

ON-GRID INVERTERS

SINGLE PHASE (1kW TO 4.6kW)



TECHNICAL PARAMETERS	GSI-1K-P1-GT	GSI-2.2K-P1-GT	GSI-3K-P1-GT	GSI-3.4K-P1-GT	GSI-3.6K-P1-GT	GSI-4.2K-P1-GT	GSI-4.6K-P1-GT
Input Side							
Max. DC Input Power(kW)	1.2	2.64	3.6	4.08	4.32	5.04	5.5
Max. DC Input Voltage(V)	550						
Start-up DC Input Voltage(V)	80						
MPPT Operating Range(V)	70-500						
Max. DC Input Current(A)	20						
Max. Short Circuit Current(A)	30						
No. of MPPT Tracker	1						
No. of String per MPPT Tracker	1						
Output Side							
Rated Output Power(kW)	1	2.2	3	3.4	3.6	4.2	4.6
Max. Active Power(kW)	1.1	2.42	3.3	3.74	3.96	4.62	5.06
Rated Output Voltage Range(V)	L/N/PE, 220/230						
Grid Frequency Range(Hz)	50 ± 5Hz , 60 ± 5Hz						
Operating Phase	Single phase						
Rated AC Grid Output Current(A)	4.35	9.57	13.04	14.78	15.65	18.26	20.00
Max. AC Output Current(A)	4.78	10.52	14.35	16.26	17.22	20.09	22.00
Output Power Factor	0.8 leading to 0.8 lagging						
Total Harmonics Current Distortion(THDi)	< 3%						
DC Injection(mA)	< 0.5%						
Efficiency							
Max. Efficiency	97.50						
Euro Efficiency	97.30						
MPPT Efficiency	> 99%						
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	Optional						
Remote software upload	YES						
Remote change of operating parameters	YES						
Surge protection	DC Type II/AC Type II						
General Data							
Dimensions(WxHxD)mm	280W×310H×184D(Excluding connectors and brackets)						
Weight(kg)	5.6						
Topology	Transformerless						
Internal Consumption	<1W (Night)						
Running Temperature	-25 to +60 °C, >45 °C derating						
Operating Surroundings Humidity	0-100%						
Ingress Protection	IP65						
Noise Emission(Typical)	≤35dB						
Cooling Concept	Natural cooling						
Max. Operating Altitude Without Derating	2000m						
Warranty	10 years						
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						