

HYBRID INVERTERS THREE PHASE(LV) (5kW TO 12kW)



TECHNICAL PARAMETERS	GSI-5K-P3-HY	GSI-6K-P3-HY	GSI-8K-P3-HY	GSI-10K-P3-HY	GSI-12K-P3-HY
Battery Input Data					
Battery Type	Lead-acid or Lithium-ion				
Battery Voltage Range(V)	40-60				
Max. Charging Current(A)	120	150	190	210	240
Max. Discharging Current(A)	120	150	190	210	240
Equalization Charge	3 Stages/Equalization				
Charging Strategy for Li-ion Battery	Self-adaption to BMS				
PV String Input Data					
Max. PV Input Power(W)	6500	7800	10400	13000	15600
Max. PV Input Voltage(V)	160-800				
Start-up Voltage(V)	160				
MPPT Voltage Range(V)	200-650				
Rated PV Input Voltage(V)	550				
Max. Operating PV Input Current(A)	20+20				
Max. Input Short-Circuit Current(A)	30+30				
No. of MPPT trackers/No. of Strings	2/1+1				
AC Input/Output Data					
Rated AC Input/Output Active Power(W)	5000	6000	8000	10000	12000
Max. AC Input/Output Apparent Power(VA)	5500	6600	8800	11000	13200
Rated AC Input/Output Current(A)	7.3	8.7	11.6	14.5	17.4
Max. AC Input/Output Current(A)	8.4	10	13.4	16.7	20
Max. Conti. AC Passthrough Current(A)	45				
Peak Power(off-grid)(W)	2 times of rated power, 10s				
Power Factor Adjustment Range	0.8 leading to 0.8 lagging				
Rated Frequency and Voltage Range	50 ± 5Hz, 60 ± 5Hz, 400/380V				
Grid Connection Form	3L+N+PE				
Total Harmonics Current Distortion(THDi)	<3%(of Nominal power)				
DC Current Injection	<0.5% In				
Protection					
Integrated	Anti-islanding Protection, PV Sttring Input Reverse Polarity Protection Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge Protection				
Over Voltage Category	TYPE II(DC)/TYPE II(AC)				
Efficiency					
Max. Efficiency	97.6%				
Euro Efficiency	96.5%				
MPPT Efficiency	>99%				
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 to +60, >45 Derating				
Permissible Ambient Humidity	0-100%				
Noise(dB)	≤55dB				
Ingress Protection	IP65				
Inverter Topology	Non-Isolated				
Dimensions(WxHxD)mm	386W×660H×250D(Excluding Connectors and Brackets)				
Weight(kg)	35.2				
Cooling Concept	Intelligent Air Cooling				
Warranty	5 Years(10 Years Optional)				
Communication Mode	RS485/CAN				
Monitoring Mode	GPRS/WiFi/LAN (Optional)				