

SYH Series

3KW-6KW Single Phase Hybrid



With a battery type of Lithium (LFP) and battery voltage range between 80 ~ 550, our new SYH series of single-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 40.0 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

Single Phase Hybrid Inverters

Model	SYH3KW	SYH3.7KW	SYH4.6KW	SYH5KW	SYH6KW
INPUT PV (ONLY FOR HYBRID)					
Max. Input Power [W]	3900	4680	5980	6500	7800
Max. Input Voltage [V]			600		
Start-up Input Voltage [V]			75		
Rated Input Voltage [V]			360		
MPPT Operating Voltage Range [V]			80 ~ 550		
Max. Input Current [A]			13.5/13.5		
Max. Short-circuit Current [A]			15/15		
No. of Independent MPP Trackers			2		
No. of Strings per MPP Tracker			1		
BATTERY CONNECTION					
Battery Type	Lithium Battery (LFP)				
Battery Voltage [V]	85 ~ 450				
Max. Charge/Discharge Current [A]	40				
Communication Interface	CAN (Communicate with Inverter), RS485 (Upgrade BMS)				
AC INPUT AND OUTPUT (GRID)					
Max. AC Input Power [VA]	7000	7680	9600	10000	12000
Max. AC Input Current (per phase) [A]	31.8	34.9	43.6	45.5	54.5
Rated Output Power [W]	3000	3680	4600	5000	6000
Max. Output Apparent Power [VA]	3300	4048	5060	5500	6600
Rated Output Current (per phase) [A]	13.0	16.0	20.0	21.7	26.1
Max. Output Current [A]	14.3	17.6	22.0	23.9	28.7
Rated Grid Voltage [V]	220/230/240				
Rated Grid Frequency [Hz]	50/60				
Power Factor	1 (Adjustable from 0.8 leading to 0.8 lagging)				
THDi [%]	<3 @ rated power				
EPS OUTPUT (WITH BATTERY)					
Max. Output Apparent Power [VA]	5000	5000	6000	6000	6000
Peak Output Apparent Power (60s) [VA]	6000	6000	7200	7200	7200
Max. Current (per phase) [A]	21.7		26.1		
Rated Output Voltage [V]	220/230/240				
Rated Output Frequency [Hz]	50/60				
Power Factor	1 (Adjustable from 0.8 leading to 0.8 lagging)				
THDv (linear Load) [%]	<2 @ rated power				
Switch time [ms]	<20				
EFFICIENCY					
Euro Efficiency [%]	97.00				
Max. Efficiency [%]	97.80				
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 III				
GENERAL DATA					
Dimensions (WxHxD) [mm]	430*410*178				
Weight [kg]	23				
Installation	Wall-Mounted				
Topology	Transformerless				
Cooling Method	Natural				
Noise Emission [dB]	35				
Max. Operating Altitude [m]	2000				
Operating Temperature Range [°C]	-25 ~ 60				
Humidity (No Condensation) [%]	0 ~ 100				
Protection Degree	IP65				
Standby consumption[W]	< 10				
Monitoring Module	WiFi, LAN, 4G, GPRS (Optional)				
Communication	2*RS485, DRM, Ripple Control, USB				
Display	LCD, App, Website				
STANDARD COMPLIANCE (MORE AVAILABLE UPON REQUEST)					
Safety	EN 62109-1, EN 62109-2				
EMC	EN 61000-6-2, EN 61000-6-3				
Grid Regulation	EN50549-1, C10 / 11, VDE-AR-N 4105, G98, G99, CEI 0-21, NRS 097-2-1, AS / NZS 4777.2				