









Single Phase Hybrid Storage Inverter

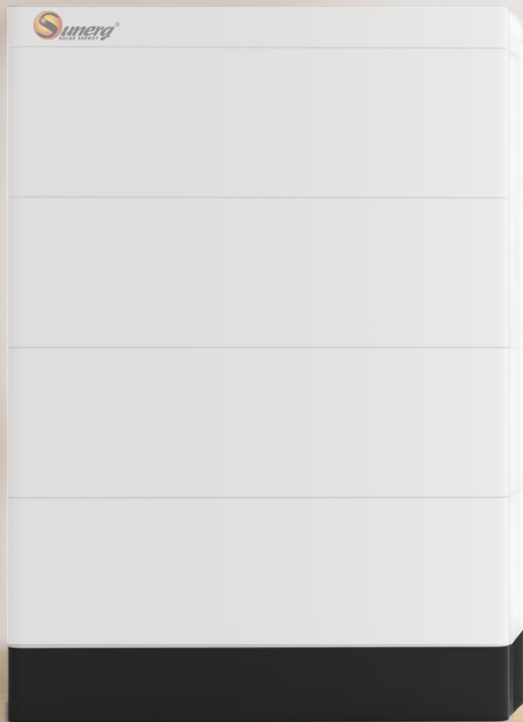
3-6 kW Plus Series



-  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



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	AF3K-SL	AF4K-SL	AF5K-SL	AF6K-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	AF3K-SL	AF4K-SL	AF5K-SL	AF6K-SL
CEC Efficiency (%)			97.0	
Max. Efficiency (%)			97.6	
PV to Bat. Efficiency (%)			98.1	
Bat. between AC Efficiency (%)			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	AF3K-SL	AF4K-SL	AF5K-SL	AF6K-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			

Stackable Home Energy Storage

Technical Specification		BLV-5.12-A			
Model	51.2 V 100Ah	51.2 V 200Ah	51.2 V 400Ah	51.2 V 600Ah	
Layers	1	2	4	6	
Picture					
Energy	5.12 KWh	10.24 KWh	20.48 KWh	30.72 KWh	
Dimension (L*W*H) mm	600*210*440	600*210*740	600*210*1340	600*210*1940	
Weight (Kg)	56	104	200	296	

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	

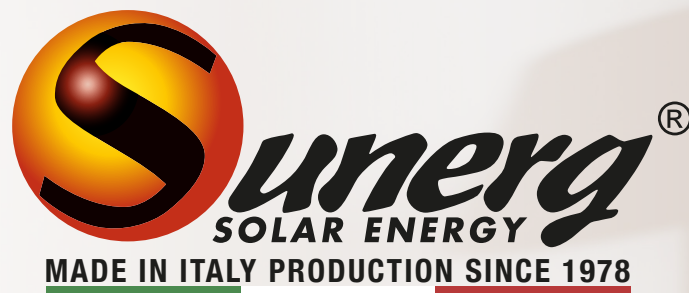
The Sunerg AF single phase Series storage Inverters are designed to increase energy independence for homeowners. Combined with our modular stackable Energy storage System, it offers freedom and control of managing the energy consumption.

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 AF 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.



Sunerg Solar Energy srl
Via Donino Donini, 51
Loc. Cinquemiglia
Città di Castello (PG)

Tel.: +39 075.8540018
Fax: +39 075 8648105
info@sunergsolar.com
export@sunergsolar.com