



GSI THREE PHASE HYBRID INVERTER

GSI-60K-P3-HY

KEY FEATURES



100% unbalanced output, each phase

AC

AC couple to retrofit existing solar system



Max. 10 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel



Max. charging/discharging current of 160A



High voltage battery, higher efficiency

6

6 time periods for battery charging/discharging



Support storing energy from diesel generator



HYBRID INVERTERS THREE PHASE(HV) (60kW)



TECHNICAL PARAMETERS

GSI-60K-P3-HY

Battery Input Data

Battery Type	Lithium-ion
Battery Voltage Range(V)	160-1000
Max. Charging Current(A)	80+80
Max. Discharging Current(A)	80+80
Charging Strategy for Li-ion Battery	Self-adaption to BMS
Number of Battery Input	2

PV String Input Data

Max. PV Input Power(W)	96000
Max. PV Input Voltage(V)	1000
Start-up Voltage(V)	180
MPPT Voltage Range(V)	150-850
Rated PV Input Voltage(V)	650
Max. Operating PV Input Current(A)	36+36+36+36+36+36
Max. Input Short-Circuit Current(A)	54+54+54+54+54+54
No. of MPPT trackers/No. of Strings	6/2+2+2+2+2+2

AC Input/Output Data

Rated AC Input/Output Active Power(W)	60000
Max. AC Input/Output Apparent Power(VA)	66000
Rated AC Input/Output Current(A)	91
Max. AC Input/Output Current(A)	100
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	220/380V, 230/400V, 50/60Hz
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)	<65dB
Ingress Protection	IP 65
Inverter Topology	Non-Isolated
Dimensions(WxHxD)mm	606W×927H×314D(Excluding Connectors and Brackets)
Weight(kg)	97.5
Cooling Concept	Intelligent Air Cooling
Warranty	5 Years(10 Years Optional)
Communication Mode	RS485/RS/232CAN
Monitoring Mode	GPRS/Wifi/4G