

Three Phase String Inverter

SUN-40/45/50K-G04



-  Max. 4 MPP trackers,
Max. efficiency up to 98.7%
-  Zero export application, VSG application
-  String intelligent monitoring (optional)
-  Wide output voltage range
-  Anti-PID function (Optional)

Technical Data

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/Range (V)	220/380V, 230/400V 0.85Un-1.1Un			
Grid Connection Form	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 Polarity Reverse Connection Protection	Yes			
AC Output Overcurrent Protection	Yes			
AC Output Overvoltage Protection	Yes			
AC Output Short Circuit Protection	Yes			
Thermal Protection	Yes			
DC Terminal Insulation Impedance Monitoring	Yes			
DC Component Monitoring	Yes			
Ground Fault Current Monitoring	Yes			
Arc Fault Circuit Interrupter (AFCI)	Optional			
Power Network Monitoring	Yes			
Island Protection Monitoring	Yes			
Earth Fault Detection	Yes			
Overvoltage Load Drop Protection	Yes			
Residual Current (RCD) Detection	Yes			
Surge Protection Level	TYPE II(DC), TYPE II(AC)			
Interface				
Communication Interface	RS485/RS232			
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)			
General Data				
Operating Temperature Range (°C)	-25 to +60°C, >45°C Derating			
Permissible Ambient Humidity	0-100%			
Permissible Altitude (m)	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			