50kW String Inverter 3P



DATASHEET

SUN-50K-G04

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v.1 (27/11/25)

PLEASE RETAIN FOR FUTURE REFERENCE

Product Parameters

Note

Approvals and certification are subject to change without prior notice. Please confirm the current status with Sunsynk before placing an order.

Model	SUN-50K-G04
PV String Input Data	
Max. PV Input Power	65kW
Max. PV Input Voltage	1100V
Start-Up Voltage	250V
MPPT Voltage Range	200-1000V
Rated PV Input Voltage	600V
Max. Operating PV Input Current	40+40+40+40A
Max. Input Short Circuit Current	60+60+60+60A
No. of MPP Trackers/ No. of Strings MPP Tracker	4/3+3+3+3
AC Output Side	
Rated AC Output Active Power	50kW
Max. AC Output Apparent Power	55kVA
Rated AC Output Current	75.8/72.5A
Max. AC Output Current	83.3/79.7A
Rated Output Voltage/Range	220/380V, 230/400V 0.85Un-1.1Un
Grid Connection Form	3L/N/PE
Rated Output Grid Frequency/Range	50/45-55Hz, 60/55-65Hz
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	
Integrated	DC Reverse Polarity Protection, AC Output Over-Current Protection, AC Output Over-Voltage Protection, AC Output Short Circuit Protection, Thermal Protection, Insulation Impedance Detection, DC Component Monitoring, Arc Fault Circuit Interrupter (AFCI) (Optional), Anti-Islanding Protection, Residual Current Detection, DC Switch
Surge Protection Level	TYPE II(DC), TYPE II(AC)
Interface	
Communication Interface	RS485/RS232/WiFi/LAN
LCD/LED Display	LCD1602

General Data	
Operating Temperature Range	-25 to +60°C, >45°C Derating
Permissible Ambient Humidity	0-100%
Permissible Altitude	4000m
Noise	≤65dB
Ingress Protection (IP) Rating	IP65
Inverter Topology	Non-Isolated
Over Voltage Category	OVC II(DC), OVC III(AC)
Cabinet Size (WxHxD)	434x570x243mm (Excluding Connectors and Brackets)
Weight	39kg
Warranty	See website for Warranty details
Type of Cooling	Intelligent Air Cooling
Grid Regulation	Approvals and certifications are subject to change without prior notice. Please confirm the current status with Sunsynk before placing an order.
Safety EMC/Standard	Approvals and certifications are subject to change without prior notice. Please confirm the current status with Sunsynk before placing an order.



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