

SOLXPOW X1 Series & POW-HVB Series

POWMr

High-voltage Off-grid & Grid-tied Solar Intelligent Energy Storage System

Optimal Power & Storage

- 97.6% Max. Efficiency.
- 15A PV, 1-2 MPP trackers.
- 30A charge/discharge current

Strong Load & Back-up

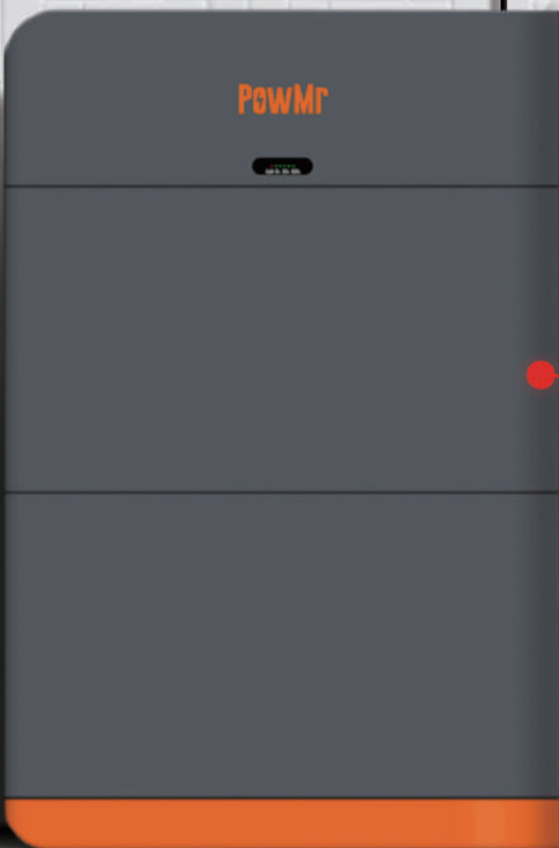
- 110% continuous AC output overloading.
- 130% max. backup output overload @60s.
- 160% DC oversizing.

Installation & Operation

- Plug & Play terminal.
- Power and alarm indicator.
- OLED display & App.

Flexible Design & Use

- 85-450V wide battery voltage range.
- IP65 for indoor and outdoor installation.
- Compact size and elegant appearance.



Safety & Durability

- Utilizes LiFePO4 for high safety and long lifespan.
- Equipped with advanced BMS for multiple protections.

Smart Management

- Remote monitoring with auto charging and discharging.
- Easy integration with various communication interfaces.

Easy Installation

- Compatible with mainstream inverters, easy stack installation.
- Multiple communication interfaces for seamless integration.

Expandable & High Capacity

- Up to 5 battery stacking series, high capacity up to 25KWh.
- Flexible configuration to meet diverse needs.

Environmentally Friendly

- IP65 waterproof rating for indoor and outdoor use.
- Self-cooling design, low noise operation.

Inverter Model			SOLXPOW X1-3.K	SOLXPOW X1-3.6K	SOLXPOW X1-4.2K	SOLXPOW X1-5K	SOLXPOW X1-6K	SOLXPOW X1-8K
PV Input	Max. PV Array Power	[KW]	4.80	5.76	6.72	8.00	9.60	12.80
	PV Input Voltage Range*	[V]	80~600					
	Rated PV Input Voltage	[V]	360					
	PV MPPT Voltage Range*	[V]	100~550					
	No. of MPP Trackers		1	1	2	2	2	2
	Max. PV Input Current	[A]	15	15	15/15	15/15	15/15	15/15
	Max. Short-circuit Current	[A]	20	20	20/20	20/20	20/20	20/20
Battery Specification	Battery Type		Lithium Battery (with BMS)					
	Battery Voltage Range	[V]	85~450					
	Max. Charging/Discharging Current	[A]	30/30					
AC Input & AC Output (On-Grid)	Rated Output Power	[KW]	3.00	3.60	4.20	5.00 ³⁾	6.00	8.00
	Max. Output Apparent Power	[KVA]	3.30	3.96 ¹⁾	4.60	5.50 ⁴⁾	6.60	8.00
	Max. Input Apparent Power**	[KVA]	6.00	7.20	8.40	10.00	10.00	12.00
	Max. AC Charging Power	[KW]	3.00	3.60	4.20	5.00	6.00	8.00
	Nominal AC Input/Output Voltage		L/N/PE; 220/230/240V					
	Nominal AC Frequency	[Hz]	50/60					
	Max. Output Current	[A]	15	18 ²⁾	21	25 ⁵⁾	28.7	36.3
	Power Factor		0.8 leading ...0.8 lagging					
	THD		<3% @Rated output power					
	DCI		<0.5%In					
AC Output (Back-up)	Rated Output Power	[KW]	3.00	3.60	4.20	5.00	6.00	8.00
	Max. Output Apparent Power	[KVA]	3.30	3.96	4.60	5.50	6.60	8.00
	Max. Output Current	[A]	15	18	21	25	28.7	36.3
	UPS Transfer Time		<10ms					
	Nominal Output Voltage		L/N/PE; 220/230/240V					
	Nominal Output Frequency	[Hz]	50/60					
	Voltage Harmonic Distortion		<3% @Linear load					
Efficiency	Max. Efficiency		97.6%					
	European Efficiency		97.0%					
Protection	Integrated	PV Reverse polarity protection,Battery reverse protection,Insulation Resistance Protection, Surge Protection,Over-temperature Protection,Residual Current Protection,Islanding Protection, AC Over-voltage Protection,Overload Protection,AC Short-circuit Protection						
General Specification	Over Voltage Category		PV: II Main: III					
	Dimensions	[W×H×D MM]	534×418×210					
	Weight	[KG]	27.0					
	IP Class		IP65					
	Static Consumption	[W]	<15					
	Topology		Transformerless					
	Operating Temperature Range	[°C]	-30~60					
	Relative Humidity	[%]	0~100					
	Operating Altitude	[m]	3000(> 3000m derating)					
	Cooling		Natural Convection					
	Noise Leve	[dB]	< 25					
	Display		OLED & LED					
Communication		CAN, RS485, WiFi/LAN (Optional)						

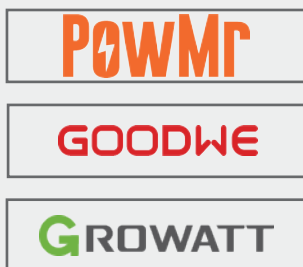
* PV Max. Input voltage is 550V without battery, or 500V with battery, otherwise inverter will be waiting;

** Max apparent power from the grid means the maximum power imported from the utility grid used to satisfy the backup loads and charge the battery;

1) G98: 3.68kVA; 2) G98: 16.00A; 3) AS 4777.2: 5.0kW, VDE-AR-N 4105: 4.6kW; 4) AS 4777.2: 5.0kVA, VDE-AR-N 4105: 4.60kVA, C10/11: 5.0kVA; 5) AS 4777.2: 21.7A, VDE-AR-N 4105: 21.0A, C10/11: 21.7A;

Inverter Model	POW-HVB-10	POW-HVB-15	POW-HVB-20	POW-HVB-25
Nominal Voltage	204.8V(64 Series)	307.2V(96 Series)	409.6V(128 Series)	512V(160 Series)
Rated Capacity [Ah]	50			
Nominal Energy [KWh]	10.24	15.36	20.48	25.6
Discharge Cut-off Voltage [V]	172.8	259.2	345.6	432
Charge Cut-off Voltage [V]	224	336	448	512
Max. Continuous Work Current [A]	50			
Protection Features	BMS, Circuit			
Operating Temperature	Charge: 0~55°C / Discharge: -20~55°C			
Storage Temperature	-20°C~20°C			
Communication Interface	CAN-inverter; CAN-Upper computer/WIFI			
Cycle Life	≥5000cycles@80%DOD,25°C, 0.5C / ≥4000cycles@80%DOD,40°C, 0.5C			
Design Life	≥15 Years (25°C)			
Nominal Operating Altitude	< 3000m			
IP Rating	IP65			
Dimensions (LxWxH) [MM]	636x185x1055	636x185x1400	636x185x1745	636x185x2100
Net Weight [KG]	~128kg	~176kg	~224kg	~272kg
Certification	UN38.3, MSDS			

Compatible Inverter Brands



Application of High-Voltage Energy Storage Batteries

