

# Hybrid Inverter

Single-Phase ECO Series: SW 8-12KSH/LV



**NEW  
MODEL  
2026**

IP65 Protection.

Touchscreen Operation.

Southeast Asia
Africa
Middle East

**Features:**

- Fit for 220 V/230 V/240 V grid voltages
- IP65 indoor or outdoor installation
- 4.3-inch color touchscreen for user-friendly local operation
- 90 V industry-leading start-up voltage
- 3 independent MPPTs, Max. 15 kW PV usable power
- Up to 20 A PV input current for the high power PV panels
- Whole series of 10 kW batteries charging power
- Whole series of 210 A battery charging current
- AC coupling ready
- Support Max. 9 units in parallel
- Support 3-phase connection
- <10 ms UPS-level switching time
- AC Type III / DC Type II overvoltage protection
- Smart monitoring and remote energy management

## DATASHEET

SW 8KSH/LV

SW 10KSH/LV

SW 12KSH/LV

	SW 8KSH/LV	SW 10KSH/LV	SW 12KSH/LV
<b>Efficiency</b>			
Max. Efficiency (PV to AC)		98.00%	
Max. Efficiency (BAT to AC)		94.50%	
<b>Input (PV)</b>			
Max. PV Usable Power	12,000W	15,000W	15,000W
Max. PV Voltage		600V	
Start-up Voltage		90V	
MPPT Operating Voltage Range		70V-540V	
Max. Input Current per MPPT		20A/20A/20A	
Max. Short Circuit Current per MPPT		30A/30A/30A	
String per MPPT		1/1/1	
Nos. of MPPT		3	
<b>Input/Output (BAT)</b>			
Battery Type		Lithium-ion/Lead-acid	
Nominal Battery Voltage		48V	
Battery Voltage Range		40V-64V	
Max. Charge/Discharge Current	210A/180A	210A/210A	210A/210A
Max. Charge/Discharge Power	10,000W/8,000W	10,000W/10,000W	10,000W/10,000W
<b>Output (Grid)</b>			
Nominal AC Output Power	8,000W	10,000W	12,000W
Max. AC Output Apparent Power	8,800VA	11,000VA	12,000VA
Max. AC Output Power (PF=1)	8,800W	11,000W	12,000W
Nominal AC Output Current	34.8A	43.5A	52.2A
Nominal Grid voltage		220V/230V/240V, L+N+PE	
Grid Voltage Range		150V-300V (Adjustable)	
Nominal Grid Frequency		50Hz/60Hz	
Grid Frequency Range		45Hz-55Hz/55Hz-65Hz (Adjustable)	
Power Factor		> 0.99 @rated power (Adjustable 0.8 LD - 0.8 LG)	
THDI		<3% (Rated Power)	
<b>Output (Back up)</b>			
Nominal Output Power	8,000W	10,000W	12,000W
Max. AC Output Current	34.8A	43.5A	52.2A
Peak Output Power	16,000VA	20,000VA	20,000VA
Nominal Output Voltage		220V/230V/240V, L+N+PE	
Nominal Output Frequency		50Hz/60Hz	
Transfer Time		<10ms (typical)	
THDV		<3% @100% R Load	
<b>Protection</b>			
Protection Category		Class I	
DC Switch		Yes	
Anti-islanding Protection		Yes	
AC Overcurrent Protection		Yes	
DC/AC Overvoltage Protection		DC Type II, AC Type III	
AC Short Circuit Protection		Yes	
DC Reverse Protection		Yes	
Surge Arrester		DC Type II, AC Type II	
Insulation Resistance Detection		Yes	
Leakage Current Protection		Yes	
Generator		Yes	
<b>General</b>			
Max. Operation Altitude		4000m (>2000m derating)	
Protection Degree		IP65	
Operating Temperature Range		-25°C-60°C (>45°C derating)	
Relative Humidity		0~100%	
Cooling		Fan Cooling	
Mounting		Wall bracket	
Dimensions (W*H*D)		420mm*800mm*240mm	
Weight		39 kg	
<b>HMI &amp; COM</b>			
Display		4.3-inch Touch LCD	
Communication		CAN (for BMS), DRM/RS485 (for Meter), RS485, Optional: Wi-Fi/LAN	
<b>Certification</b>			
Safety		EN IEC 62109-1&2	
EMC		EN IEC 61000	
Warranty		5 Years/10 Years (optional)	

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