

Off-Grid Energy Storage Inverter

Off-Grid LV Series: SW 6KSO

**NEW
MODULE
2026**



IP54 Protection.

Easy to Install.

Southeast Asia

Africa

Middle East

Features:

- 36 A PV input current for high power solar panels
- 200% PV oversizing, 9,000 W Max. PV usable power
- 60 V Lower startup voltage , 60 V~450 V wide MPPT voltage range
- Max. 11.5 kW utility input power, Max. 40 A bypass current
- Max. 140 A battery charge/discharge current
- 200%, 5.5s Overload capacity
- USB On the Go function
- Stably and flexibly running with/without battery or PV
- Selectable charging priority
- Independent generator port
- Smart Load management
- Time Based battery charging/discharging
- Up to 12 pcs in parallel, support 3 phase parallel system
- Built in Wi Fi optional , remote App monitoring and updating
- IP54 protection rating

DATASHEET

SW 6KSO

Efficiency	
Efficiency (PV to AC)	95%
Efficiency (BAT to AC)	93%
PV Input	
Max. PV Usable Power	9,000W
Max. PV Voltage	500V
MPPT Voltage Range	60V-450V
Star-up Voltage	60V
Nos. of MPPT	1
String Per MPPT	1
Max. Input Current Per MPPT	36A
Max. Short Circuit Current Per MPPT	45A
Battery	
Battery Type	Lead-acid/Li-ion
Rated Battery Voltage	48V
Battery Voltage Range	40-60V
Max. Solar Charging Current	140A
Max. AC Charging Current	140A
Max. Charging/Discharging Current	140A/140A
AC Input	
Max. Input Power	11,500W
Max. AC Input Current	50A
Rated Grid Voltage	220V/230V/240V
Input Voltage Range	170V-280V (For UPS)/90V-280V (For Home Appliances)
Rated Grid Frequency	50Hz/60Hz
AC Output	
Rated Output Power	6,000W/6,000VA
Rate Output Voltage	220V/230V/240V
Rated Output Current	27.3A/26A/25A
Rate Output Frequency	50Hz/60Hz
Max. Continuous AC Passthrough (grid to load)	40A
Overload Capacitor	105%-150% after 10.5s shutdown/150%-200% after 5.5s shutdown
Surge Power	12000VA 5s
THDv (@linear load)	< 3%
Parallel Capacity	12 PCS
Switch Time	10ms Typical (For UPS)/20ms Typical (For Home Appliances)/50ms Typical (For Parallel Operation)
Protection	
Ingress Protection	IP54
Over Voltage Protection	Yes
Overload Protection	Yes
Short Circuit Protection	Yes
Over Temperature Protection	Yes
Surge Protection	DC: Type III, AC: Type III
General	
Communication	USB (OTG), RJ45 (for BMS,CAN/RS485), RJ45 (for Parallel), Dry-Contact, WI-FI/LAN (Optional)
Operation Temperature Range	-10°C ~ +55°C
Humidity	5%-95%
Max. Operating Altitude	4000m, >2000m derating
Cooling Method	Intelligent fan cooling
Display	LED+LCD
Mounting	Wall-mounted
Dimensions (W*H*D)	345mm*445mm*120mm
Weight	10.8Kg
Certification	EN/IEC62109-1, EN/IEC62109-2, EN/IEC 61000
Warranty	3 Years

- The range of output voltage and frequency may vary depending on different grid codes.
- Specifications are subject to change without advanced notice.