



SYH Series

5KW-12KW Three Phase Hybrid

With a battery type of Lithium (LFP) and battery voltage range between 180 ~ 600 (1), our new SYH series of three-phase inverters have a capacity of battery drain discharge up to 90%.

- ✓ Easily Expandable when added with extra batteries.
- ✓ Storage capacity up to 33.24kWh, making it easier to harness the power during the day and night.
- ✓ The range has a max. charge/discharge current of 26.0 A.



High MPPT Range with inbuilt global MPP scan for higher yield efficiency



AC/DC built-in Type II SPD and I-V curve diagnosis supported



Remote monitoring the system via app or portal with access to easy upgradation



IP 65 rated, engineered to last with maximum flexibility, making it suitable for outdoor installation

Three Phase Hybrid Inverters

Model	SYH5KW	SYH6KW	SYH8KW	SYH10KW	SYH12KW
INPUT PV (only for hybrid)					
Max. Input Power [W]	A:4000 B:4000	A:4500 B:4500	A:8000 B:5000	A:8000 B:5000	A:9000 B:6000
Max. Input Voltage [V]				1000	
Start-up Input Voltage [V]				160	
Rated Input Voltage [V]				720	
MPPT Operating Voltage Range [V]				160 ~ 950	
Max. Input Current [A]	14/14		26/14		
Max. Short-circuit Current [A]	16/16		32/16		
No. of Independent MPP Trackers	2				
No. of Strings per MPP Tracker	1/1		2/1		
BATTERY CONNECTION					
Battery Type	Lithium Battery (LFP)				
Battery Voltage Range [V]	180 ~ 600 [1]				
Max. Charge/Discharge Current [A]	26.0				
Communication Interface	CAN (Communicate with inverter), RS485 (Upgrade BMS)				
AC INPUT AND OUTPUT (GRID)					
Max. AC Input Power [VA]	10000	12000	16000		
Max. AC Input Current (per phase) [A]	15.2	18.2	24.2		
Rated Output Power [W]	5000	6000	8000	10000	12000
Max. Output Apparent Power [VA]	5500	6600	8800	11000	13200
Rated Output Current (per phase) [A]	7.2	8.7	11.6	14.5	17.4
Max. Output Current (per phase) [A]	8.8	10.6	14.1	17.6	21.2
Rated Grid Voltage [V]	3L/N/PE 380/220; 400/230; 415/240				
Rated Grid Frequency [Hz]	50/60				
Power Factor	1 (Adjustable from 0.8 leading to 0.8 lagging)				
THDI [%]	<3 @Rated Power				
EPS OUTPUT					
Max. Output Apparent Power [VA]	5000	6000	8000	10000	12000
Peak Output Apparent Power (60s) [VA]	10000	12000	14000	15000	
Max. Current (per phase) [A]	7.2	8.7	11.6	14.5	17.4
Rated Output Voltage [V]	3L/N/PE 400/230				
Rated Output Frequency [Hz]	50/60				
Power Factor	1 (Adjustable from 0.8 leading to 0.8 lagging)				
THDv (linear Load) [%]	<3 @Rated Power				
Switch time [ms]	<20				
EFFICIENCY					
Euro Efficiency [%]	97.30				
Max. Efficiency [%]	98.00				
Max. Battery Charge Efficiency(PV to BAT) (@full load) [%]	98.50				
Max. Battery Discharge Efficiency (BAT to AC) (@full load) [%]	97.00				
PROTECTION					
Insulation Monitoring	YES				
Residual Current Monitoring	YES				
DC Reverse Polarity Protection	YES				
Anti-islanding Protection	YES				
AC Short-circuit Protection	YES				
AC Overcurrent/Overvoltage Protection	YES				
DC Switch	YES				
SPD	DC: Type II, /AC: Type II				
AFCI	Optional				
GENERAL DATA					
Dimensions (W x H x D) [mm]	449*519*198				
Weight [kg]	28				
Installation	Wall-Mounted				
Topology	Transformerless				
Cooling Method	Natural		FAN Cooling		
Noise Emission [db]	35		45		
Max. Operating Altitude [m]	2000				
Operating Temperature Range [°C]	-25 ~ 60				
Humidity (No Condensation) %	0 ~ 100				
Protection Degree	IP65				
Standby Consumption [W]	<15				
Monitoring Module	Wi-Fi, LAN, 4G, GPRS (Optional)				
Communication	2*RS485, DRM, Ripple Control, USB				
Display	LCD, App, Website				
Warranty	10 Years				
STANDARD COMPLIANCE (MORE AVAILABLE UPON REQUEST)					
Safety	EN 62109-1, EN 62109-2, EN 62477-1				
EMC	IEC 61000-6-1, IEC 61000-6-3				
Grid Regulation	EN50549-1, C10/11, VDE-AR-N 4105, G98, CEI 0-21				

* More technical characteristics are available on demand and customized.

[1] The minimum operation battery voltage is 150V.