


# Hybrid Inverter

## Split-Phase LA Series: SW 6-12KSH/LV-LA



**IP65 Protection.**

**Essentials Backup Choice.**

Central America
South America

**Features:**

- NEMA 3R/IP65 indoor or outdoor installation
- 4.3-inch color touchscreen for user-friendly local operation
- 50 A grid passthrough current for the essentials backup solution
- Up to 3 MPPTs , Max. 30 A PV input current for high power solar panels
- 15 kW Max. PV usable power
- Whole series of 210 A battery charging current
- Whole series of 10 kW battery charging power
- 12 kW Max. AC output, Max. 20 kW peak surge capacity
- 90 V lower startup voltage , 70 V-540 V wide MPPT voltage range
- Support generator/smart load/AC coupling
- Support 3-phase system operation
- Support 9 units in parallel
- AFCI/RSD function optional
- Built-in multiple AC/DC breakers for safety and reliability
- AC Type IV / DC Type II overvoltage protection
- < 10ms UPS-level switching time
- Smart monitoring and remote energy management

### DATASHEET

SW 6KSH/LV-LA

SW 7K5SH/LV-LA

SW 12KSH/LV-LA

	SW 6KSH/LV-LA	SW 7K5SH/LV-LA	SW 12KSH/LV-LA
<b>Efficiency</b>			
Max. Efficiency (PV to AC)		98.0%	
Max. Efficiency (BAT to AC)		94.5%	
CEC. Efficiency		96.5%	
<b>Input (PV)</b>			
Max. PV Usable Power	9,000W	12,000W	15,000W
Max. PV Voltage		600V	
Start-up Voltage		90V	
MPPT Operating Voltage Range		70V-540V	
Max. Input Current Per MPPT	30A/22A	30A/22A/22A	30A/22A/22A
Max Short Current Per MPPT	40A/30A	40A/30A/30A	40A/30A/30A
String Per MPPT	2/2	2/2/2	2/2/2
Nos. of MPPT	2	3	3
<b>Input/Output (BAT)</b>			
Battery Type		Lithium-ion/Lead-acid	
Nominal Battery Voltage		48V	
Battery Voltage Range		40V-60V	
Max. Charge/Discharge Current	210A/130A	210A/180A	210A/210A
Max. Charge/Discharge Power	10,000W/6,000W	10,000W/7,500W	10,000W/10,000W
<b>Output (Grid)</b>			
Nominal AC Output Power	6,000W	7,500W	12,000W
Max. AC Output Apparent Power	6,600VA	7,500VA	12,000VA
Max. AC Output Power (PF=1)	6,600W	7,500W	12,000W
Nominal AC Output Current	25A	31.3A	50.0A
Max. AC Output Current	27.5A	31.3A	50.0A
Nominal Grid Voltage		120/240V (Split phase), 120/208V, 127/220V (2/3 phase)	
Nominal Grid Frequency		50Hz/60Hz	
Grid Frequency Range		45Hz-55Hz/55Hz-65Hz (Adjustable)	
Power Factor		> 0.99 @rated power (Adjustable 0.8 LG - 0.8 LD)	
THDI		<3% (Rated Power)	
<b>Output (Back up)</b>			
Nominal Output Power	6,000W	7,500W	12,000W
Max. AC Output Power (PF=1)	6,600W	7,500W	12,000W
Nominal Output Current	25.0A	31.3A	50.0A
Peak Output Apparent Power (1s)	12,000VA	15,000VA	20,000VA
Nominal Output Voltage		120/240V (Split phase), 120/208V, 127/220V (2/3 phase)	
Nominal Output Frequency		50Hz/60Hz	
Transfer Time		<10ms	
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 IV	
AC Short Circuit Protection		Yes	
DC Reverse Connection		Yes	
Surge Arrester		DC Type II, AC Type II	
Insulation Resistance Detection		Yes	
Leakage Current Protection		Yes	
AFCI2.0/RSD Monitoring		Optional	
<b>General</b>			
Max. Operation Altitude		4000m (>2000m derating)	
Ingress Protection Degree		NEMA 3R/IP65	
Operating Temperature Range		-25~60°C (>45°C derating)	
Relative Humidity		0~100%	
Cooling Method		Fan Cooling	
Mounting		Wall bracket	
Dimensions (W*H*D)		16.5*31.1*10.0 inch (420mm*790mm*255mm)	
Weight		44kg/97lb	
<b>HMI &amp; COM</b>			
Display		4.3-inch Touch LCD	
Communication		CAN (for BMS), RS485 (for meter), RS485, CAN (for parallel), Optional: WiFi/LAN	
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.