

# SH 5K



## Flexible

- Handy and light, easy to handle without lift machinery assistance, lower the cost of installation and maintenance.
- EMS Integrated, multiple-target can be optimized
- Integrated DC combine and surge protection function, lower the system cost
- DC switch, safe and convenient for maintenance
- Dual MPPTs

## Safe and long lifetime

- Lithium-ion battery from Samsung is recommended, safe and stable, after-sale service and guarantee
- Charging/discharging lifetime could up to 6000 cycles

## Grid-friendly

- Active power continuously adjustable (0~100%)
- Reactive power control with power factor 0.8 lagging~0.8 leading

## Efficient

- Max. Efficiency at 98.0%
- Battery to grid efficiency at 95.0%

## Qualified

- TÜV, AS4777, VDE AR N 4105

### Input Side Data

Max. PV input power	5100W (2550W/2550W)
Max. PV input voltage	600V
Startup voltage	125V
Nominal input voltage	345V
MPP voltage range	125~560V
MPP voltage range for nominal power	255~520V
No. of MPPTs	2
Max. number of PV strings per MPPT	1
Max. PV input current	20A (10A/10A)
Max. current for input connector	12A

### Output Side Data

Nominal AC output power	5000W
Max AC output power (PF=1)	5000W
Max. AC output apparent power	5000VA
Max. AC output current	21.7A
Nominal AC voltage	230Vac
AC voltage range	180~276Vac
Nominal grid frequency	50Hz
Grid frequency range	45-55Hz
THD	<3% (Nominal power)
DC current injection	<0.5%In
Power factor	>0.99@default value at nominal power, (adj. 0.8 lagging ~0.8 leading)

### Protection

Anti-islanding protection	Yes
AC short circuit protection	Yes
Leakage current protection	Yes
DC switch (solar)	Yes

### System Data

Max. efficiency	98.0%
Max. European efficiency	97.6%
Battery to grid efficiency	95.0%
Isolation method (solar)	Transformerless
Isolation method (battery)	HF
Ingress protection rating	IP65
Night power consumption	<1W
Noise emission	<30dB
Operating ambient temperature range	-25~60°C
Allowable relative humidity range	0~100%
Cooling method	Nature convection
Max. operating altitude	4000m (<2000m derating)
Display	Graphic LCD
Communication	2 × RS485/Ethernet/CAN/Wi-Fi (optional)
Power management	4 × Digital Inputs, 1 × Digital Output
Analogue inputs	PT1000 (temperature sensor)
DC connection type	MC4
AC connection type	Clamping yoke connector
Certificates and approvals (Planned)	AS4777, AS/NZS3100, SI4777, G59/2, G83/2, IEC62109-1, IEC62109-2, VDE-AR-N-4105, IEC 62619, IEC 61427, IEC 62040

### Battery Side Data

Battery type	Li-battery/ Lead acid battery
Battery voltage	48V (32V-70V)
Max charge/discharge current	65A/65A

### Mechanical Data

Dimensions (W × H × D)	447 × 510 × 150mm
Mounting method	Wall bracket
Weight	20kg