

SVH 29.9/30/40/50 kW

Three-phase Hybrid Inverter (High Voltage)



MODEL

SVH029KH-T1-BM48 | SVH030KH-T1-BM48
SVH040KH-T1-BM510 | SVH050KH-T1-BM510



PV Side

Max. 5 MPPTs
2 times oversizing



Battery Side

55A*3 independent input
Support 3 in 1 or 3 different battery connection
Perfectly compatible with 280/314Ah cell



AC Side

2 times rated power input
100% unbalanced output
GEN port for diesel generator/smart load/AC couple connection



Protection

Support smart RSD connection
AFCL optional
IP66 degree



User friendly

Scalable to 150kW system
Low noise less than 60dB

Model	SVH029KH-T1-BM48	SVH030KH-T1-BM48	SVH040KH-T1-BM510	SVH050KH-T1-BM510
PV Input				
Recommended Max. PV Input Power [kW]	59.8	60	80	100
Max. Input Voltage [V]			1000	
MPPT Voltage Range [V]			180-850	
Rated Voltage [V]			600	
Start-up Voltage [V]			200	
No. of MPPT Trackers	4			5
No. of PV Strings per MPPT		2		
Max. Input Current per MPPT [A]		40		
Max. Short Circuit Current per MPPT [A]		60		
Battery				
Battery Module Type			Lithium-ion	
Battery Voltage Range [V]			160-800	
Maximum Charge/Discharge Current [A]			55*3	
Maximum Charge/Discharge Power [W]			1.1 times of rated Power	
No. of Battery Input			3	
BMS Communication			Self-adaption BMS, CAN/RS485	
AC Input/Output(Grid)				
Rated Input / Output Power [kW]	29.9	30	40	50
Max. Input Power [kW]	59.8	60	80	100
Max. Input Current [A]	86.3	86.6	115.5	144.3
Max. Output Power [kW]	29.9	33	44	55
Max. Output Current [A]	43.2	47.6	63.5	79.4
Rated Voltage [V]			3L/N/PE 220/380, 230/400	
Rated Frequency [Hz]			50/60	
Max. Continuous AC Passthrough(A)			200A	
Power Factor [cos φ]			1(0.8leading~ 0.8lagging)	
THDi (Rated Output Power)			<3%	
DC Injection			<0.5%In	
AC Output (Backup)				
Rated Output Power [kW]	29.9	30	40	50
Rated Output Current[A]	43.2	43.3	57.7	72.2
Max. Output Power [kW]	29.9	33	44	55
Max. Output Current [A]	43.2	47.6	63.5	79.4
Peak Output Power [W]			1.2 times of rated power, 60s / 1.5 times of rated power, 30s	
Rated Output Voltage[V]			3L/N/PE 220/380, 230/400	
Rated Output Frequency [Hz]			50/60	
THDv (Rated Output Power)			<3%	
UPS Switch Time [ms]			<10ms	
AC Input/Output (GEN)				
Rated Input/Output Power [kW]	29.9	30	400	50
Max. Input Power [kW]	59.8	60	80	100
Max. Input Current [A]	86.3	86.6	115.5	144.3
Max. Output Power [kW]	29.9	33	44	55
Max. Output Current [A]	43.2	47.6	63.5	79.4
Rated Voltage[V]			3L/N/PE 220/380, 230/400	
Rated Frequency [Hz]			50/60	
Efficiency				
Max. Efficiency			97.80%	
Euro Efficiency			97.40%	
MPPT Efficiency			99.9%	
Battery Charged by PV Max. Efficiency			98.5%	
Battery Charge/Discharge to AC Max. Efficiency			97.5%	
General Data				
Dimensions (W*H*D) [mm]			580*920*300 (Excluding connectors and brackets)	
Weight [kg]			93	
Display			OLED+LED & APP	
Communication			WiFi&LAN /4G/Bluetooth	
Operating Temperature Range			- 30~+60 ° C(if>45° C,output power derating)	
Relative Humidity			0%~100%, Non-condensing	
Operation Altitude			≤ 4000m(if ≥ 3000m output power derating)	
Self Consumption (night)			<35W	
Topology			Transformerless	
Cooling Concept			Smart Fan	
Protection level			IP66, C5L	
Noise			<60dB	
Installation Method			Wall Mounted	
Warranty			5 Years (10 Years Optional)	
No. of Parallel			3	
Certificate				
Safety			IEC 62109-1/2	
EMC			IEC 61000-1/2/3/4	
Grid			VDE 4105,CEI 0-21,NRS097,EN 50549-1/10,IEC 61683/EN 50530,IEC 62116/IEC 61727	
Protection				
DC Switch,Insulation Resistance Detection,PV Input Reverse Polarity Protection,Battery Input Reverse Polarity Protection,AC/DC Surge Protection,Grid Detection Protection,Anti-island Protection,AC Over Voltage Protection,AC Over Load Protection,Short Current Protection,Grounding Fault Protection,Residual Current Monitoring,Overtemperature Protection,Smart RSD,PID, AFCI(Optional)				