

SH3K6/SH4K6

Hybrid Inverter

SUNGROW

Clean power for all



FLEXIBLE APPLICATION

- Convenient for new installation and retrofit
- Compatible with both lithium-ion and lead-acid batteries
- Energy trading ready with 3rd-party EMS to maximise ROI



SAFE AND RELIABLE

- Built-in surge arresters and residual current protection
- Durable finish with high anti-corrosion enclosure



SMART MANAGEMENT

- High self-consumption with optimised built-in EMS
- Free online monitoring to enhance energy management for end user, installer and retailer
- Remote firmware update and customisable settings



EASY INSTALLATION

- Custom-fit mounting plate with built-in level
- Fast and easy commissioning via front panel LCD or App
- Lightweight and compact



| Type designation | SH3K6 | SH4K6 |
|---------------------------------------|--|--------------------|
| PV Input Side Data | | |
| Max. PV input power | | 6500 W |
| Max. PV input voltage | | 600 V |
| Startup voltage | | 125 V |
| Nominal input voltage | | 360 V |
| MPP voltage range | | 125 V – 560 V |
| MPP voltage range for nominal power | 180 V – 520 V | 220 V – 520 V |
| No. of MPPTs | | 2 |
| Max. number of PV strings per MPPT | | 1 / 1 |
| Max. PV input current | | 22 A (11 A / 11 A) |
| Max. current for input connector | | 12 A |
| Short-circuit current of PV input | | 24 A (12 A / 12 A) |
| AC Input and Output Data | | |
| Nominal AC output power to grid | 3680 W | 4600 W |
| Max. AC output apparent power to grid | 3680 VA | 4600 VA |
| Max. AC input power from grid | 3000 W | 3000 W |
| Nominal AC output current | 16 A | 20 A |
| Max. AC output current | 16 A | 20 A |
| Nominal AC voltage | | 230 Vac |
| AC voltage range | 180 Vac – 276 Vac (this may vary with grid standards) | |
| Nominal grid frequency | 50 Hz | |
| Grid frequency range | 45 Hz – 55 Hz (this may vary with grid standards) | |
| THD (Total Harmonic Distortion) | < 3 % (of nominal power) | |
| DC current injection | < 0.5 % (of nominal current) | |
| Power factor | > 0.99 at default value at nominal power (adj. 0.8 overexcited / leading–0.8 underexcited / lagging) | |
| Protection | | |
| Anti-islanding protection | | Yes |
| AC short circuit protection | | Yes |
| Leakage current protection | | Yes |
| DC switch (solar) | | Yes |
| DC fuse (solar) | | No |
| DC fuse (battery) | | Yes |
| Overvoltage Category | III [MAINS], II [PV] [BATTERY] | |
| Battery Data | | |
| Battery type | Li-ion battery / Lead-acid battery | |
| Battery voltage | 48 V (32 V–70 V) | |
| Max. charge / discharge current | 65 A / 65 A | |
| System Data | | |
| Max. efficiency | | > 97.7 % |
| European efficiency | > 97.0 % | > 97.2 % |
| Max. charge / discharge efficiency | | > 94.0 % |
| Isolation method (solar) | Transformerless | |
| Isolation method (battery) | HF | |
| Ingress protection rating | IP65 | |
| Night power consumption | < 1 W | |
| Operating ambient temperature range | -25 °C to 60 °C (> 45 °C derating) | |
| Allowable relative humidity range | 0 %–100 % | |
| Cooling method | Natural convection | |
| Max. operating altitude | 2000 m | |
| Display | Graphic LCD | |
| Communication | 2 × RS485, Wi-Fi (optional), CAN, Ethernet | |
| Analogue inputs | PT1000 | |
| Power management | 1 × Digital Output | |
| Earth alarm | 1 × Digital Output, email, buzzer inside | |
| PV connection type | MC4 | |
| AC connection type | Plug and play connector | |
| Certification | VDE-AR-N-4105, DIN VDE0126-1-1, G83/2, G59/3, CEI 0-21, IEC 62109-1, IEC62109-2, EN 62477-1, EN 61000-6-1/-3 | |
| Mechanical Data | | |
| Dimensions (W * H * D) | 457 mm * 515 mm * 170 mm | |
| Mounting method | Wall-mounting bracket | |
| Weight | 22 kg | |

