

Three Phase String Inverter

SUN-40/45/50K-G04



Efficient

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



Intelligent

- String intelligent monitoring (optional)



Adaptive

- Zero export application, VSG application
 - Wide output voltage range



Reliable

- Anti-PID function (Optional)

Model	SUN-40K-G04		SUN-45K-G04		SUN-50K-G04	
PV String Input Data						
Max. PV Input Power (kW)	52		58.5		65	
Max. PV Input Voltage (V)			1100			
Start-up Voltage (V)			250			
MPPT Voltage Range (V)			200-1000			
Rated PV Input Voltage (V)			600			
Max. Operating PV Input Current (A)	40+40+40				40+40+40+40	
Max. Input Short Circuit Current (A)	60+60+60				60+60+60+60	
No. of MPP Trackers/ No. of Strings MPP Tracker	3/3+3+3				4/3+3+3+3	
AC Output Side						
Rated AC Output Active Power (kW)	40		45		50	
Max. AC Output Apparent Power (kVA)	44		49.5		55	
Rated AC 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	
Rated output voltage	220/380V, 230/400V 0.85Un-1.1Un 3L/N/PE					
Rated Output Grid Frequency/Range(Hz)	50/45-55, 60/55-65					
Power Factor Adjustment Range	0.8 leading to 0.8 lagging					
Total Current Harmonic Distortion THDi	<3%					
DC Injection Current	<0.5%In					
Efficiency						
Max. Efficiency	98.7%					
Euro Efficiency	98.1%					
MPPT Efficiency	>99%					
Equipment Protection						
DC Reverse Polarity Protection	Yes					
AC Output Overcurrent Protection	Yes					
AC Output Overvoltage Protection	Yes					
AC Output Short Circuit Protection	Yes					
Thermal Protection	Yes					
Insulation Impedance Detection	Yes					
DC Component Monitoring	Yes					
Arc Fault Circuit Interrupter (AFCI)	Optional					
Anti-islanding Protection	Yes					
Residual Current Detection	Yes					
DC Switch	Yes					
Surge Protection Level	TYPE II(DC), TYPE II(AC)					
Interface						
LCD/LED Display	LCD1602					
Communication Interface	RS485/RS232 /WiFi/LAN					
General Data						
Operating Temperature Range (°C)	-25 to +60°C, >45°C Derating					
Permissible Ambient Humidity	0-100%					
Permissible Altitude	4000m					
Noise (dB)	<65					
Ingress Protection(IP) Rating	IP 65					
Inverter Topology	Non-Isolated					
Over Voltage Category	OVC II(DC), OVC III(AC)					
Cabinet Size (WxHxD mm)	434×570×243 (Excluding Connectors and Brackets)					
Weight (kg)	39					
Warranty	5 Years					
Type of Cooling	Intelligent Air Cooling					
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105					
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2					