

Three Phase String Inverter

SUN-40 / 45 / 50K-G03



Max. 4 MPP trackers,
Max. efficiency up to 98.7%



Zero export application, VSG application



String intelligent monitoring



Wide output voltage range



Anti-PID function (Optional)

Technical Data

Model	SUN-40K-G03	SUN-45K-G03	SUN-50K-G03
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+40+40+40
Max. Short Circuit Current (A)	60+60+60		60+60+60+60
No. of MPP Trackers	3		4
No. of Strings per MPP Tracker	3+3+3		3+3+3+3
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 (this may vary with grid standards)		
Rated Grid Frequency (Hz)	50 / 60 (Optional)		
Operating Phase	Three Phase		
Rated AC Grid Output Current (A)	60.6/58	68.2/65.2	75.8/72.5
Max. AC Output Current (A)	66.7/63.8	75/71.7	83.3/79.7
Output Power Factor	0.8 leading to 0.8 lagging		
Total Harmonics Current Distortion (THDI)	<3%		
DC Injection Current (mA)	<0.5%		
Grid Frequency Range	45-55 or 55-65 (Optional)		
Efficiency			
Max. Efficiency	98.7%		
Euro Efficiency	98%		
MPPT Efficiency	>99%		
Protection			
DC Reverse-Polarity Protection	Yes		
AC Short Circuit Protection	Yes		
AC Output Overcurrent Protection	Yes		
Output Overvoltage 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		
General Data			
Cabinet Size (WxHxD mm)	434x570x243 (Excluding Connectors and Brackets)		
Weight (kg)	37.1		
Topology	Transformerless		
Internal Consumption	<1W (Night)		
Running Temperature	-25 to +60°C, >45°C Derating		
Ingress Protection	IP65		
Noise Emission (Typical)	≤50 dB		
Cooling Concept	Smart Cooling		
Permissible Altitude (m)	4000		
Warranty	8 Years		
Grid Connection Standard	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25.G99, VDE-AR-N 4105		
Operating Surroundings Humidity	0-100%		
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2		
Features			
Display	LCD 240 x 160		
Interface	RS485/RS232/Wifi/LAN		