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)

Deye

Stock Code: 605117.SH

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 MPPT Trackers/ No. of Strings per MPPT Trackers	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		
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 /WiFi/LAN		
General Data			
Operating Temperature Range (°C)	-25 to +60°C, >45°C Derating		
Permissible Ambient Humidity	0-100%		
Permissible Altitude (m)	4000m		
Noise (dB)	<50 dB(A)		
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)	37.1		
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		