

HYBRID INVERTERS

SINGLE PHASE (3kW TO 8kW)



TECHNICAL PARAMETERS	GSI-3K-P1-HY	GSI-3.6K-P1-HY	GSI-5K-P1-HY	GSI-6K-P1-HY	GSI-8K-P1-HY
Battery Input Data					
Battery Type	Lead-acid or Lithium-ion				
Battery Voltage Range(V)	40-60				
Max. Charging Current(A)	70	90	120	135	190
Max. Discharging Current(A)	70	90	120	135	190
Equalization Charge	3 Stages/Equalization				
Charging Strategy for Li-ion Battery	Self-adaption to BMS				
PV String Input Data					
Max. DC Input Power(W)	3900	4680	6500	7800	10400
Rated PV Input Voltage(V)	370(125-500)				
Start-up Voltage(V)	125				
MPPT Voltage Range(V)	150-425				
Full Load DC Voltage Range(V)	200-425				
PV Input Current(A)	18	18+18			26+26
Max. PV Isc(A)	27	27+27			34+34
No. of MPPT Trackers	1	2			
No. of Strings per MPPT Tracker	1	1+1			2+2
AC Input/Output Data					
Rated AC Input/Output Active Power(W)	3000	3600	5000	6000	8000
Max. AC Input/Output Apparent Power(VA)	3300	3960	5500	6600	8800
Rated AC Input/Output Current(A)	13.1	15.7	21.7	26.1	34.8
Max. AC Input/Output Current(A)	14.4	17.2	23.9	28.7	38.3
Max. Conti. AC Passthrough Current(A)	35			40	50
Peak Power(off-grid) (W)	2 time of rated power, 10 Sec				
Power Factor Adjustment Range	0.8 leading to 0.8 lagging				
Rated Frequency and Voltage Range	50/60Hz, L/N/PE, 220/230V				
Grid Type	Single Phase				
Total Harmonic Current Distortion(THDi)	<3%(of nominal power)				
DC Current Injection	<0.5% In				
Efficiency					
Max. Efficiency	97.60%				
Euro Efficiency	96.50%				
MPPT Efficiency	>99.90%				
Protection					
Integrated	Anti-islanding Protection, PV String Input Reverse Polarity Protection Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge Protection				
Over Voltage Category	DC Type II/AC Type II				
Certifications and Standards					
Grid Regulations	IEC 61727, IEC 62116				
Safety Standards	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				
General Data					
Operating Temperature Range(°C)	-40-60°C, +45°C Derating				
Cooling Concept	Smart Cooling				
Noise(dB)	≤30dB				
Communication Mode	RS485, CAN				
Weight(kg)	18.4	20.5			24
Dimension(WxHxD)mm	376W×470H×241.5D				330W×580H×232D
Ingress Protection	IP65				
Installation Style	Wall-mounted				
Monitoring Mode	GPRS/WiFi/LAN(Optional)				
Warranty	5 Years(10 Years Optional)				