

HYBRID INVERTERS THREE PHASE(LV) (14kW TO 20kW)



TECHNICAL PARAMETERS

GSI-14K-P3-HY

GSI-15K-P3-HY

GSI-16K-P3-HY

GSI-18K-P3-HY

GSI-20 K-P3-HY

Battery Input Data

Battery Type	Lead-acid or Lithium-ion				
Battery Voltage Range(V)	40-60				
Max. Charging Current(A)	260	280	300	330	350
Max. Discharging Current(A)	260	280	300	330	350
Equalization Charge	3 Stages/Equalization				
Charging Strategy for Li-ion Battery	Self-adaption to BMS				

PV String Input Data

Max. PV Input Power(W)	18200	19500	20800	23400	26000
Max. PV Input Voltage(V)	160-800				
Start-up Voltage(V)	160				
MPPT Voltage Range(V)	160-650				
Rated PV Input Voltage(V)	550				
Max. Operating PV Input Current(A)	36+36				
Max. Input Short-Circuit Current(A)	54+54				
No. of MPPT trackers/No. of Strings	2/2+2				

AC Input/Output Data

Rated AC Input/Output Active Power(W)	14000	15000	16000	18000	20000
Max. AC Input/Output Apparent Power(VA)	15400	16500	17600	19800	22000
Rated AC Input/Output Current(A)	20.3	21.8	23.2	26.1	29
Max. AC Input/Output Current(A)	23.4	25	26.7	30	33.4
Max. Conti. AC Passthrough Current(A)	70				
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	50/60Hz, 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	456W×750H×268.5D(Excluding Connectors and Brackets)
Weight(kg)	50.6
Cooling Concept	Intelligent Air Cooling
Warranty	5 Years(10 Years Optional)
Communication Mode	RS485/CAN
Monitoring Mode	GPRS/WiFi/LAN(Optional)