

# Single Phase String Inverter

## SUN-3 K-G



1 MPP tracker, Max. efficiency up to 97.5%



Wide output voltage range



Zero export application, VSG application



Built-in SPD



String intelligent monitoring (optional)



Ani-PID function (Optional)

## Technical Specifications

SUN-3 K-G

Model	SUN-3K-G
<b>Input Side</b>	
Max. DC Input Power (kW)	3.6
Max. DC Input Voltage (V)	500
Start-up DC Input Voltage (V)	120
MPPT Operating Range (V)	100~500
Max. DC Input Current (A)	10
Number of MPPT / Strings per MPPT	1 / 1
<b>Output Side</b>	
Rated Output Power (kW)	3
Max. Active Power (kW)	3.3
Rated AC Grid Voltage (V)	230
AC Grid Voltage Range (V)	160~300
Rated Grid Frequency (Hz)	50 / 60 (Optional)
Operating Phase	Single phase
Rated AC Grid Output Current (A)	13.1
Max. AC Output Current (A)	14
Output Power Factor	0.8 leading to 0.8 lagging
Grid Current THD	<3%
DC Injection Current (mA)	<0.5%
Grid Frequency Range	47~52 or 57~62 (Optional)
<b>Efficiency</b>	
Max. Efficiency	97.5%
Euro Efficiency	97.3%
MPPT Efficiency	>99%
<b>Protection</b>	
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
Surge Protection	Yes
Islanding Protection	Yes
Temperature Protection	Yes
Integrated DC Switch	Optional
<b>General Data</b>	
Size (mm)	330W × 310H × 115D
Weight (kg)	6
Topology	Transformerless
Internal Consumption	<1W (Night)
Running Temperature	-25~60°C
Ingress Protection	IP65
Noise Emission (Typical)	<30 dB
Cooling Concept	Intelligent cooling
Max. Operating Altitude Without Derating	2000m
Designed Lifetime	>20 years
Grid Connection Standard	EN50549, IEC61727
Operating Surroundings Humidity	0-100%
Safety EMC / Standard	IEC62109-1/-2, EN61000-6-1, EN61000-6-3
<b>Features</b>	
DC Connection	MC-4 mateable
AC Connection	IP65 rated plug
Display	LCD1602
Interface	RS485 / RS232



การไฟฟ้านครหลวง  
Metropolitan Electricity Authority

รายชื่อผลิตภัณฑ์อินเวอร์เตอร์ที่ผ่านการทดสอบตาม  
ข้อกำหนดสำหรับอินเวอร์เตอร์ที่ใช้ในระบบผลิตไฟฟ้าประเภทเชื่อมต่อกับโครงข่ายของการไฟฟ้านครหลวง

No	Brand	Model/Type	Ac voltage Rated	Rated Power	Firmware version
56	DSC	SUN-3K-G	230 V, 1ph, 50 Hz	3 kW	Ver : 0176 Ver : 5131
57	DSC	SUN-5K-G	230 V, 1ph, 50 Hz	5 kW	Ver : 0176 Ver : 5131
58	DSC	SUN-5K-SG03LP1-EU	230 V, 1ph, 50 Hz	5 kW	HMI: Ver5331 MAIN: Ver2136