

SWR

5.12/7.68/10.24/12.80

15.36/17.92/20.48kWh

High Voltage Battery

- Modular design, easy installation
- IP65 outdoor design
- 90% discharge depth
- Supports up to 8 batteries in series



Model	SWR5.12-H1	SWR7.68-H1	SWR10.24-H1	SWR12.80-H1	SWR15.36-H1	SWR17.92-H1	SWR20.48-H1
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Model Features							
Battery Module Type	Lithium Iron Phosphate (LFP)						
Battery Module Quantity	2	3	4	5	6	7	8
Total Energy [kWh]	5.12	7.68	10.24	12.8	15.36	17.92	20.48
Usable Energy(90%DOD) [kWh]	4.61	6.91	9.21	11.52	13.82	16.13	18.43
Rated Voltage [V]	102.4	153.6	204.8	256	307.2	358.4	409.6
Operating Voltage Range [V]	80~116.8	120~175.2	160~233.6	200~350.4	320~467.2	360~525.6	400~584
Maximum Discharge Current [A]	50						
Battery Roundtrip Efficiency	> 95%						
Recommended Depth of Discharge	90%						
Scalability	Support up to 8 batteries in series						

Operating Conditions	
Installation	Stacked
Operation Temperature [°C]	-10~50
Storage Temperature [°C]	-20~50
Communication	CAN
Cooling Concept	Natural Cooling
Humidity	5%-85% (Non-condensing)
Altitudes [m]	≤2000

General Data							
Dimensions(W*H*D) [mm]	500*484*380	500*626*380	500*768*380	500*910*380	500*1052*380	500*1194*380	500*1336*380
Weight [kg]	68.4	96.8	125.2	153.6	182	210.4	238.8

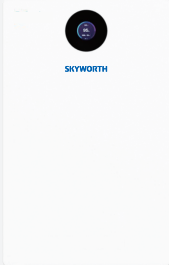
Certification	
Safety Regulation	IEC62619, IEC60730, IEC62477
EMC	EN IEC 61000-6-1/-2/-3/-4
Deliveries	UN38.3
Protection Level	IP65

SWR

5.12/10.24kWh

Low Voltage Battery

- Up to 16 in parallel connection
- Reliable lithium-ion battery management solutions for 6000 cycles
- Plug-and-play, wiring can be done from either side
- Minimum width of just 10 cm, saving space in the home



Model	SWR5.12-L1-SW	SWR10.24-L1-SW
Maininfo		
Rated Voltage [V]		51.2
Rated Capacity [Ah]	100	200
Battery Power [kWh]	5.12	10.24
Battery Type		LFP
Cycling Lifespan		6000 Cycles
Max. Parallel Capacity		16 units

Charge&Discharge	
Max. Charging Voltage [V]	57.6
Over Discharging Voltage [V]	44.8
Max. Charging Current [A]	100
Peak Charging Current [A]	110 (3s)
Max. Discharging Current [A]	100 (1C)
Peak Discharging Current [A]	110 (3s)

General Data	
Weight [kg]	47
Dimension (W*H*D) [kg]	460*725*100 mm
Communication	CAN / RS485 / USB / WiFi / Bluetooth
Storage Condition	6 Months @25°C; 3 Months @35°C; 1 Months @45°C
Charging Temp. Range [°C]	0~45
Discharging Temp. Range [°C]	-10~45
Cooling Method	Neutral Cooling
Protection Grade	IP65

Certification	
Transportation	UN38.3, MSDS
Safety	IEC 62619:2017, EN IEC 61000-6, CEI 0-21 EN 55032, EN 55024, EN 61000-3-2, EN 61000-3-3

SWR

5.12/10.49/16.07kWh

Lithium Battery Energy Storage

- Supports wall or floor mounting
- Up to 16 in parallel connection, expand to 257.12kWh
- Proven Li-ion battery management solutions
- Support WiFi and Bluetooth view real-time data through APP
- Get started quickly and use it instantly

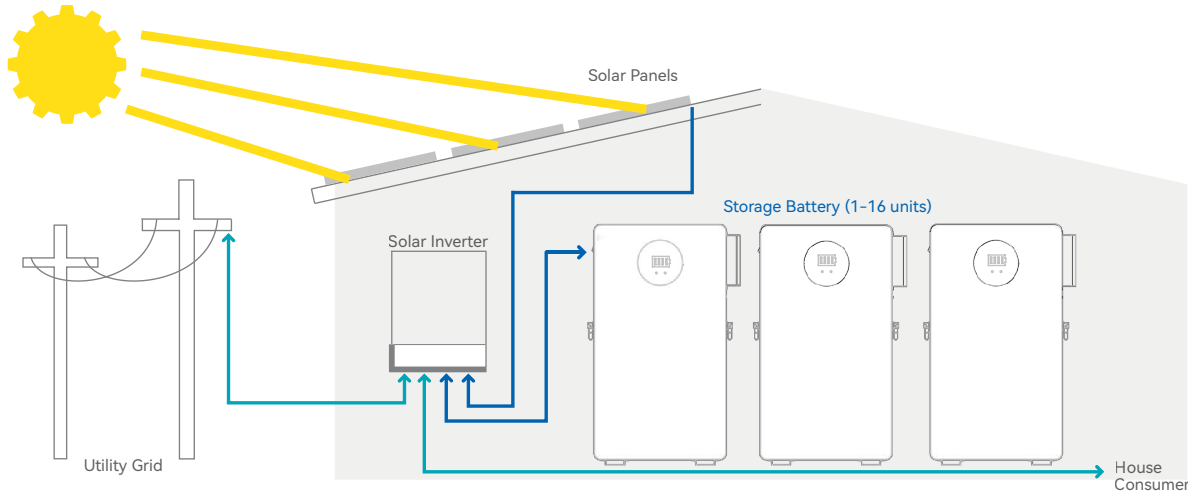


Model	SWR5.12-L2-SW-SA	SWR10.49-L2-SW-SA	SWR16.07-L2-SW-SA
Main Info			
Rated Voltage [V]		51.2	
Rated Capacity [Ah]	100	205	314
Battery Energy [kWh]	5.12	10.49	16.07
Battery Type		LFP	
Cycle Lifespan		6000 Cycles	
Max. Parallel Capacity		1~16 units	

Charge&Discharge	
Max. Charging Voltage [V]	57.6
Over Discharging Voltage [V]	44.8
Standard charge/discharge current [A]	50
Max. charge/discharge current [A]	100
Peak. charge/discharge current [A]	120 (3s)

General Data	
Weight [kg]	44
Dimensions (W*H*D) [mm]	646*399*150
Communication	CAN/RS485/USB
WiFi	✓
Bluetooth	✓
Storage Condition	6 months @25°C;3 months @35°C;1 months @45°C
Charging Temp. Range [°C]	0~45
Discharging Temp. Range [°C]	-10~45
Cooling Method	Natural cooling
Protection Degree	IP30

Standard	
Transportation	UN38.3,MSDS
Safety	IEC 62619: 2017,EN IEC 61000-6



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SWH

3/4/5/6kW

Single-phase Hybrid Inverter (High Voltage)

- 150% oversizing
- Switching time <10ms
- EU efficiency up to 97%
- AC and DC surge protection



SWH

5/8/10/12/15kW

Three-phase Hybrid Inverter (High Voltage)

- Low starting voltage, wide operating voltage range
- Switching time <10ms
- Flexible monitoring mode
- AC and DC surge protection



SWH

3.6/4/4.6/5/5.5/6kW

Single-phase Hybrid Inverter (Low Voltage)

- Efficiency up to 16A*16A PV input current
- Outputs high-quality pure sine wave AC power
- With IP65 protection degree
- Up to 100A charging current
- Time-slot function to save cost with peak-valley



SWH

8/10/12kW

Single-phase Hybrid Inverter (Low Voltage)

- Efficiency up to 22A*2 PV input current
- Outputs high-quality pure sine wave AC power
- With IP65 protection degree
- Up to 200A charging current
- Time-slot function to save cost with peak-valley



Model	SWH3000H-S1	SWH4000H-S1	SWH5000H-S1	SWH6000H-S1
PV Input				
Recommended Max. PV Input Power [Wp]	4500	6000	7500	9000
Max. Input Voltage [V]		600		
MPPT Voltage Range [V]		80~580		
Rated Voltage [V]		360		
Start-up Voltage [V]		90		
No. of MPPT Trackers	1	2	2	2
No. of PV Strings per MPPT	1	1/1	1/1	1/1
Max. Input Current per MPPT [A]	14	14/14	14/14	14/14
Max. Short Circuit Current per MPPT [A]	18	18/18	18/18	18/18
AC Output				
Rated Output Power [W]	3000	4000	5000	6000
Rated Output Current [A]	13.6	18.2	22.7	27.3
Max. Output Current [A]	15	20	25	30
Max. Apparent Output Power [VA]	3300	4400	5500	6600
Rated Output Voltage [V]		220/230/240		
Rated Grid Frequency [Hz]		50/60		
Power Factor		1/0.8(leading)~0.8(lagging)		
THDi (Rated Output Power)		< 3%		
AC Input (Grid)				
Max. Apparent Input Power [VA]	6000	8000	10000	12000
Max. Input Current [A]	27.3	36.4	45.5	54.5
Rated Output Voltage [V]		220/230/240		
Rated Grid Frequency [Hz]		50/60		
Battery				
Battery Module Type		Lithium Iron Phosphate(LFP)		
Battery Voltage Range [V]		80~450		
Max. Charge / Discharge Current [A]		25		
Max. Charge Power [W]	4500	6000	7500	9000
Max Discharge Power [W]	3000	4000	5000	6000
Battery Communication		CAN/RS485		
AC Output (Backup)				
Rated Output Power [W]	3000	4000	5000	6000
Rated Output Voltage [V]		220/230/240		
Rated Output Frequency [Hz]		50/60		
Rated Output Current [A]	13.6	18.2	22.7	27.3
THDi (Rated Output Power)		< 3%		
Switch Time [ms]		10		
Peak Apparent Power, Duration [VA, s]	4500, 60	6000, 60	7500, 60	7500, 60
Efficiency				
Max. Efficiency		97.8%		
EU Efficiency		97%		
Battery Charged / Discharged to AC Max. Efficiency		98.5%@Charge/97.0%@Discharge		
Protection				
DC Switch		Integrated		
Insulation Resistance Detection		Integrated		
Input Reverse Polarity Protection		Integrated		
Anti-island Protection		Integrated		
Residual Current Monitoring		Integrated		
Overtemperature Protection		Integrated		
DC Surge Protection		Integrated (Type II)		
AC Surge Protection		Integrated (Type II)		
General Data				
Dimensions (W*H*D) [mm]		536*444*173		
Weight [kg]		18.5		
Display		LCD/WEB/APP		
Communication		WiFi/RS485/LAN		
Operating Temperature Range [°C]		-25~+60, if >45°C, Power Reduction Needed		
Relative Humidity		0%~100%, Non-condensing		
Operation Altitude [m]		0~4000, if ≥2000, Power Reduction Needed		
Self Consumption (night) [W]		< 8		
Topology		Transformerless		
Cooling Concept		Natural Cooling		
Protection Level		IP66		
Noise		< 30dB		

Model	SWH005KH-T1	SWH008KH-T1	SWH010KH-T1	SWH012KH-T1	SWH015KH-T1
PV Input					
Recommended Max. PV Power [Wp]	6500	10400	13000	15600	18750
Max. Input Voltage [V]			1000		
MPPT Voltage Range [V]			180~950		
Rated Voltage [V]			600		
Start-up Voltage [V]			200		
No. of MPPT Trackers			2		
No. of PV Strings per MPPT		1/1		2/1	
Max. Input Current per MPPT [A]		15/15		30/15	
Max. Short Circuit Current per MPPT [A]		18/18		36/18	
AC Output					
Rated Output Power [W]	5000	8000	10000	12000	15000
Rated Output Current [A]	7.2	11.6	14.5	17.4	21.7
Max. Output Current [A]	7.9	12.7	15.9	19.1	23.8
Max. Apparent Output Power [VA]	5500	8800	11000	13200	16500
Rated Output Voltage [V]			220/380; 230/400; 240/415		
Rated Grid Frequency [Hz]			50/60		
Power Factor			1/0.8(leading)~0.8(lagging)		
THDi (Rated Output Power)			< 3%		
AC Input (Grid)					
Max. Apparent Input Power [VA]	5500	8800	11000	13200	16500
Max. Input Current [A]	7.9	12.7	15.9	19.1	23.8
Rated Input Voltage [V]			220/380; 230/400; 240/415		
Rated Grid Frequency [Hz]			50/60		
Battery					
Battery Type			Lithium Iron Phosphate(LFP)		
Battery Voltage Range [V]			150~600		
Max. Charge / Discharge Current [A]			25		
Battery Communication			CAN		
AC Output (Off-grid)					
Rated Output Power [W]	5000	8000	10000	12000	15000
Rated Output Voltage [V]			220/380; 230/400; 240/415		
Rated Output Frequency [Hz]			50/60		
Rated Output Current [A]	7.2	11.6	14.5	17.4	21.7
THDi (Rated Output Power)			< 3%		
Switch Time [ms]			10		
Peak Apparent Power, Duration [VA, s]	7500, 30	12000, 30	15000, 30	18000, 30	22500, 30
Efficiency					
Max. Efficiency			98.7%		
EU Efficiency			97.8%		
Battery Charged / Discharged to AC Max. Efficiency			98.5%@Charge / 97.0%@Discharge		
Protection					
DC Switch			Integrated		
Insulation Resistance Detection			Integrated		
Input Reverse Polarity Protection			Integrated		
Anti-island Protection			Integrated		
Residual Current Monitoring			Integrated		
Overtemperature Protection			Integrated		
DC Surge Protection			Integrated (Type II)		
AC Surge Protection			Integrated (Type II)		
General Data					
Dimensions (W*H*D) [mm]			498*563*200		
Weight [kg]		28		29	
Display			LCD/WEB/APP		
Communication			WiFi/RS485/LAN		
Operating Temperature Range [°C]			-25~+60		
Relative Humidity			0%~100%, Non-condensing		
Operation Altitude [m]			≤4000, if >2000, Power Reduction Needed		
Self Consumption (night) [W]			< 15		
Topology			Transformerless		
Cooling Concept			Natural Convection		Smart Fan-cooling
Protection Level			IP66		

Model	SWH3600L-S1-SR	SWH4000L-S1-SR	SWH4600L-S1-SR	SWH5000L-S1-SR	SWH5500L-S1-SR	SWH6000L-S1-SR
Off-grid Output						
Rated Output Power [W]	3600	4000	4600	5500	5500	6000
Max. Peak Power [VA]	7200	8000	9200	11000	11000	12000
Rated Output Voltage [Vac]			220/230/240, single phase			
Load Capacity of Motors		3HP		4HP		
Output Frequency Range [Hz]			50 ± 0.3/60 ± 0.3			
Switching Time			10ms(typical value)			
On-grid Output						
Rated Output Power [W]	3600	4000	4600	5500	5500	6000
Max. Apparent Power [VA]	7200	8000	9200	11000	11000	12000
Rated Output Current [A]	15.7	17.4	20	24	24	26
Max. Output Current [A]	17.2	19.1	22	26.4	26.4	28.6
THDI			< 3%			
Power Factor			0.8 leading to 0.8 lagging			
Rated Voltage			220/230/240, single-phase			
Frequency [Hz]			50/60			
Battery						
Battery Type			Lead-acid / Li-ion / User-defined			
Rated Battery Voltage			48V (minimum start-up voltage 44V)			
Battery Voltage Range [Vdc]			40~60			
Max. PV Charging Current [A]			100			
Max. Utility Charging Current [A]			60			
Max. Generator Charging Current [A]			60			
PV Input						
Num. of MPPT			2			
Max. Input Power [W]	3000+3000	3000+3000	3500+3500	4000+4000	4000+4000	4500+4500
Max. Input Current [A]			16+16			
Max. Short-circuit Current [A]			27+27			
Max. Open-circuit Voltage [Vdc]			500+500			
Start-up Voltage [Vdc]			120			
MPPT Operating Voltage Range [Vdc]			120~450			
Utility/Generator Input						
Input Voltage Range [Vac]			90~280			
Input Frequency Range [Hz]			50/60			
Bypass Overload Current [A]			40			
Efficiency						
MPPT Tracking Efficiency			99.9%			
Max. Efficiency			97.5%			
European Efficiency			97.0%			
General						
Num. of Parallel			1~6 units			
Dimension (W*H*D) [mm]			345*556*182			
Weight [Kg]			20			
Protection Degree			IP65			
Operating Temperature Range			-25~60°C (>45°C derating)			
Humidity Range			0%~100%			
Noise [dB]			<60			
Cooling Method			Heatsink & Intelligent air cooling			
Warranty			5 years			
Communication						
Internal Interface			RS485 / CAN / USB / Dry contact			
External Module (optional)			Wi-Fi / GPRS			
Certification						
On-grid Certification			EN50549-1, G99, NRS-097, VDE-ARN-4105, CEI021, UNE217002, PGC 2016			
Safety/EMC			IEC62109-1, IEC62109-2,EN61000-6-1, EN61000-6-3, FCC15 classB			
RoHS			Yes			
Protection						
Protection			PV Reverse Protection / Anti-islanding Protection / Residual-Current Monitoring / Insulation Resistance Monitoring / Output Short-Circuit Protection / Output Over-Current Protection / Over-Voltage Protection / Surge Protection			

Model	SWH008KL-S1-SR		SWH010KL-S1-SR		SWH012KL-S1-SR	
Off-grid Output						
Rated Output Power [W]	8800		10000		12000	
Max. Peak Power [VA]	17600		20000		24000	
Rated Output Voltage [Vac]	220/230/240 single-phase / three-phase (parallel)					
Load Capacity of Motors	5HP		6HP			
Output Frequency Range [Hz]	50 ± 0.3/60 ± 0.3					
Number of Parallel	1~6 units					
Switching Time	10ms(typical value)					
On-grid Output						
Rated Output Power [W]	8800		10000		12000	
Max. Apparent Power [VA]	8800		10000		12000	
Rated AC out current [A]	38.2		43.5		52.2	
Max. Output Current [A]	40		45.5		54.5	
Rated Output Voltage [Vac]	220/230/240					
THDI	< 3%					
Power Factor	0.8 leading to 0.8 lagging					
Frequency [Hz]	50/60					
Battery						
Battery Type	Lead-acid / Li-ion / User-defined					
Rated Battery Voltage [V]	48					
Battery Voltage Range [Vdc]	40~60					
Max. Generator Charging Current [A]	60					
Max. Grid Charging Current [A]	120					
Max. PV/Hybrid Charging Current [A]	200					
PV Input						
Num. of MPPT Trackers	2					
Max. PV Array Power [W]	5500+5500				6600+6600	
Max. Input Current [A]	22+22					
Max. Voltage of Open Circuit [Vdc]	500+500					
Start-up Voltage [Vdc]	120					
MPPT Operating Voltage Range [Vdc]	125~425					
Utility/Generator Input						
Input Voltage Range [Vac]	90~280					
Frequency Range [Hz]	50/60					
Bypass Overload Current [A]	63					
Efficiency						
MPPT Tracking Efficiency	99.9%					
Max. Efficiency	97.5%					
European Efficiency	97.0%					
General						
Dimension (W*H*D) [mm]	440*670*240					
Weight [Kg]	37					
Protection Degree	IP65					
Operating Temperature Range	-25~60°C (>45°C derating)					
Humidity Range	0% ~ 100%					
Cooling Method	Forced air cooling					
Communication						
Embedded Interfaces	RS485 / CAN / USB / Dry contact					
External Module (optional)	Wi-Fi / GPRS					
Certification						
Safety / EMC	IEC62109-1, IEC62109-2,EN61000-6-1, EN61000-6-3, FCC15 classB					
RoHS	Yes					
Protection						
Protection	PV Reverse Protection / Anti-islanding Protection / Residual-Current Monitoring / Insulation Resistance Monitoring / Output Short-Circuit Protection / Output Over-Current Protection / Over-Voltage Protection / Surge Protection					