

Hybrid Inverter

SUN-5K-SG03LP1-EU



Colorful touch LCD,
IP65 protection degree

6

6 time periods for battery
charging/discharging

120

Max. charging/discharging
current of 120A

16

Frequency droop control,
Max.16pcs parallel



DC couple and AC couple to
retrofit existing solar system



Support storing energy from
diesel generator

Technical Specifications

SUN-5K-SG03LP1-EU

Model

SUN-5K-SG01/03LP1-EU

Battery Input Data

Battery Type	Lead-acid or Lithium-ion
Battery Voltage Range (V)	40~60V
Max. Charging Current (A)	120A
Max. Discharging Current (A)	120A
Charging Curve	3 Stages / Equalization
External Temperature Sensor	Optional
Charging Strategy for Li-Ion Battery	Self-adaption to BMS

PV String Input Data

Max. DC Input Power (W)	6500W
PV Input Voltage (V)	370V (100V~500V)
MPPT Range (V)	125~425V
Full Load DC Voltage Range	240~425V
Start-up Voltage (V)	150V
PV Input Current (A)	11A+11A
No.of MPPT Trackers	2
No.of Strings Per MPPT Tracker	1+1

AC Output Data

Rated AC Output and UPS Power (W)	5000W
Max. AC Output Power (W)	5500W
Peak Power (off grid)	2 times of rated power, 10 S
AC Output Rated Current (A)	21.7A
Max. AC Current (A)	25A
Max. Continuous AC Passthrough (A)	35A
Power Factor	0.8 leading to 0.8 lagging
Output Frequency and Voltage	50/60Hz; 220/230 / 240Vac (single phase)
Grid Type	Single Phase
Current Harmonic Distortion	THD<3% (Linear load<1.5%)

Efficiency

Max. Efficiency	97.60%
Euro Efficiency	96.50%
MPPT Efficiency	99.90%

Protection

PV Input Lightning Protection	Integrated
Anti-islanding Protection	Integrated
PV String Input Reverse Polarity Protection	Integrated
Insulation Resistor Detection	Integrated
Residual Current Monitoring Unit	Integrated
Output Over Current Protection	Integrated
Output Shorted Protection	Integrated
Output Over Voltage Protection	Integrated

Certifications and Standards

Grid Regulation	VDE 0126, AS4777, NRS2017, G98, G99, IEC61683, IEC62116, IEC61727, RD1699: 2011, XP C15-712-3: 2019-05
Safety Regulation	IEC62109-1, IEC62109-2
EMC	EN61000-6-1, EN61000-6-3

General Data

Operating Temperature Range (°C)	-25~60°C, >45°C Derating
Cooling	Fan
Noise (dB)	<30
Communication with BMS	RS485; CAN
Weight (kg)	20.5
Size (mm)	580W × 330H × 208D
Protection Degree	IP65
Installation Style	Wall-mounted
Warranty	5 years



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