer and other plant devices
Monitoring Capacity	More than 100 GW (scalable)
Data Collection	
Time interval	5 minutes
General Data	
Language	Chinese, English, Japanese, German, French, Spanish, Portuguese, Italian, Dutch, Korean
Data storage time	>25 years
Storage capability	>100PB
System reliability	99.99%
Minimum Web requirements	
Browser	IE11, Chrome 56, Safari 11
Resolution	1366 * 768, 1920 * 1080 recommended
Minimum Operating Environment for App	
Minimum OS	Android 4.4, iOS 9.3
Resolution	1920 * 1080, 2001 * 1125, 1280 * 720

