

ON-GRID INVERTERS

THREE PHASE (40kW TO 50kW)



TECHNICAL PARAMETERS	GSI-40K-P3-GT	GSI-45K-P3-GT	GSI-50K-P3-GT
Input Side			
Max. DC Input Power(kW)	52	58.5	65
Max. DC Input Voltage(V)		1100	
Start-up DC Input Voltage(V)		250	
MPPT Operating Range(V)		200-1000	
Max. DC Input Current(A)		40+40+40+40	
Max. Short Circuit Current(A)		60+60+60+40	
No. of MPPT Trackers		4	
No. of Strings per MPPT Tracker		4+4+4+4	
Output Side			
Rated Output Power(kW)	40	45	50
Max. Active Power(kW)	44	49.5	55
Rated Output Voltage Range(V)	3L/N/PE, 220/380V, 230/400V, 0.85Un-1.1Un		
Grid Frequency Range	50 ± 5Hz, 60 ± 5Hz		
Operating Phase	Three Phase		
Rated AC Grid Output Current(A)	58	65.5	72.5
Max. AC Output Current(A)	66.7	75.7	83.3
Output Power Factor	0.8 leading to 0.8 lagging		
Total Harmonics Current Distortion(THDi)	<3%		
DC Injection Current(mA)	<0.5%		
Protection			
DC Reverse Polarity Protection	Yes		
AC Short Circuit Protection	Yes		
AC Output Over Current Protection	Yes		
Output Over Voltage Protection	Yes		
Insulation Resistance Protection	Yes		
Ground Fault Monitoring	Yes		
Anti-islanding Protection	Yes		
Temperature Protection	Yes		
Integrated DC Switch	Yes		
Remote software upload	Yes		
Remote change of operating parameters	Yes		
Surge protection	DC Type II/AC Type II		
Efficiency			
Max. Efficiency	98.6%		
Euro Efficiency	97.8%		
MPPT Efficiency	>99%		
General Data			
Dimensions(WxHxD)mm	434W×570H×243D(Excluding Connectors and Brackets)		
Weight(kg)	39		
Topology	Transformerless		
Running Temperature	-25 to +65°C, >45°C derating		
Ingress Protection	IP65		
Noise Emission(Typical)	≤50dB		
Cooling Concept	Smart cooling		
Max. Operating Altitude Without Derating	2000m		
Warranty	10 years		
Operating Surroundings Humidity	0-100%		
Grid Connection Standards	IEC 61727, IEC 62116,		
Safety Standards	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2		
Features			
Display	LCD 1602		
Interface	RS485/WiFi/LAN/Local Monitoring		