

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	

