









Single Phase Hybrid Storage Inverter

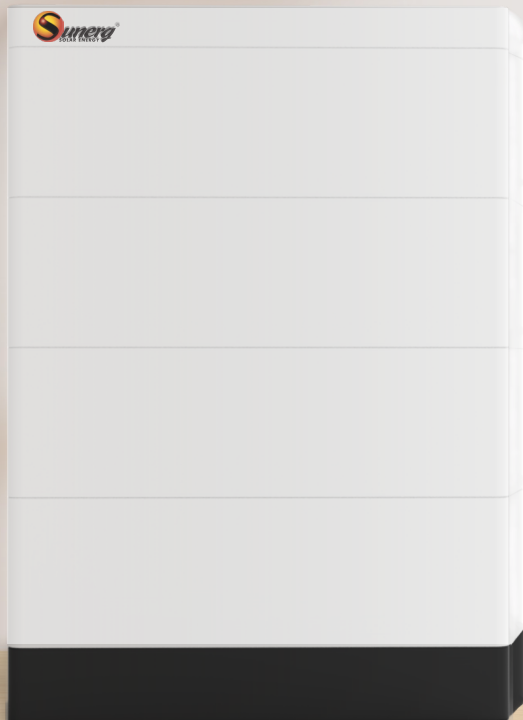
3-6 kW



-  Support for Time-of-use Optimization
-  Configurable Operation Modes
-  Arc Fault Circuit Interrupter (AFCI) (optional)
-  The charging and discharging power of the battery is greater
-  Build in Anti-feed-in Function
-  Compact Size and Easy Installation
-  Smart Monitoring & Remote Firmware upgrade
-  Off-grid mode, with a larger load capacity, the maximum load can be 6KVA

Max. 120A	Max. 1.5	2 MPPT	<10 ms	
Current Charge/Discharge	PV Oversize	MPPT Channels	UPS Function	Parallel Stacking

Stackable Home Energy Storage



-  High capacity
-  Scalable design
-  Efficient Performance
-  Safe and Reliable
-  Real-time Monitoring
-  Durability
-  intelligent BMS
-  Seamless Integration

Max. 5.12	10 Year		6,000+	Up to 15 years
Capacity	Warranty	Smart Charge/discharge	Life cycles	Battery Life





Single Phase Hybrid Storage Inverter



Plus Serie

PV Input	X-SUN-3-SL	X-SUN-4-SL*	X-SUN-5-SL*	X-SUN-6-SL*	X-SUN-4-SLP*	X-SUN-5-SLP*	X-SUN-6-SLP
Max. Input Power (kW)	4.5	6.0	7.5	9.0	6.0	7.5	9.0
Max. PV Voltage (V)	550			550			
MPPT Range (V)	80 - 500			80 - 500			
Full MPPT range (V)	90 - 500	120 - 500	150 - 500	170 - 500	120 - 500	150 - 500	170 - 500
Normal Voltage (V)	360			360			
Startup Voltage (V)	100			100			
Max. Input Current (A)	18.5 x 2			18.5 x 2			
Max. Short Current (A)	26 x 2			26 x 2			
No. of MPP Tracker / No. of PV String	2 / 2			2 / 2			
Battery Port							
Max. Charge/Discharge Power (kW)	3.0	4.0	4.8	4.8	4.0	5.0	6.0
Max. Charge/Discharge Current (A)	80			120			
Battery Normal Voltage (V)	51.2			51.2			
Battery Voltage Range (V)	40 - 60			40 - 60			
Battery Type	Li-ion / Lead-acid etc.			Li-ion / Lead-acid etc.			
AC Grid	X-SUN-3-SL	X-SUN-4-SL*	X-SUN-5-SL*	X-SUN-6-SL*	X-SUN-4-SLP*	X-SUN-5-SLP*	X-SUN-6-SLP
Max Continuous Current (A)	14.0	19.0	23.0	28.0	19.0	23.0	28.0
Max Continuous Power (kVA)	3.0	4.0	5.0	6.0	4.0	5.0	6.0
Nominal Grid Current (A)	13.7 / 13.1	18.2 / 17.4	22.8 / 21.8	27.3 / 26.1	18.2 / 17.4	22.8 / 21.8	27.3 / 26.1
Nominal Grid Voltage (V)	198 to 242 @ 220 / 207 to 253 @ 230						
Nominal Grid Frequency (Hz)	50 / 60			50 / 60			
Power Factor	0.999 (Adjustable from 0.8 overexcited to 0.8 underexcited)						
Current THD (%)	< 3			< 3			
AC Load Output							
Max Continuous Current (A)	14.0	19.0	23.0	28.0	19.0	23.0	28.0
Max Continuous Power (kVA)	3.0	4.0	5.0	6.0	4.0	5.0	6.0
Max Peak Current (A) (10min)	20.5 / 19.6	27.3 / 26.1	34.1 / 32.7	41.0 / 39.2	27.3 / 26.1	34.1 / 32.7	41.0 / 39.2
Max Peak Power (kVA) (10min)	4.5	6.0	7.5	9.0	6.0	7.5	9.0
Nominal AC Voltage L-N (V)	220 / 230			220 / 230			
Nominal AC Frequency (Hz)	50 / 60			50 / 60			
Switching Time (ms)	Seamless			immediata			
Voltage THD (%)	< 3			< 3			
Efficiency	X-SUN-3-SL	X-SUN-4-SL*	X-SUN-5-SL*	X-SUN-6-SL*	X-SUN-4-SLP*	X-SUN-5-SLP*	X-SUN-6-SLP
CEC Efficiency (%)	97.0			97.0			
Max. Efficiency (%)	97.6			97.6			
PV to Bat. Efficiency (%)	98.1			98.1			
Bat. between AC Efficiency (%)	96.8			96.8			
Protection							
Intregated	PV Reverse Polarity Protection, Over Current/Voltage Protection, Anti-Islanding Protection, AC Short Circuit Protection, Residual Current Detection, Ground Fault Monitoring, Insulation Resister Detection, PV Arc Detection						
Enclosure Protect Level	IP65 / NEMA4X						
General Data	X-SUN-3-SL	X-SUN-4-SL*	X-SUN-5-SL*	X-SUN-6-SL*	X-SUN-4-SLP*	X-SUN-5-SLP*	X-SUN-6-SLP
Dimensions (W x H x D, mm)	370 x 535 x 192			370 x 535 x 192			
Weight (kg)	18.5	20.5		20.5			
Topology	Transformerless			Transformerless			
Cooling	Intelligent Fan			Intelligent Fan			
Relatively Humidity	0 - 100 %			0 - 100 %			
Operating Temperature Range (°C)	- 25 to 60			- 25 to 60			
Operating Altitude (m)	< 4000			< 4000			
Noise Emission (dB)	< 25			< 25			
Standby Consumption (W)	< 10			< 10			
Mounting	Wall Bracket			Wall Bracket			
Communication with RSD	SUNSPEC			SUNSPEC			
Display & Communication Interfaces	LCD, LED, RS485, CAN, Wi-Fi, GPRS, 4G						
Certification & Approvals	NRS097, G98/G99, EN50549-1, C10/C11, AS4777.2, VDE-AR-N4105, VDE0126, IEC62109-1, IEC62109-2						
Security EMC/Standard	EN61000-6-2, EN61000-6-3						

Stackable Home Energy Storage

Technical Specification		BLV-5.12-A			
Model	51.2 V 100Ah	51.2 V 200Ah	51.2 V 300Ah	51.2 V 400Ah	
Layers	1	2	3	4	
Picture					
Energy	5.12 KWh	10.24 KWh	15.36 KWh	20.48 KWh	
Dimension (L*W*H) mm	600*210*440	600*210*740	600*210*1040	600*210*1340	
Weight (Kg)	56	104	152	200	

Single Module Specification		BLV-5.12-A
Normal Voltage (Vdc)		51.2
Normal Capacity (Wh)		5120
Operating Voltage Range (Vdc)		43.2 V ~ 56.16 V
Charge Voltage (Vdc)		58.4
Nominal Charge/Discharge current (A)		50 A
Max. Charge / Discharge Current (A)		100 A
Peak Discharge Current		150 A 600ms
Parallel Connection		≤ 6 pcs
Cycle Life		6000 @ 80% DOD, 25°C / 0.5C

Structure	
Dimension (mm)	600*210*300
Weight (Kg)	48
IP Rating	IP65
Cell Technology	Lithium-iron phosphate (LiFePO4)

Working Environment	
Charge Working Temperature (°C)	0 ~ 55
Discharge Working Temperature (°C)	-20 ~ 60
Altitude (M)	<2500
Humidity (RH)	5 ~ 95% (w/o condensing)

Communication	
Communication Port	RS458, CAN
LED Display	SOC status indicator, LED indicator

Certification	
CB, IEC62619; CE-EMC, CE-GPDS, UKCA; UN38.3, MSDS	

Accessories	
BLV-BASE+TOP	
Installation cover and base + accessories	

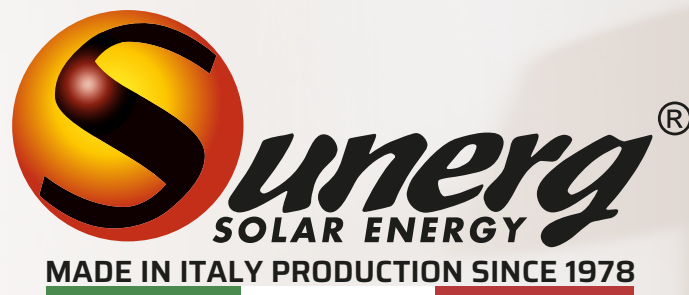
The Sunerg X-SUN-SL single phase Series storage Inverters are designed to increase energy independence for homeowners. Combined with our modular stackable Energy storage System, it offers freedom and control of managing the energy consumption.

The Inverter's power range is from 3kW to 6kW and the energy management is based on time-of-use and demand charge rate structures, significantly reduce the amount of energy purchased from the public grid.

Thanks for the UPS function (switch time < 10ms), enables the crucial loads power on during outages. Additionally, under the backup operation mode, the inverter provides you up to 150% peak output overloading.

The X-SUN-SL Single phase Series storage inverters integrated with Arc Fault Circuit Interrupter (AFCI) and Rapid Shutdown.

With the batterie's modular design you can also customize the system to meet your specific needs by easily adding or removing energy storage units.



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