

Single Phase Hybrid Storage Inverter

4-6 kW plus Series



MAX. 120A
Max. Charge/Discharge Current 120A



Max. 1.5 **PV OVERSIZE**
1.5 Time Oversize



2 **MPPT CHANNELS**
Up to 2 MPPT Channels



<10 **UPS FUNCTION**
Switch Time <10ms











PARALLEL
Max. 6 Parallel Stacking

The Sunerg X-SUN SL Series Inverters are designed to increase energy independence for homeowners. The power range is from 4kW to 6kW, compatible with low voltage (40-60V) batteries.

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 low voltage Series storage inverters integrated with Arc Fault Circuit Interrupter (AFCI) and Rapid Shutdown

-  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

PV Input	X-SUN-3-SL	X-SUN-4-SL	X-SUN-5-SL	X-SUN-6-SL
Max. Input Power (kW)	4.5	6.0	7.5	9.0
Max. PV Voltage (V)			550	
MPPT Range (V)			80 - 500	
Full MPPT range (V)	90 - 500	120 - 500	150 - 500	170 - 500
Normal Voltage (V)			360	
Startup Voltage (V)			100	
Max. input Current (A)			18.5 x 2	
Max. Short Current (A)			26 x 2	
No. of MPP Tracker / No. of PV String			2 / 2	
Battery Port				
Max. Charge/Discharge Power (kW)	3.0	4.0	4.8	4.8
Max. Charge/Discharge Current (A)			80	
Battery Normal Voltage (V)			51.2	
Battery Voltage Range (V)			40 - 60	
Battery Type			Li-ion / Lead-acid etc.	
AC Grid	X-SUN-3-SL	X-SUN-4-SL	X-SUN-5-SL	X-SUN-6-SL
Max Continuous Current (A)	14.0	19.0	23.0	28.0
Max Continuous Power (kVA)	3.0	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
Nominal Grid Voltage (V)		198 to 242 @ 220 / 207 to 253 @ 230		
Nominal Grid Frequency (Hz)		50 / 60		
Power Factor	0.999 (Adjustable from 0.8 overexcited to 0.8 underexcited)			
Current THD (%)	< 3			
AC Load Output				
Max Continuous Current (A)	14.0	19.0	23.0	28.0
Max Continuous Power (kVA)	3.0	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
Max Peak Power (kVA) (10min)	4.5	6.0	7.5	9.0
Nominal AC Voltage L-N (V)		220 / 230		
Nominal AC Frequency (Hz)		50 / 60		
Switching Time (ms)		Seamless		
Voltage THD (%)		< 3		
Efficiency	X-SUN-3-SL	X-SUN-4-SL	X-SUN-5-SL	X-SUN-6-SL
CEC Efficiency (%)			97.0	
Max. Efficiency (%)			97.6	
PV to Bat. Efficiency (%)			98.1	
Bat. between AC Efficiency (%)			96.8	
Protection				
Integrated	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
Dimensions (W x H x D, mm)			370 x 535 x 192	
Weight (kg)	18.5		20.5	
Topology	Transformerless			
Cooling	Intelligent Fan			
Relatively Humidity	0 - 100 %			
Operating Temperature Range (°C)	- 25 to 60			
Operating Altitude (m)	< 4000			
Noise Emission (dB)	< 25			
Standby Consumption (W)	< 10			
Mounting	Wall Bracket			
Communication with RSD	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			

Sunerg S.r.l. reserves the right to make changes to the products' technical data without prior notice.