

HYBRID INVERTERS THREE PHASE(HV) (30kW TO 50kW)



TECHNICAL PARAMETERS

GSI-30K-P3-HY

GSI-35K-P3-HY

GSI-40K-P3-HY

GSI-50K-P3-HY

Battery Input Data

Battery Type	Lithium-ion			
Battery Voltage Range(V)	160-800			
Max. Charging Current(A)	50+50			
Max. Discharging Current(A)	50+50			
Charging Strategy for Li-ion Battery	Self-adaption to BMS			
Number of Battery Input	2			

PV String Input Data

Max. PV Input Power(W)	39000	45500	52000	65000
Max. PV Input Voltage(V)	1000			
Start-up Voltage(V)	180			
MPPT Voltage Range(V)	150-850			
Rated PV Input Voltage(V)	600			
Max. Operating PV Input Current(A)	36+36+36		36+36+36+36	
Max. Input Short-Circuit Current(A)	55+55+55		55+55+55+55	
No. of MPPT trackers/No. of Strings	3/2+2+2		4/2+2+2+2	

AC Input/Output Data

Rated AC Input/Output Active Power(W)	30000	35000	40000	50000
Max. AC Input/Output Apparent Power(VA)	33000	38500	44000	55000
Rated AC Input/Output Current(A)	43.5	50.8	58	72.5
Max. AC Input/Output Current(A)	50	58.4	66.7	83.4
Max. Conti. AC Passthrough Current(A)	200			
Peak Power(off-grid)(W)	1.5 times of rated power, 10s			
Power Factor Adjustment Range	0.8 leading to 0.8 lagging			
Rated Frequency and Voltage Range	50/60Hz, 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 String Input Reverse Polarity Protection Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge Protection
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Over Voltage Category	TYPE II(DC)/TYPE II(AC)
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Efficiency

Max. Efficiency	97.6%
Euro Efficiency	97%
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°C, >45°C Derating
Permissible Ambient Humidity	0-100%
Noise(dB)	<60dB
Ingress Protection	IP65
Inverter Topology	Non-Isolated
Dimensions(WxHxD)mm	527W×894H×294D(Excluding Connectors and Brackets)
Weight(kg)	80
Cooling Concept	Intelligent Air Cooling
Warranty	5 Years(10 Years Optional)
Communication Mode	RS485/CAN
Monitoring Mode	GPRS/WiFi/LAN(Optional)