

Three Phase String Inverter

SUN- 50 K-G03



Max. 4 MPPT tracker, Max. efficiency up to 98.7%



Zero export application, VSG application



String intelligent monitoring (optional)



Wide output voltage range



Type II DC/AC SPD



Anti-PID function (Optional)

Deye

Clean Power For You

Model	SUN-50K-G03
Input Side	
Max. DC Input Power (kW)	65
Max. DC Input Voltage (V)	1000
Start-up DC Input Voltage (V)	250
MPPT Operating Range (V)	200~1000
Max. DC Input Current (A)	40+40+40+40
Number of MPPT / Strings per MPPT	4 / 3
Output Side	
Rated Output Power (kW)	50
Max. Active Power (kW)	55
Rated AC Grid Voltage (V)	220 / 380, 230 / 400
AC Grid Voltage Range (V)	277Vac~460Vac (this may vary with grid standards)
Rated Grid Frequency (Hz)	50 / 60 (Optional)
Operating Phase	Three phase
Rated AC Grid Output Current (A)	72.4
Max. AC Output Current (A)	79.7
Output Power Factor	0.8 leading to 0.8 lagging
Grid Current THD	<3%
DC Injection Current (mA)	<0.5%
Grid Frequency Range	45-55Hz or 55-65Hz (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	
Size (mm)	647.5W×537H×303.5D
Weight (kg)	44.5
Topology	Transformerless
Internal Consumption	<1W (Night)
Running Temperature	-25~65°C
Ingress Protection	IP66
Noise Emission (Typical)	<45 dB
Cooling Concept	Smart cooling
Max. Operating Altitude Without Derating	2000m
Designed Lifetime	>20 years
Grid Connection Standard	EN50549-1, IEC61727, IEC62116, IEC60068, IEC61683
Operating Surroundings Humidity	0-100%
Safety EMC / Standard	IEC62109-1/-2, IEC61000-6-2, IEC61000-6-4, IEC61000-3-11, IEC61000-3-12
Features	
DC Connection	MC-4 mateable
AC Connection	IP65 rated plug
Display	LCD 240 × 160
Interface	RS485/RS232/Wifi/LAN