Clean Power For You

Ningbo Deye Inverter Technology Co., Ltd.

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Note: The technical data above mentioned may be updated or revised due to product development. The data in this brochure is subject to change without notice. The latest datasheet and catalogue can be acquired via market@deye.com.cn

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Deye Inverter www.deyeinverter.com Market@Deye.com.cn

World-leading Energy Storage System Provider

Stock Code: 605117.SH
Choose Deye — Choose a Green and Healthy Life

2023

Company Profile

1 **Ningbo Deye Inverter Technology Co., Ltd**, founded in 2007 with registered capital 56 million USD, is one of the China's high-tech enterprises and a subsidiary of Deye Group. With a plant area over 600,000㎡ and complete production and testing equipment, Deye has become a major player in the global solar inverter market.

2 **Ningbo Deye Inverter Technology Co., Ltd** is dedicated to providing complete photovoltaic power system solutions, including residential and commercial power plants solutions. Also, Deye offers solar energy storage system solutions. Among them, PV grid-connected inverter power range from 1-136kW, Hybrid inverter 3kW-50kW, and microinverter 300W-2200W.

3 As a technology-oriented company, Deye has always been committing to research and develop new cutting-edge technologies to provide efficiency and reliable products. For example, Deye adopts T-type three-level topology and enhanced SVPWM algorithm to further improve the conversion efficiency by 0.7% compared with common SPWM. With frequency droop control technology, Deye string inverter is able to work with diesel generator, which greatly expands the scope of the product application.

Read more

Milestones

2022

Launched the latest generation of 50kW hybrid inverter, equipped with independent two-way battery terminal port.

2021

Deye Group was successfully listed on SSE of China in 2021, Stock Code 605117.SH.

30,000 pcs +

By the end of 2019, with total shipments 30,000+, Deye hybrid inverter has become Top 3 in South Africa, Pakistan and Top 1 Chinese brand in USA.

2017

Deye has launched first generation hybrid inverter and attracted a lot of attention with many unique features such as V/f droop control technology and battery DC / DC topology etc...

2007

Founded in 2007 with registered capital of 56 million USD.

Core Technology

Deye hybrid inverter 3-50kW with 208/230/240/400Vac

4	Automatic switching time 4ms
6	6 time periods for battery charging/discharging
16	V/f droop control, Max. 16pcs in parallel
24	Supports using diesel generator to charge battery directly, ensuring system energy supply 7* 24H
96.5	Max. conversion efficiency of 97.6%; Max. battery charge efficiency of 96.5%
290	Max. charging/discharging current of 290A

Core Features

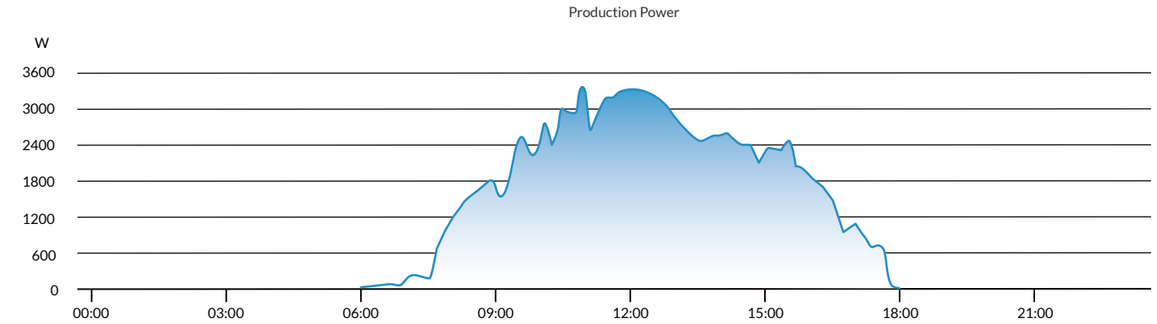
Deye grid-connected inverter 1-136kW

- Max. 8 MPP trackers, Max. efficiency up to 98.9%
- High DC/AC ratio 1.5 times for more yields
- Wide output voltage range 277-520Vac
- Zero export application, response speed within 0.5S
- T-type three-level topology and enhanced SVPWM
- Type II DC / AC SPD, frequency droop control technology
- Max. DC input current of 16A/string, adpat to 600W solar panel
- String intelligent monitoring (optional), Ani-PID function (Optional)

Main Highlights

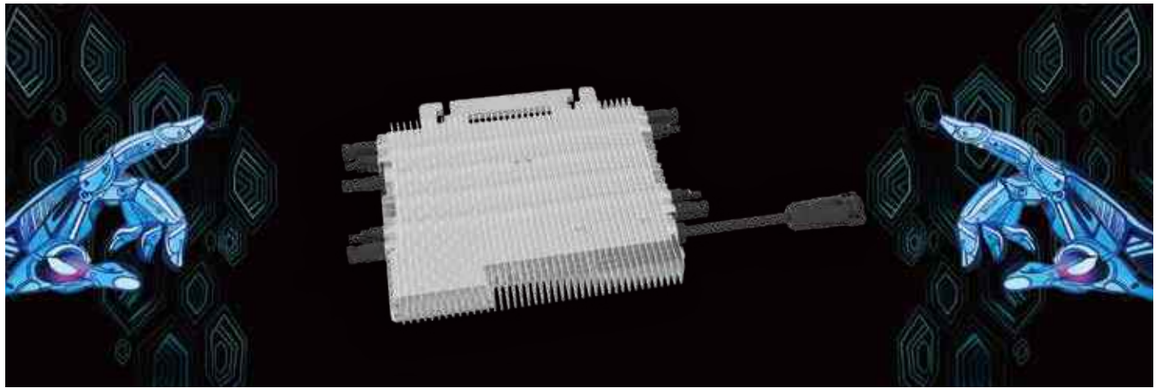
Deye microinverter 300-2200W

- Support reactive power compensation, comply with UL code.
- Module level monitoring, Max. 4 MPPTs design
- Max. DC input current 13A, adapt to 600W PV module
- Rapid shutdown function, safe and reliable
- Zigbee or WIFI communication
- IP67 protection degree, 10 years warranty



Physical Layout

0W	200 W	180 W	150 W
170 W	170 W	280 W	250 W
270 W	280 W	260 W	240 W



Complete
Manufacturing System

World-Class
Components Suppliers

Deye chooses world-class suppliers to ensure the high quality of its products.

MOSFET, IGBT

Infineon
ON Semiconductor
ALPHA & OMEGA SEMICONDUCTOR

IC

Texas Instruments
TOSHIBA
VAC VACUUMSCHMELZE

Capacitor, Inductor

NIPPON CHEMI-CON
TDK

Diode

FAIRCHILD SEMICONDUCTOR

Relay

Panasonic
HONGFA

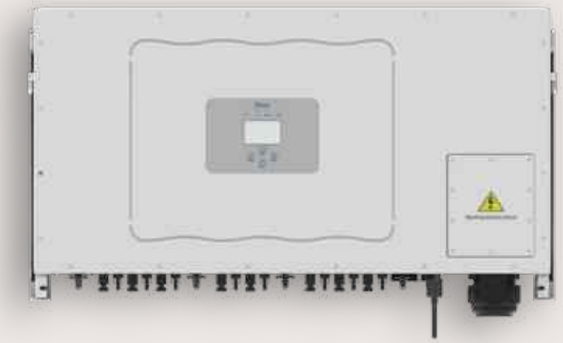
FAN

NMB

Deye Inverter Portfolio

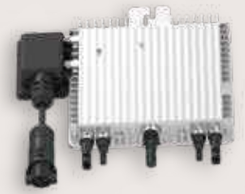
Single Phase
String Inverter

Three Phase
String Inverter



Three Phase
Hybrid Inverter

Single Phase
Hybrid Inverter



Microinverter

Accessory &
monitoring

Three Phase String Inverter

SUN-15K-G05

- 2 MPP trackers, Max. efficiency up to 98.5%
- Zero export application, VSG application
- String intelligent monitoring (optional)
- Wide output voltage range
- Anti-PID function (Optional)

Technical Data

Model	SUN-15K-G05
Input Side	
Max. DC Input Power (kW)	19.5
Max. DC Input Voltage (V)	1000
Start-up DC Input Voltage (V)	250
MPPT Operating Range (V)	200-850
Max. DC Input Current (A)	13+26
Max. Short Circuit Current (A)	19.5+39
No.of MPP Trackers	2
No.of Strings per MPP Tracker	1+2
Output Side	
Rated Output Power (kW)	15
Max. Active Power (kW)	16.5
Rated Output Voltage/Range (V)	3L/N/PE 220/380V, 230/400V 0.85Un-1.1Un (this may vary with grid standards)
Rated Grid Frequency (Hz)	50 / 60 (Optional)
Operating Phase	Three Phase
Rated AC Grid Output Current (A)	22.7/21.7
Max. AC Output Current (A)	25/23.9
Power Factor Adjustment Range	0.8 leading to 0.8 lagging
Total Harmonics Current Distortion (THDi)	<3%
DC Injection Current (mA)	<0.5%
Grid Frequency Range	45-55 or 55-65 (Optional)
Efficiency	
Max. Efficiency	98.5%
Euro Efficiency	97.5%
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	
Cabinet Size (WxHxD mm)	333×472×203 (Excluding Connectors and Brackets)
Weight (kg)	15
Topology	Transformerless
Internal Consumption	<1W (Night)
Running Temperature	-25 to +65°C, >45°C Derating
Ingress Protection	IP65
Noise Emission (Typical)	≤40 dB
Cooling Concept	Smart Cooling
Permissible Altitude (m)	4000
Warranty	5 Years
Grid Connection Standard	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, G98, G99, VDE 4105
Operating Surroundings Humidity	0-100%
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2
Features	
Display	LCD1602
Interface	RS485/RS232/Wifi/LAN

Three Phase String Inverter

SUN-18/20/22/23/25K-G05

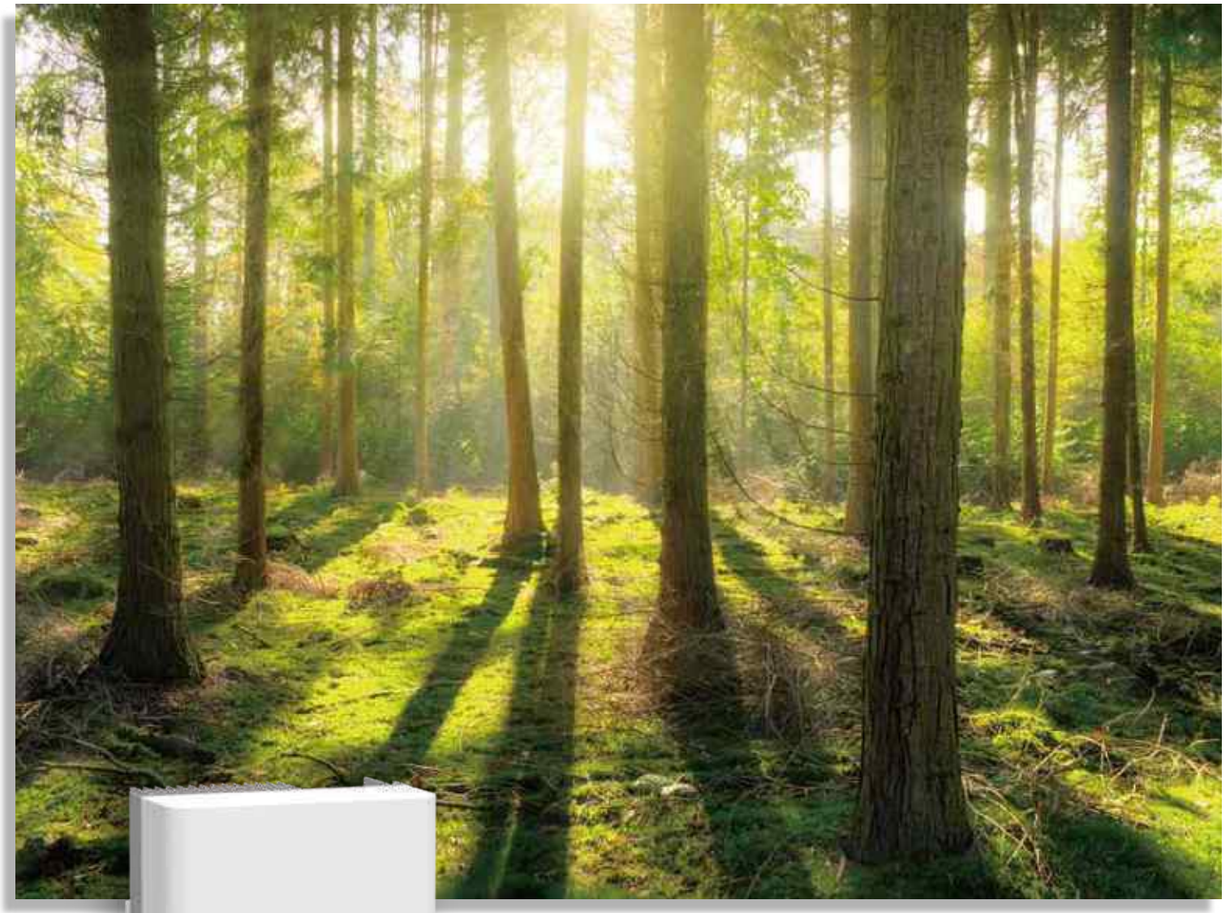
- 2 MPP trackers, Max. efficiency up to 98.6%
- Zero export application, VSG application
- String intelligent monitoring (optional)
- Wide output voltage range
- Anti-PID function (Optional)

Technical Data

Model	SUN-18K-G05	SUN-20K-G05	SUN-22K-G05	SUN-23K-G05	SUN-25K-G05
Input Side					
Max. DC Input Power (kW)	23.4	26	28.6	29.9	32.5
Max. DC Input Voltage (V)	1000				
Start-up DC Input Voltage (V)	250				
MPPT Operating Range (V)	200-850				
Max. DC Input Current (A)	26+26				
Max. Short Circuit Current (A)	39+39				
No.of MPP Trackers	2				
No.of Strings per MPP Tracker	2+2				
Output Side					
Rated Output Power (kW)	18	20	22	23	25
Max. Active Power (kW)	19.8	22	24.2	25.3	27.5
Rated Output Voltage/Range (V)	3L/N/PE 220/380V, 230/400V 0.85Un-1.1Un (this may vary with grid standards)				
Rated Grid Frequency (Hz)	50 / 60 (Optional)				
Operating Phase	Three Phase				
Rated AC Grid Output Current (A)	27.3/26.1	30.3/29	33.4/31.9	34.9/33.4	37.9/36.2
Max. AC Output Current (A)	30/28.7	33.3/31.9	36.7/35.1	38.4/36.7	41.7/39.8
Power Factor Adjustment Range	0.8 leading to 0.8 lagging				
Total Harmonics Current Distortion (THDi)	<3%				
DC Injection Current (mA)	<0.5%				
Grid Frequency Range	45-55 or 55-65 (Optional)				
Efficiency					
Max. Efficiency	98.6%				
Euro Efficiency	97.8%				
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					
Cabinet Size (WxHxD mm)	362×527×220 (Excluding Connectors and Brackets)				
Weight (kg)	20				
Topology	Transformerless				
Internal Consumption	<1W (Night)				
Running Temperature	-25 to +65°C, >45°C Derating				
Ingress Protection	IP65				
Noise Emission (Typical)	≤40 dB				
Cooling Concept	Smart Cooling				
Permissible Altitude (m)	4000				
Warranty	5 Years				
Grid Connection Standard	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105				
Operating Surroundings Humidity	0-100%				
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				
Features					
Display	LCD1602				
Interface	RS485/RS232/Wifi/LAN				

Three Phase String Inverter

SUN-30/33/35/36K-G04



- 2 MPP trackers, Max. efficiency up to 98.6%
- Zero export application, VSG application
- String intelligent monitoring (optional)
- Wide output voltage range
- Anti-PID function (Optional)

Technical Data

Model	SUN-30K-G04	SUN-33K-G04	SUN-35K-G04	SUN-36K-G04
Input Side				
Max. DC Input Power (kW)	39	42.9	45.5	46.8
Max. DC Input Voltage (V)	1000			
Start-up DC Input Voltage (V)	250			
MPPT Operating Range (V)	200-850			
Max. DC Input Current (A)	40+40			
Max. Short Circuit Current (A)	60+60			
No.of MPP Trackers	2			
No.of Strings per MPP Tracker	3+3			
Output Side				
Rated Output Power (kW)	30	33	35	36
Max. Active Power (kW)	33	36.3	38.5	39.6
Rated Output Voltage/Range (V)	3L/N/PE 220/380V, 230/400V 0.85Un-1.1Un (this may vary with grid standards)			
Rated Grid Frequency (Hz)	50 / 60 (Optional)			
Operating Phase	Three Phase			
Rated AC Grid Output Current (A)	45.5/43.5	50/47.8	53/50.7	54.5/52.2
Max. AC Output Current (A)	50/47.9	55/52.6	58.3/55.8	60/57.4
Power Factor Adjustment Range	0.8 leading to 0.8 lagging			
Total Harmonics Current Distortion (THDi)	<3%			
DC Injection Current (mA)	<0.5%			
Grid Frequency Range	45-55 or 55-65 (Optional)			
Efficiency				
Max. Efficiency	98.6%			
Euro Efficiency	97.8%			
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				
Cabinet Size (WxHxD mm)	362×577×215 (Excluding Connectors and Brackets)			
Weight (kg)	23			
Topology	Transformerless			
Internal Consumption	<1W (Night)			
Running Temperature	-25 to +65°C, >45°C Derating			
Ingress Protection	IP65			
Noise Emission (Typical)	≤50 dB			
Cooling Concept	Smart Cooling			
Permissible Altitude (m)	2000			
Warranty	5 Years			
Grid Connection Standard	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105			
Operating Surroundings Humidity	0-100%			
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2			
Features				
Display	LCD1602			
Interface	RS485/RS232/Wifi/LAN			

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)

Technical Data

Model	SUN-40K-G04	SUN-45K-G04	SUN-50K-G04
Input Side			
Max. DC Input Power (kW)	52	58.5	65
Max. DC Input Voltage (V)	1100		
Start-up DC Input Voltage (V)	250		
MPPT Operating Range (V)	200-1000		
Max. DC Input Current (A)	40+40+40		40+40+40+40
Max. Short Circuit Current (A)	60+60+60		60+60+60+60
No.of MPP Trackers	3		4
No.of Strings per MPP Tracker	3+3+3		3+3+3+3
Output Side			
Rated Output Power (kW)	40	45	50
Max. Active Power (kW)	44	49.5	55
Rated Output Voltage/Range (V)	3L/N/PE 220/380V, 230/400V 0.85Un-1.1Un (this may vary with grid standards)		
Rated Grid Frequency (Hz)	50 / 60 (Optional)		
Operating Phase	Three Phase		
Rated AC Grid 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
Power Factor Adjustment Range	0.8 leading to 0.8 lagging		
Total Harmonics Current Distortion (THDi)	<3%		
DC Injection Current (mA)	<0.5%		
Grid Frequency Range	45-55 or 55-65 (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			
Cabinet Size (WxHxD mm)	434×570×243 (Excluding Connectors and Brackets)		
Weight (kg)	37.1		
Topology	Transformerless		
Internal Consumption	<1W (Night)		
Running Temperature	-25 to +60°C, >45°C Derating		
Ingress Protection	IP65		
Noise Emission (Typical)	≤50 dB		
Cooling Concept	Smart Cooling		
Permissible Altitude (m)	4000		
Warranty	5 Years		
Grid Connection Standard	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105		
Operating Surroundings Humidity	0-100%		
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2		
Features			
Display	LCD1602		
Interface	RS485/RS232/Wifi/LAN		

Three Phase String Inverter

SUN-60/70/75/80K-G

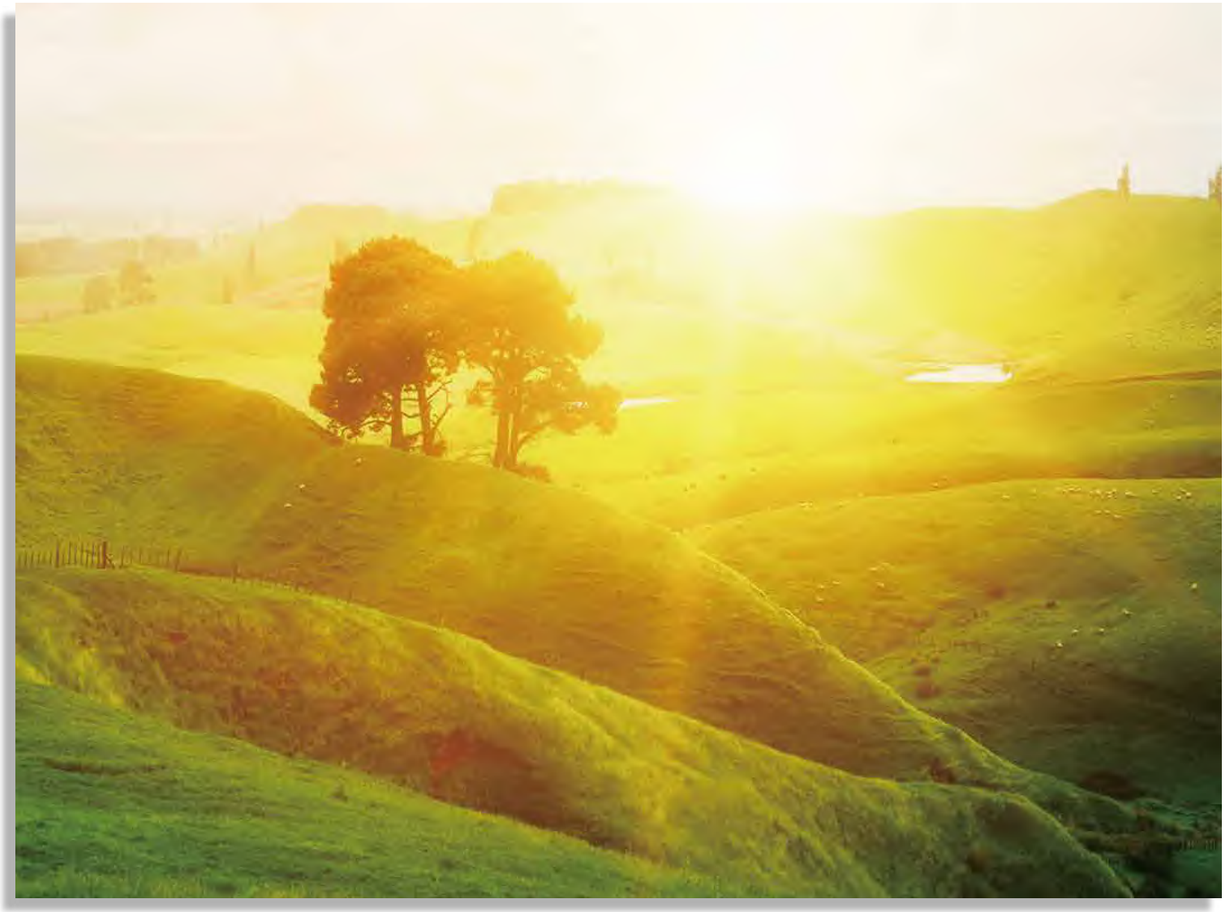
- 4 MPP trackers, Max. efficiency up to 98.7%
- Zero export application, VSG application
- String intelligent monitoring (optional)
- Wide output voltage range
- Anti-PID function (Optional)
- Type II DC/AC SPD

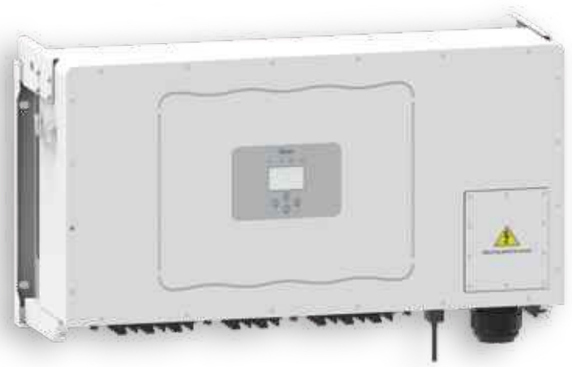
Technical Data

Model	SUN-60K-G	SUN-70K-G	SUN-75K-G	SUN-80K-G
Input Side				
Max. DC Input Power (kW)	78	91	97.5	104
Max. DC Input Voltage (V)	1000			
Start-up DC Input Voltage (V)	250			
MPPT Operating Range (V)	200-850			
Max. DC Input Current (A)	40+40+40+40			
Max. Short Circuit Current (A)	60+60+60+60			
No.of MPP Trackers	4			
No.of Strings per MPP Tracker	3+3+3+3	4+4+4+4		
Output Side				
Rated Output Power (kW)	60	70	75	80
Max. Active Power (kW)	66	77	82.5	88
Rated Output Voltage/Range (V)	3L/N/PE 220/380V, 230/400V 0.85Un-1.1Un (this may vary with grid standards)			
Rated Grid Frequency (Hz)	50 / 60 (Optional)			
Operating Phase	Three Phase			
Rated AC Grid Output Current (A)	90.9/87	106.1/101.5	113.6/108.7	121.2/115.9
Max. AC Output Current (A)	100/95.7	116.7/111.6	125/119.6	133.3/127.5
Power Factor Adjustment Range	0.8 leading to 0.8 lagging			
Total Harmonics Current Distortion (THDi)	<3%			
DC Injection Current (mA)	<0.5%			
Grid Frequency Range	45-55 or 55-65 (Optional)			
Efficiency				
Max. Efficiency	98.7%			
Euro Efficiency	98.3%			
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				
Cabinet Size (WxHxD mm)	700×575×297 (Excluding Connectors and Brackets)			
Weight (kg)	60			
Topology	Transformerless			
Internal Consumption	<1W (Night)			
Running Temperature	-25 to +65°C, >45°C Derating			
Ingress Protection	IP65			
Noise Emission (Typical)	≤50 dB	≤55 dB		
Cooling Concept	Smart Cooling			
Permissible Altitude (m)	2000			
Warranty	5 Years			
Grid Connection Standard	IEC 61727, IEC 62116, CEI 0-21,CEI 0-16,EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105, VDE-AR-N 4110			
Operating Surroundings Humidity	0-100%			
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2			
Features				
Display	LCD 240 × 160			
Interface	RS485/RS232/Wifi/LAN			

Three Phase String Inverter

SUN-120/125/130/135/136K-G01P3-EU-AM8





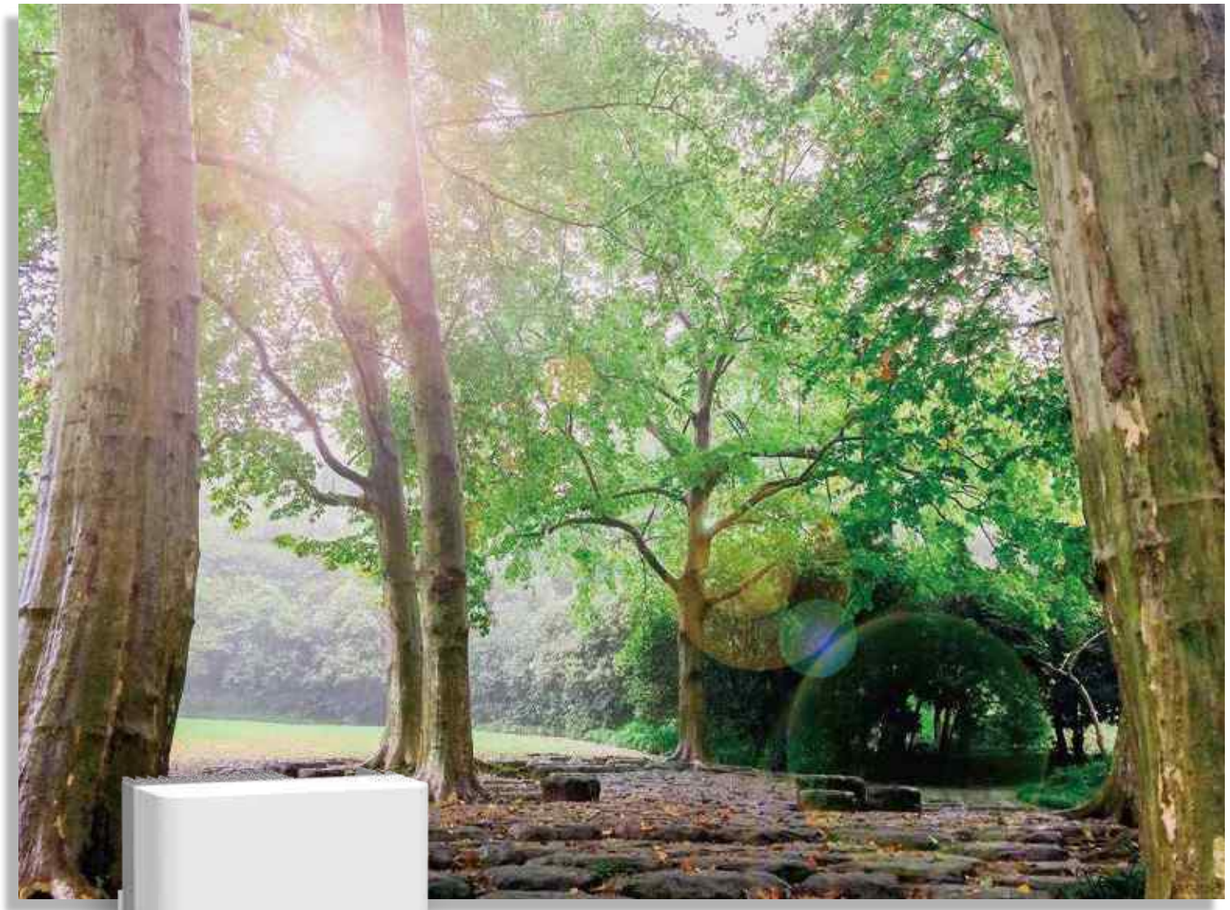
- 8 MPP trackers, Max. efficiency up to 98.8%
- Zero export application, VSG application
- String intelligent monitoring (optional)
- Wide output voltage range
- Anti-PID function (Optional)
- Type II DC/AC SPD

Technical Data

Model	SUN-120K-G01P3-EU-AM8	SUN-125K-G01P3-EU-AM8	SUN-130K-G01P3-EU-AM8	SUN-135K-G01P3-EU-AM8	SUN-136K-G01P3-EU-AM8
Input Side					
Max. DC Input Power (kW)	180	187.5	195	202.5	204
Max. DC Input Voltage (V)	1100				
Start-up DC Input Voltage (V)	250				
MPPT Operating Range (V)	200-1000				
Max. DC Input Current (A)	40+40+40+40+40+40+40+40				
Max. Short Circuit Current (A)	60+60+60+60+60+60+60+60				
No.of MPP Trackers	8				
No.of Strings per MPP Tracker	4+4+4+4+4+4+4+4				
Output Side					
Rated Output Power (kW)	120	125	130	135	136
Max. Active Power (kW)	132	135	135	135	136
Rated Output Voltage/Range (V)	3L/N/PE 220/380V, 230/400V 0.85Un-1.1Un (this may vary with grid standards)				
Rated Grid Frequency (Hz)	50 / 60 (Optional)				
Operating Phase	Three Phase				
Rated AC Grid Output Current (A)	181.9/174	189.4/181.2	197/188.5	204.6/195.7	206.1/197.2
Max. AC Output Current (A)	200/191.4	204.6/195.7	204.6/195.7	204.6/195.7	206.1/197.2
Power Factor Adjustment Range	0.8 leading to 0.8 lagging				
Total Harmonics Current Distortion (THDi)	<3%				
DC Injection Current (mA)	<0.5%				
Grid Frequency Range	45-55 or 55-65 (Optional)				
Efficiency					
Max. Efficiency	98.8%				
Euro Efficiency	98.3%				
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					
Cabinet Size (WxHxD mm)	1006×516×325.5 (Excluding Connectors and Brackets)				
Weight (kg)	103				
Topology	Transformerless				
Internal Consumption	<1W (Night)				
Running Temperature	-25 to +60°C, >45°C Derating				
Ingress Protection	IP65				
Noise Emission (Typical)	≤65 dB				
Cooling Concept	Smart Cooling				
Permissible Altitude (m)	4000				
Designed Lifetime	>20 Years				
Grid Connection Standard	IEC 61727, IEC 62116, CEI 0-21, CEI 0-16, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105, VDE-AR-N 4110				
Operating Surroundings Humidity	0-100%				
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				
Features					
Display	LCD 240 × 160				
Interface	RS485/RS232/Wifi/LAN				

Three Phase String Inverter(LV)

SUN-10/12/15K-G05-LV



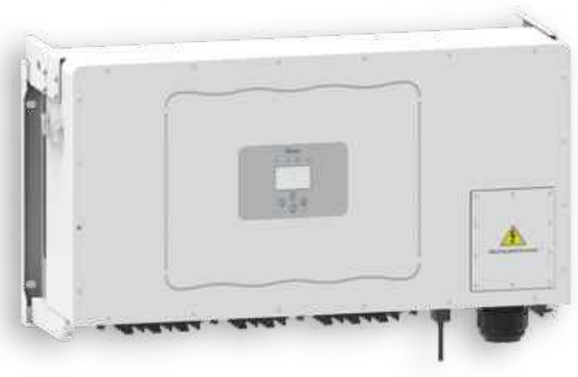
- 120V/208V, 127V/220V, 133V/230V and 50/60Hz, Three phase system
- 2 MPP trackers, Max. efficiency up to 98.6%
- Zero export application, VSG application
- String intelligent monitoring (optional)
- Wide output voltage range
- Anti-PID function (Optional)

Technical Data

Model	SUN-10K-G05-LV	SUN-12K-G05-LV	SUN-15K-G05-LV
Input Side			
Max. DC Input Power (kW)	13	15.6	19.5
Max. DC Input Voltage (V)	800		
Start-up DC Input Voltage (V)	250		
MPPT Operating Range (V)	200-700		
Max. DC Input Current (A)	26+26		
Max. Short Circuit Current (A)	39+39		
No.of MPP Trackers	2		
No.of Strings per MPP Tracker	2		
Output Side			
Rated Output Power (kW)	10	12	15
Max. Active Power (kW)	10	12	15
Rated Output Voltage/Range (V)	3L/N/PE 120V/208V, 127V/220V, 133V/230V 0.85UN-1.1UN		
Rated Grid Frequency (Hz)	50/60		
Operating Phase	Three phase		
Rated AC Grid Output Current (A)	27.8/26.3/25.1	33.4/31.5/30.1	41.7/39.4/37.6
Max. AC Output Current (A)	27.8/26.3/25.1	33.4/31.5/30.1	41.7/39.4/37.6
Power Factor Adjustment Range	0.8 leading to 0.8 lagging		
Grid Current THD	<3%		
DC Injection Current (mA)	<0.5%		
Grid Frequency Range	57-62		
Efficiency			
Max. Efficiency	98.6%		
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)	362W×527H×220D (Excluding connectors and brackets)		
Weight (kg)	20		
Topology	Transformerless		
Internal Consumption	<1W (Night)		
Running Temperature	-25 to +60°C, >45°C Derating		
Ingress Protection	IP65		
Noise Emission (Typical)	≤50 dB		
Cooling Concept	Smart cooling		
Max. Operating Altitude Without Derating	4000m		
Warranty	5 years		
Grid Connection Standard	NBR 16149, NBR 16150, EN 50549, RD 140		
Operating Surroundings Humidity	0-100%		
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2		
Features			
Display	LCD1602		
Interface	RS485/RS232/Wifi/LAN		

Three Phase String Inverter(LV)

SUN-60/70/75K-G01P3-EU-AM8-LV



- 120V/208V, 127V/220V, 133V/230V and 50/60Hz, Three phase system
- 8 MPP trackers, Max. efficiency up to 98.8%
- Zero export application, VSG application
- String intelligent monitoring (optional)
- Wide output voltage range
- Anti-PID function (Optional)

Technical Data

Model	SUN-60K-G01P3-EU-AM8-LV	SUN-70K-G01P3-EU-AM8-LV	SUN-75K-G01P3-EU-AM8-LV
Input Side			
Max. DC Input Power (kW)	90	105	112.5
Max. DC Input Voltage (V)	800		
Start-up DC Input Voltage (V)	250		
MPPT Operating Range (V)	200-700		
Max. DC Input Current (A)	40+40+40+40+40+40+40+40		
Max. Short Circuit Current (A)	60+60+60+60+60+60+60+60		
No.of MPP Trackers	8		
No.of Strings per MPP Tracker	4+4+4+4+4+4+4+4		
Output Side			
Rated Output Power (kW)	60	70	75
Max. Active Power (kW)	60	70	75
Rated Output Voltage/Range (V)	3L/N/PE 120V/208V, 127V/220V, 133V/230V 0.85Un-1.1Un (this may vary with grid standards)		
Rated Grid Frequency (Hz)	50/60		
Operating Phase	Three Phase		
Rated AC Grid Output Current (A)	166.7/157.5/150.4	194.5/183.8/175.5	208.4/196.9A/188
Max. AC Output Current (A)	166.7/157.5/150.4	194.5/183.8/175.5	208.4/196.9A/188
Power Factor Adjustment Range	0.8 leading to 0.8 lagging		
Total Harmonics Current Distortion (THDi)	<3%		
DC Injection Current (mA)	<0.5%		
Efficiency			
Max. Efficiency	98.8%		
Euro Efficiency	98.3%		
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			
Cabinet Size (WxHxD mm)	1006×516×325.5 (Excluding Connectors and Brackets)		
Weight (kg)	103		
Topology	Transformerless		
Internal Consumption	<1W (Night)		
Running Temperature	-25 to +60°C, >45°C Derating		
Ingress Protection	IP65		
Noise Emission (Typical)	≤65 dB		
Cooling Concept	Smart Cooling		
Permissible Altitude (m)	4000		
Designed Lifetime	>20 Years		
Grid Connection Standard	NBR 16149, NBR 16150, EN 50549, RD 140		
Operating Surroundings Humidity	0-100%		
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2		
Features			
Display	LCD 240 × 160		
Interface	RS485/RS232/Wifi/LAN		

Single Phase Hybrid Inverter

SUN-3K-SG04LP1-24-EU-SM1
SUN-3K-SG04LP1-EU-SM1
SUN-3.6/5/6K-SG04LP1-EU-SM2

- Colorful touch LCD, IP65 protection degree
- AC couple to retrofit existing solar system
- Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- Max. charging/discharging current of 140A
- 6 time periods for battery charging/discharging
- Support storing energy from diesel generator

Technical Data

Model	SUN-3K-SG04LP1-24-EU-SM1	SUN-3K-SG04LP1-EU-SM1	SUN-3.6K-SG04LP1-EU-SM2	SUN-5K-SG04LP1-EU-SM2	SUN-6K-SG04LP1-EU-SM2
Battery Input Data					
Battery Type	Lead-acid or Lithium-ion				
Battery Voltage Range (V)	20-30	40-60	40-60	40-60	40-60
Max. Charging Current (A)	140	70	90	120	135
Max. Discharging Current (A)	140	70	90	120	135
External Temperature Sensor	Yes				
Charging Curve	3 Stages / Equalization				
Charging Strategy for Li-Ion Battery	Self-adaption to BMS				
PV String Input Data					
Max. DC Input Power (W)	3900	3900	4680	6500	7800
Rated PV Input Voltage (V)	370 (125-500)				
Start-up Voltage (V)	125				
MPPT Voltage Range (V)	150-425				
Full Load DC Voltage Range (V)	300-425				
PV Input Current (A)	18		18+18		
Max. PV I_{SC}(A)	27		27+27		
No.of MPP Trackers	1		2		
No.of Strings per MPP Tracker	1		1+1		
AC Output Data					
Rated AC Output Active Power (W)	3000		3600	5000	6000
Max AC Output Active Power (W)	3300		3960	5500	6600
AC Output Rated Current (A)	13.6/13		16.4/15.7	22.7/21.7	27.3/26.1
Max. AC Output Current (A)	15/14.3		18/17.2	25/23.9	30/28.7
Max. Continuous AC Passthrough (A)	35				40
Peak Power (off grid)	2 time of rated power, 10 S				
Power Factor Adjustment Range	0.8 leading to 0.8 lagging				
Rated Input/Output Voltage/Range(V)	220/230 0.85Un-1.1Un				
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz 60Hz/55Hz-65Hz				
Grid Connection Form	L+N+PE				
Total Harmonics Current Distortion (THDi)	<3% (of nominal power)				
DC Current Injection	<0.5% In				
Efficiency					
Max. Efficiency	97.60%				
Euro Efficiency	96.50%				
MPPT Efficiency	99.90%				
Protection					
Integrated	Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge Protection				
Over Voltage Category	DC Type II/AC Type III				
Certifications and Standards					
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				
General Data					
Operating Temperature Range (**℃**)	-40 to +60°C, >45°C Derating				
Cooling	Free Cooling				
Noise (dB)	≤30 dB				
Communication with BMS	RS485; CAN				
Weight (kg)	17.95				
Cabinet Size (WxHxD mm)	376×470×241.5(Excluding Connectors and Brackets)				
Protection Degree	IP65				
Installation Style	Wall-mounted				
Warranty	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy				

Single Phase Hybrid Inverter

SUN-3/3.6/5/6K-SG03LP1-EU-SM2

- Colorful touch LCD, IP65 protection degree
- AC couple to retrofit existing solar system
- Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- Max. charging/discharging current of 135A
- 6 time periods for battery charging/discharging
- Support storing energy from diesel generator

Technical Data

Model	SUN-3K-SG03LP1-EU-SM2	SUN-3.6K-SG03LP1-EU-SM2	SUN-5K-SG03LP1-EU-SM2	SUN-6K-SG03LP1-EU-SM2
Battery Input Data				
Battery Type	Lead-acid or Lithium-ion			
Battery Voltage Range (V)	40-60			
Max. Charging Current (A)	70	90	120	135
Max. Discharging Current (A)	70	90	120	135
External Temperature Sensor	Yes			
Charging Curve	3 Stages / Equalization			
Charging Strategy for Li-Ion Battery	Self-adaption to BMS			
PV String Input Data				
Max. DC Input Power (W)	3900	4680	6500	7800
Rated PV Input Voltage (V)	370 (125-500)			
Start-up Voltage (V)	125			
MPPT Voltage Range (V)	150-425			
Full Load DC Voltage Range (V)	300-425			
PV Input Current (A)	18+18			
Max. PV I_{SC}(A)	27+27			
No.of MPP Trackers	2			
No.of Strings per MPP Tracker	1+1			
AC Output Data				
Rated AC Output Active Power (W)	3000	3600	5000	6000
Max AC Output Active Power (W)	3300	3960	5500	6600
AC Output Rated Current (A)	13.7/13.1	16.4/15.7	22.8/21.8	27.3/26.1
Max. AC Output Current (A)	15/14.4	18/17.3	25/24	30/28.7
Max. Continuous AC Passthrough (A)	35			40
Peak Power (off grid)	2 time of rated power, 10 S			
Power Factor Adjustment Range	0.8 leading to 0.8 lagging			
Rated Input/Output Voltage/Range(V)	220/230 0.85Un-1.1Un			
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz 60Hz/55Hz-65Hz			
Grid Connection Form	L+N+PE			
Total Harmonics Current Distortion (THDi)	<3% (of nominal power)			
DC Current Injection	<0.5% In			
Efficiency				
Max. Efficiency	97.60%			
Euro Efficiency	96.50%			
MPPT Efficiency	99.90%			
Protection				
Integrated	Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge Protection			
Over Voltage Category	DC Type II/AC Type III			
Certifications and Standards				
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			
General Data				
Operating Temperature Range (**℃**)	-40 to +60°C, >45°C Derating			
Cooling	Smart Cooling			
Noise (dB)	≤30 dB			
Communication with BMS	RS485; CAN			
Weight (kg)	24.9			
Cabinet Size (WxHxD mm)	366×589.5×237 (Excluding Connectors and Brackets)			
Protection Degree	IP65			
Installation Style	Wall-mounted			
Warranty	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy			

Single Phase Hybrid Inverter

SUN-3.6/5/6/7/7.6/8K-SG05LP1-EU

- Colorful touch LCD, IP65 protection degree
- AC couple to retrofit existing solar system
- Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- Max. charging/discharging current of 190A
- 6 time periods for battery charging/discharging
- Support storing energy from diesel generator

Technical Data

Model	SUN-3.6K -SG05LP1-EU	SUN-5K -SG05LP1-EU	SUN-6K -SG05LP1-EU	SUN-7K -SG05LP1-EU	SUN-7.6K -SG05LP1-EU	SUN-8K -SG05LP1-EU
Battery Input Data						
Battery Type	Lead-acid or Lithium-ion					
Battery Voltage Range (V)	40-60					
Max. Charging Current (A)	90	120	135	175	190	190
Max. Discharging Current (A)	90	120	135	175	190	190
External Temperature Sensor	Yes					
Charging Curve	3 Stages / Equalization					
Charging Strategy for Li-Ion Battery	Self-adaption to BMS					
PV String Input Data						
Max. DC Input Power (W)	4680	6500	7800	10000	9880	10400
Rated PV Input Voltage (V)	370 (125-500)					
Start-up Voltage (V)	125					
MPPT Voltage Range (V)	150-425					
Full Load DC Voltage Range (V)	300-425			200-425		
PV Input Current (A)	13+13			26+26		
Max. PV I_{SC}(A)	17+17			34+34		
No.of MPP Trackers	2					
No.of Strings per MPP Tracker	1+1			2+2		
AC Output Data						
Rated AC Output Active Power (W)	3600	5000	6000	7000	7600	8000
Max AC Output Active Power (W)	3960	5500	6600	7700	8360	8800
AC Output Rated Current (A)	16.4/15.7	22.7/21.7	27.3/26.1	31.9/30.5	34.5/33	36.4/34.8
Max. AC Output Current (A)	18/17.2	25/23.9	30/28.7	35/33.5	38/36.3	40/38.3
Max. Continuous AC Passthrough (A)	35		40	50		
Peak Power (off grid)	2 time of rated power, 10 S					
Power Factor Adjustment Range	0.8 leading to 0.8 lagging					
Rated Input/Output Voltage/Range(V)	220/230 0.85Un-1.1Un					
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz 60Hz/55Hz-65Hz					
Grid Connection Form	L+N+PE					
Total Harmonics Current Distortion (THDi)	<3% (of nominal power)					
DC Current Injection	<0.5% In					
Efficiency						
Max. Efficiency	97.60%					
Euro Efficiency	96.50%					
MPPT Efficiency	99.90%					
Protection						
Integrated	Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge Protection					
Over Voltage Category	DC Type II/AC Type III					
Certifications and Standards						
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					
General Data						
Operating Temperature Range (**°C**)	-40 to +60°C, >45°C Derating					
Cooling	Smart Cooling					
Noise (dB)	≤30 dB					
Communication with BMS	RS485; CAN					
Weight (kg)	24					
Cabinet Size (WxHxD mm)	330×580×232 (Excluding Connectors and Brackets)					
Protection Degree	IP65					
Installation Style	Wall-mounted					
Warranty	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy					

Single Phase Hybrid Inverter

SUN-3.6/5/6/7/7.6/8K-SG05LP1-EU-SM2

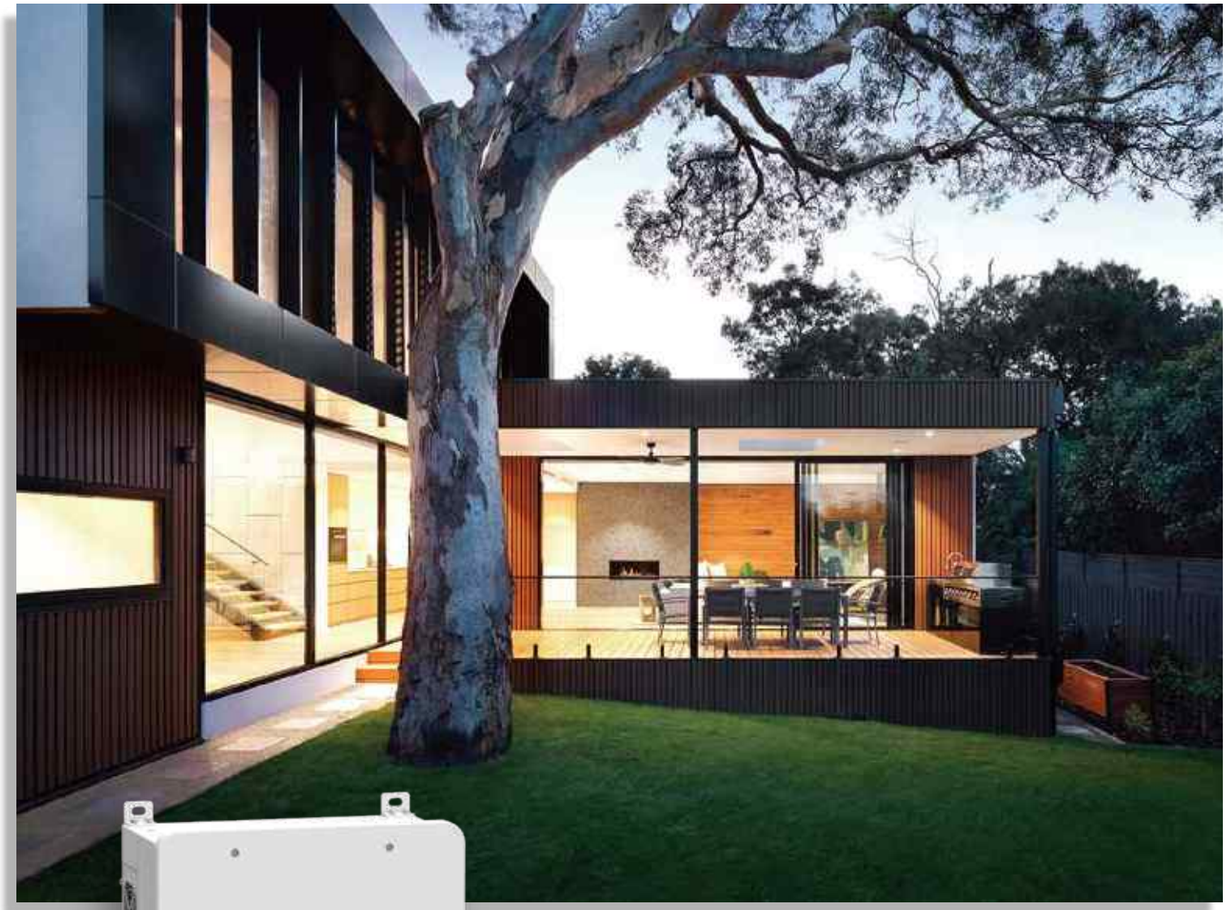
- Colorful touch LCD, IP65 protection degree
- AC couple to retrofit existing solar system
- Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- Max. charging/discharging current of 190A
- 6 time periods for battery charging/discharging
- Support storing energy from diesel generator

Technical Data

Model	SUN-3.6K-SG05 LP1-EU-SM2	SUN-5K-SG05 LP1-EU-SM2	SUN-6K-SG05 LP1-EU-SM2	SUN-7K-SG05 LP1-EU-SM2	SUN-7.6K-SG05 LP1-EU-SM2	SUN-8K-SG05 LP1-EU-SM2
Battery Input Data						
Battery Type	Lead-acid or Lithium-ion					
Battery Voltage Range (V)	40-60					
Max. Charging Current (A)	90	120	135	175	190	190
Max. Discharging Current (A)	90	120	135	175	190	190
External Temperature Sensor	Yes					
Charging Curve	3 Stages / Equalization					
Charging Strategy for Li-Ion Battery	Self-adaption to BMS					
PV String Input Data						
Max. DC Input Power (W)	4680	6500	7800	10000	9880	10400
Rated PV Input Voltage (V)	370 (125-500)					
Start-up Voltage (V)	125					
MPPT Voltage Range (V)	150-425					
Full Load DC Voltage Range (V)	300-425			200-425		
PV Input Current (A)	18+18			26+26		
Max. PV I_{SC}(A)	27+27			34+34		
No.of MPP Trackers	2					
No.of Strings per MPP Tracker	1+1			2+2		
AC Output Data						
Rated AC Output Active Power (W)	3600	5000	6000	7000	7600	8000
Max AC Output Active Power (W)	3960	5500	6600	7700	8360	8800
AC Output Rated Current (A)	16.4/15.7	22.7/21.7	27.3/26.1	31.9/30.5	34.5/33	36.4/34.8
Max. AC Output Current (A)	18/17.2	25/23.9	30/28.7	35/33.5	38/36.3	40/38.3
Max. Continuous AC Passthrough (A)	35		40	50		
Peak Power (off grid)	2 time of rated power, 10 S					
Power Factor Adjustment Range	0.8 leading to 0.8 lagging					
Rated Input/Output Voltage/Range(V)	220/230 0.85Un-1.1Un					
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz 60Hz/55Hz-65Hz					
Grid Connection Form	L+N+PE					
Total Harmonics Current Distortion (THDi)	<3% (of nominal power)					
DC Current Injection	<0.5% In					
Efficiency						
Max. Efficiency	97.60%					
Euro Efficiency	96.50%					
MPPT Efficiency	99.90%					
Protection						
Integrated	Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge Protection					
Over Voltage Category	DC Type II/AC Type III					
Certifications and Standards						
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					
General Data						
Operating Temperature Range (**℃**)	-40 to +60°C, >45°C Derating					
Cooling	Smart Cooling					
Noise (dB)	≤30 dB					
Communication with BMS	RS485; CAN					
Weight (kg)	27.3					
Cabinet Size (WxHxD mm)	366×589.5×237 (Excluding Connectors and Brackets)					
Protection Degree	IP65					
Installation Style	Wall-mounted					
Warranty	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy					

Single Phase Hybrid Inverter

SUN-7.6/8K-SG01LP1-EU



- Colorful touch LCD, IP65 protection degree
- AC couple to retrofit existing solar system
- Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- Max. charging/discharging current of 190A
- 6 time periods for battery charging/discharging
- Support storing energy from diesel generator

Technical Data

Model	SUN-7.6K-SG01LP1-EU	SUN-8K-SG01LP1-EU
Battery Input Data		
Battery Type	Lead-acid or Lithium-ion	
Battery Voltage Range (V)	40-60	
Max. Charging Current (A)	190	190
Max. Discharging Current (A)	190	190
External Temperature Sensor	Yes	
Charging Curve	3 Stages / Equalization	
Charging Strategy for Li-Ion Battery	Self-adaption to BMS	
PV String Input Data		
Max. DC Input Power (W)	9880	10400
Rated PV Input Voltage (V)	370 (125-500)	
Start-up Voltage (V)	125	
MPPT Voltage Range (V)	150-425	
Full Load DC Voltage Range (V)	200-425	
PV Input Current (A)	26+26	
Max. PV I_{SC}(A)	44+44	
No.of MPP Trackers	2	
No.of Strings per MPP Tracker	2+2	
AC Output Data		
Rated AC Output Active Power (W)	7600	8000
Max AC Output Active Power (W)	8360	8800
AC Output Rated Current (A)	34.5/33	36.4/34.8
Max. AC Output Current (A)	38/36.3	40/38.3
Max. Continuous AC Passthrough (A)	50	
Peak Power (off grid)	2 time of rated power, 10 S	
Power Factor Adjustment Range	0.8 leading to 0.8 lagging	
Rated Input/Output Voltage/Range(V)	220/230 0.85Un-1.1Un	
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz 60Hz/55Hz-65Hz	
Grid Connection Form	L+N+PE	
Total Harmonics Current Distortion (THDi)	<3% (of nominal power)	
DC Current Injection	<0.5% In	
Efficiency		
Max. Efficiency	97.60%	
Euro Efficiency	97.00%	
MPPT Efficiency	99.90%	
Protection		
Integrated	Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge Protection	
Over Voltage Category	DC Type II/AC Type III	
Certifications and Standards		
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	
General Data		
Operating Temperature Range (**°C**)	-40 to +60°C, >45°C Derating	
Cooling	Smart Cooling	
Noise (dB)	≤30 dB	
Communication with BMS	RS485; CAN	
Weight (kg)	32	
Cabinet Size (WxHxD mm)	420×670×233 (Excluding Connectors and Brackets)	
Protection Degree	IP65	
Installation Style	Wall-mounted	
Warranty	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy	

Split Phase Hybrid Inverter

SUN-5/6/7.6/8K-SG01LP1-US

- Colorful touch LCD, IP65 protection degree
- AC couple to retrofit existing solar system
- Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- Max. charging/discharging current of 190A
- 6 time periods for battery charging/discharging
- Support storing energy from diesel generator

Technical Data

Model	SUN-5K -SG01LP1-US	SUN-6K -SG01LP1-US	SUN-7.6K -SG01LP1-US	SUN-8K -SG01LP1-US
Battery Input Data				
Battery Type	Lead-acid or Lithium-ion			
Battery Voltage Range (V)	40-60			
Max. Charging Current (A)	120	135	190	190
Max. Discharging Current (A)	120	135	190	190
External Temperature Sensor	Yes			
Charging Curve	3 Stages / Equalization			
Charging Strategy for Li-Ion Battery	Self-adaption to BMS			
PV String Input Data				
Max. DC Input Power (W)	6500	7800	9880	10400
Rated PV Input Voltage (V)	370 (125-500)			
Start-up Voltage (V)	125			
MPPT Voltage Range (V)	150-425			
Full Load DC Voltage Range (V)	300-425	200-425		
PV Input Current (A)	13+13	26+13	26+26	
Max. PV I_{SC}(A)	22+22	44+22	44+44	
No.of MPP Trackers	2			
No.of Strings per MPP Tracker	1+1	2+1	2+2	
AC Output Data				
Rated AC Output Active Power (W)	5000	6000	7600	8000
Max AC Output Active Power (W)	5500	6600	8360	8800
AC Output Rated Current (A)	20.8	25	31.7	33.3
Max. AC Output Current (A)	22.9	27.5	34.8	36.7
Max. Continuous AC Passthrough (A)	50			
Peak Power (off grid)	2 time of rated power, 10 S			
Power Factor Adjustment Range	0.9-1			
Rated Input/Output Voltage/Range(V)	120/240,208 0.88Un-1.1Un			
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz 60Hz/55Hz-65Hz			
Grid Connection Form	2L+N+PE			
Total Harmonics Current Distortion (THDi)	<3% (of nominal power)			
DC Current Injection	<0.5% In			
Efficiency				
Max. Efficiency	97.60%			
Euro Efficiency	97.00%			
MPPT Efficiency	99.90%			
Protection				
Integrated	Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge Protection			
Over Voltage Category	DC Type II/AC Type III			
Certifications and Standards				
Grid Regulation	EN 50549, UNE 217002, NRS 097, IEEE 1547.1, SRD V2.0			
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2, UL 1741			
General Data				
Operating Temperature Range (**℃**)	-40 to +60°C, >45°C Derating			
Cooling	Smart Cooling			
Noise (dB)	≤30 dB			
Communication with BMS	RS485; CAN			
Weight (kg)	32			
Cabinet Size (WxHxD mm)	420×670×233 (Excluding Connectors and Brackets)			
Protection Degree	IP65			
Installation Style	Wall-mounted			
Warranty	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy			

Split Phase Hybrid Inverter

SUN-5/6/7.6/8K-SG02LP2-US-AM2
SUN-10/12K-SG02LP2-US-AM3

- Colorful touch LCD, IP65 protection degree
- AC couple to retrofit existing solar system
- Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- Max. charging/discharging current of 190A
- 6 time periods for battery charging/discharging
- Support storing energy from diesel generator

Technical Data

Model	SUN-5K-SG02 LP2-US-AM2	SUN-6K-SG02 LP2-US-AM2	SUN-7.6K-SG02 LP2-US-AM2	SUN-8K-SG02 LP2-US-AM2	SUN-10K-SG02 LP2-US-AM3	SUN-12K-SG02 LP2-US-AM3
Battery Input Data						
Battery Type	Lead-acid or Lithium-ion					
Battery Voltage Range (V)	40-60					
Max. Charging Current (A)	120	135	190	190	220	250
Max. Discharging Current (A)	120	135	190	190	220	250
External Temperature Sensor	Yes					
Charging Curve	3 Stages / Equalization					
Charging Strategy for Li-Ion Battery	Self-adaption to BMS					
PV String Input Data						
Max. DC Input Power (W)	6500	7800	9880	10400	13000	15600
Rated PV Input Voltage (V)	370 (125-500)					
Start-up Voltage (V)	125					
MPPT Voltage Range (V)	150-425					
Full Load DC Voltage Range (V)	200-425					
PV Input Current (A)	13+13	26+13	26+26	26+26	26+26+26	26+26+26
Max. PV I_{SC}(A)	22+22	44+22	44+44	44+44	44+44+44	44+44+44
No.of MPP Trackers					3	
No.of Strings per MPP Tracker	1+1	2+1	2+2	2+2	2+2+2	2+2+2
AC Output Data						
Rated AC Output Active Power (W)	5000	6000	7600	8000	10000	12000
Max AC Output Active Power (W)	5000	6000	7600	8000	10000	12000
AC Output Rated Current (A)	20.9	25	31.7	33.4	41.7	50
Max AC Output Current (A)	20.9	25	31.7	33.4	41.7	50
Max. Continuous AC Passthrough (A)	35	40	50		60	
Peak Power (off grid)	2 time of rated power, 10 S					
Power Factor Adjustment Range	0.9-1					
Rated Input/Output Voltage/Range(V)	120/240,208 0.88Un-1.1Un					
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz 60Hz/55Hz-65Hz					
Grid Connection Form	2L+N+PE					
Total Harmonic Distortion (THD)	<3% (of nominal power)					
DC Current Injection	<0.5% In					
Efficiency						
Max. Efficiency	97.60%					
Euro Efficiency	97.00%					
MPPT Efficiency	99.90%					
Protection						
Integrated	Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge Protection					
Over Voltage Category	DC Type II/AC Type III					
Certifications and Standards						
Grid Regulation	VDE4105, IEC61727/62116, VDE0126, AS4777.2, CEI 0 21, EN50549-1, G98, G99, C10-11, UNE217002, NBR16149/NBR16150					
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2					
General Data						
Operating Temperature Range (**℃**)	-40 to +60°C, >45°C Derating					
Cooling	Smart Cooling					
Noise (dB)	≤45 dB					
Communication with BMS	RS485; CAN					
Weight (kg)	35.6					
Cabinet Size (WxHxD mm)	420×670×233 (Excluding Connectors and Brackets)					
Protection Degree	IP65					
Installation Style	Wall-mounted					
Warranty	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy					

Single Phase Hybrid Inverter

SUN-5/6/7.6/8K-SG02LP1-EU-AM2
SUN-10/12K-SG02LP1-EU-AM3

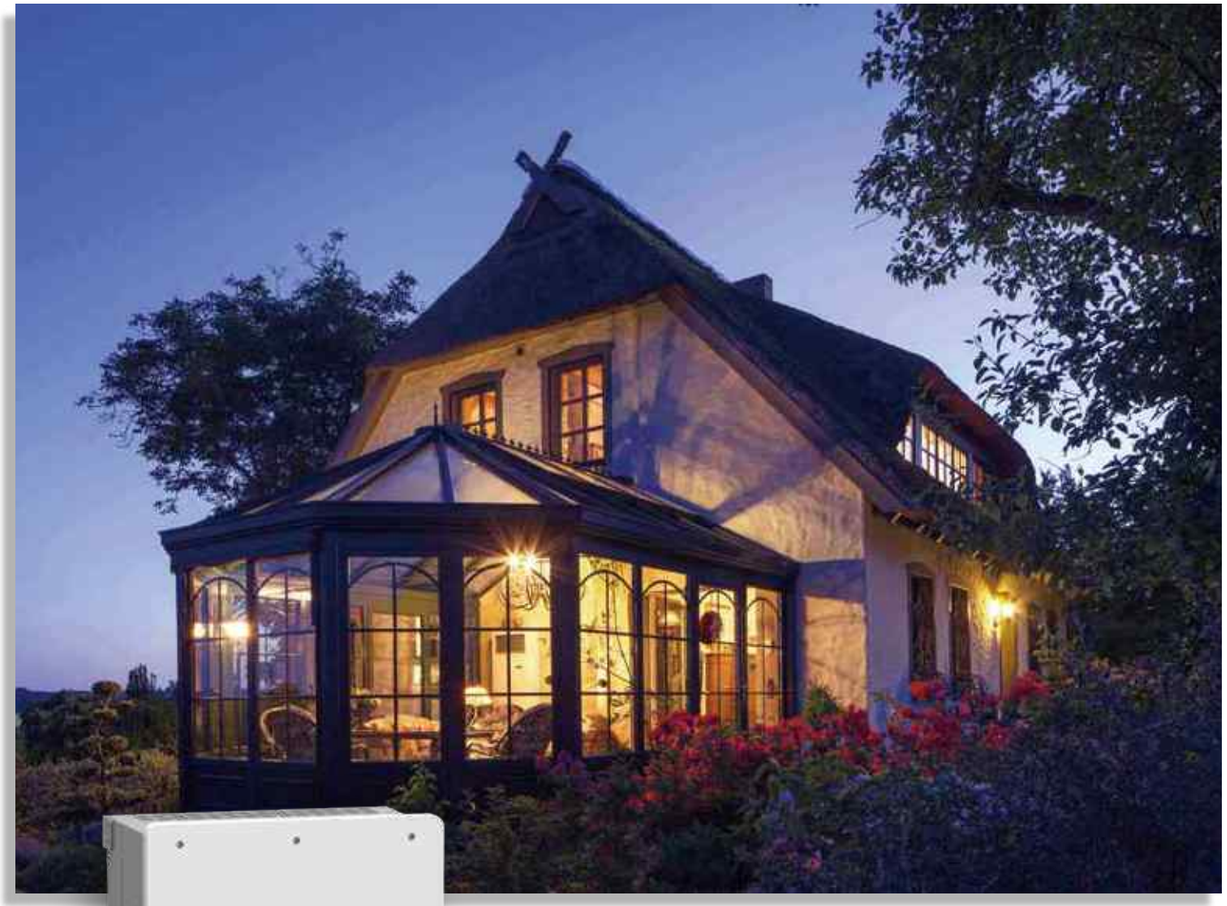
- Colorful touch LCD, IP65 protection degree
- AC couple to retrofit existing solar system
- Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- Max. charging/discharging current of 250A
- 6 time periods for battery charging/discharging
- Support storing energy from diesel generator

Technical Data

Model	SUN-5K-SG02 LP1-EU-AM2	SUN-6K-SG02 LP1-EU-AM2	SUN-7.6K-SG02 LP1-EU-AM2	SUN-8K-SG02 LP1-EU-AM2	SUN-10K-SG02 LP1-EU-AM3	SUN-12K-SG02 LP1-EU-AM3
Battery Input Data						
Battery Type	Lead-acid or Lithium-ion					
Battery Voltage Range (V)	40-60					
Max. Charging Current (A)	120	135	190	190	220	250
Max. Discharging Current (A)	120	135	190	190	220	250
External Temperature Sensor	Yes					
Charging Curve	3 Stages / Equalization					
Charging Strategy for Li-Ion Battery	Self-adaption to BMS					
PV String Input Data						
Max. DC Input Power (W)	6500	7800	9880	10400	13000	15600
Rated PV Input Voltage (V)	370 (125-500)					
Start-up Voltage (V)	125					
MPPT Voltage Range (V)	150-425					
Full Load DC Voltage Range (V)	300-425	200-425				
PV Input Current (A)	20+20	20+20	26+26	26+26	26+26+26	26+26+26
Max. PV I_{SC}(A)	44+44	44+44	44+44	44+44	44+44+44	44+44+44
No.of MPP Trackers	2				3	
No.of Strings per MPP Tracker	1+1	2+1	2+2	2+2	2+2+2	2+2+2
AC Output Data						
Rated AC Output Active Power (W)	5000	6000	7600	8000	10000	12000
Max AC Output Active Power (W)	5500	6600	8360	8800	11000	13200
AC Output Rated Current (A)	22.8/21.8	27.3/26.1	34.6/33.1	36.4/34.8	45.5/43.5	54.6/52.2
Max. AC Output Current (A)	25/24	30/28.7	38/36.4	40/38.3	50/47.9	60/57.4
Max. Continuous AC Passthrough (A)	35	40	50	50	60	60
Peak Power (off grid)	2 time of rated power, 10 S					
Power Factor Adjustment Range	0.8 leading to 0.8 lagging					
Rated Input/Output Voltage/Range(V)	220/230 0.85Un-1.1Un					
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz 60Hz/55Hz-65Hz					
Grid Connection Form	L+N+PE					
Total Harmonics Current Distortion (THDi)	<3% (of nominal power)					
DC Current Injection	<0.5% In					
Efficiency						
Max. Efficiency	97.60%					
Euro Efficiency	97.00%					
MPPT Efficiency	99.90%					
Protection						
Integrated	Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge Protection					
Over Voltage Category	DC Type II/AC Type III					
Certifications and Standards						
Grid Regulation	VDE4105, IEC61727/62116, VDE0126, AS4777.2, CEI 0 21, EN50549-1, G98, G99, C10-11, UNE217002, NBR16149/NBR16150					
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2					
General Data						
Operating Temperature Range (**℃**)	-40 to +60°C, >45°C Derating					
Cooling	Smart Cooling					
Noise (dB)	≤30 dB					
Communication with BMS	RS485; CAN					
Weight (kg)	32					
Cabinet Size (WxHxD mm)	420×670×233 (Excluding Connectors and Brackets)					
Protection Degree	IP65					
Installation Style	Wall-mounted					
Warranty	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy					

Single Phase Hybrid Inverter

SUN-12/14/16K-SG01LP1-EU



- Colorful touch LCD, IP65 protection degree
- AC couple to retrofit existing solar system
- Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- Max. charging/discharging current of 290A
- 6 time periods for battery charging/discharging
- Support storing energy from diesel generator

Technical Data

Model	SUN-12K-SG01LP1-EU	SUN-14K-SG01LP1-EU	SUN-16K-SG01LP1-EU
Battery Data			
Battery Type	Lead-acid or Lithium-ion		
Battery Voltage Range (V)	40-60		
Max. Charging Current (A)	220	250	290
Max. Discharging Current (A)	220	250	290
External Temperature Sensor	Yes		
Charging Curve	3 Stages / Equalization		
Charging Strategy for Li-Ion Battery	Self-adaption to BMS		
PV String Input Data			
Max. DC Input Power (W)	15600	18200	20800
Max. DC Input Voltage (V)	500		
Start-up Voltage (V)	125		
MPPT Range (V)	150-425		
Rated DC Input Voltage (V)	370		
PV Input Current (A)	26+26+26		
Max. PV I_{SC}(A)	44+44+44		
No.of MPP Trackers	3		
No.of Strings per MPP Tracker	2+2+2		
AC Output Data			
Rated AC Output Active Power (W)	12000	14000	16000
Max AC Output Active Power (W)	13200	15400	17600
Rated AC Output Current (A)	54.5/52.2	63.6/60.9	72.7/69.6
Max. AC Output Current (A)	60/57.4	70/67	80/76.5
Max. Continuous AC Passthrough (A)	100		
Peak Power (Off Grid)	2 time of rated power, 10 S		
Power Factor Adjustment Range	0.8 leading to 0.8 lagging		
Rated Input/Output Voltage/Range(V)	220/230 0.85Un-1.1Un		
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz 60Hz/55Hz-65Hz		
Grid Connection Form	L+N+PE		
Total Harmonics Current Distortion (THDi)	<3% (of nominal power)		
DC Current Injection	<0.5% In		
Backup Data			
Backup Power (W)	10000	12000	14000
Backup Rated Current (A)	45.5/43.5	54.5/52.2	63.6/60.9
Backup UPS	4ms Automatic switchover time		
Efficiency			
Max. Efficiency	97.60%		
Euro Efficiency	96.50%		
MPPT Efficiency	99.90%		
Protection			
Integrated	Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge Protection		
Over Voltage Category	DC Type II/AC Type III		
Certifications and Standards			
Grid Regulation	IEC 61727, IEC 62116, AS 4777.2, NRS 097		
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2		
General Data			
Operating Temperature Range (℃)	-40 to +60°C, >45°C Derating		
Cooling	Smart Cooling		
Noise (dB)	≤30 dB		
Communication with BMS	RS485; CAN		
Weight (kg)	48.5		
Cabinet Size (WxHxD mm)	464×763×282 (Excluding Connectors and Brackets)		
Protection Degree	IP65		
Installation Style	Wall-mounted		
Warranty	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy		

Three Phase Hybrid Inverter

SUN-5/6/8/10/12K-SG04LP3-EU

- 100% unbalanced output, each phase; Max. output up to 50% rated power
- AC couple to retrofit existing solar system
- Max. 10 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- Max. charging/discharging current of 240A
- 48V low voltage battery, transformer isolation design
- 6 time periods for battery charging/discharging
- Support storing energy from diesel generator

Technical Data

Model	SUN-5K -SG04LP3-EU	SUN-6K -SG04LP3-EU	SUN-8K -SG04LP3-EU	SUN-10K -SG04LP3-EU	SUN-12K -SG04LP3-EU
Battery Input Data					
Battery Type	Lead-acid or Lithium-ion				
Battery Voltage Range (V)	40-60				
Max. Charging Current (A)	120	150	190	210	240
Max. Discharging Current (A)	120	150	190	210	240
External Temperature Sensor	Yes				
Charging Curve	3 Stages / Equalization				
Charging Strategy for Li-Ion Battery	Self-adaption to BMS				
PV String Input Data					
Max. DC Input Power (W)	6500	7800	10400	13000	15600
Rated PV Input Voltage (V)	550 (160-800)				
Start-up Voltage (V)	160				
MPPT Voltage Range (V)	200-650				
Full Load DC Voltage Range (V)	350-650				
PV Input Current (A)	13+13			26+13	
Max. PV I_{SC}(A)	17+17			34+17	
No.of MPP Trackers	2				
No.of Strings per MPP Tracker	1+1			2+1	
AC Output Data					
Rated AC Output Active Power (W)	5000	6000	8000	10000	12000
Max AC Output Active Power (W)	5500	6600	8800	11000	13200
AC Output Rated Current (A)	7.6/7.2	9.1/8.7	12.1/11.6	15.2/14.5	18.2/17.4
Max AC Output Current (A)	8.4/8	10/9.6	13.4/12.8	16.7/15.9	20/19.1
Max. Three-phase Unbalanced Output Current (A)	11.4/10.9	13.6/13	18.2/17.4	22.7/21.7	27.3/26.1
Max Output short circuit current (A)	75				
Max. Continuous AC Passthrough (A)	45				
Peak Power (off grid)	2 time of rated power, 10 S				
Power Factor Adjustment Range	0.8 leading to 0.8 lagging				
Rated Input/Output Voltage/Range(V)	**220/380, 230/400 0.85Un-1.1Un**				
Rated Input/Output Grid Frequency/Range	**50Hz/45Hz-55Hz 60Hz/55Hz-65Hz**				
Grid Connection Form	**3L+N+PE**				
Total Harmonics Current Distortion (THDi)	<3% (of nominal power)				
DC Current Injection	<0.5% In				
Efficiency					
Max. Efficiency	97.60%				
Euro Efficiency	97.00%				
MPPT Efficiency	99.90%				
Protection					
Integrated	Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection				
Surge Protection	DC Type III / AC Type III				
Over Voltage Category	DC Type II/AC Type III				
Certifications and Standards					
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				
General Data					
Operating Temperature Range (**℃**)	-40 to +60°C, >45°C Derating				
Cooling	Smart Cooling				
Noise (dB)	≤45 dB				
Communication with BMS	RS485; CAN				
Weight (kg)	33.6				
Cabinet Size (WxHxD mm)	422×702×281 (Excluding Connectors and Brackets)				
Protection Degree	IP65				
Installation Style	Wall-mounted				
Warranty	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy				

Three Phase Hybrid Inverter

SUN-5/6/8/10/12K-SG05LP3-EU-SM2

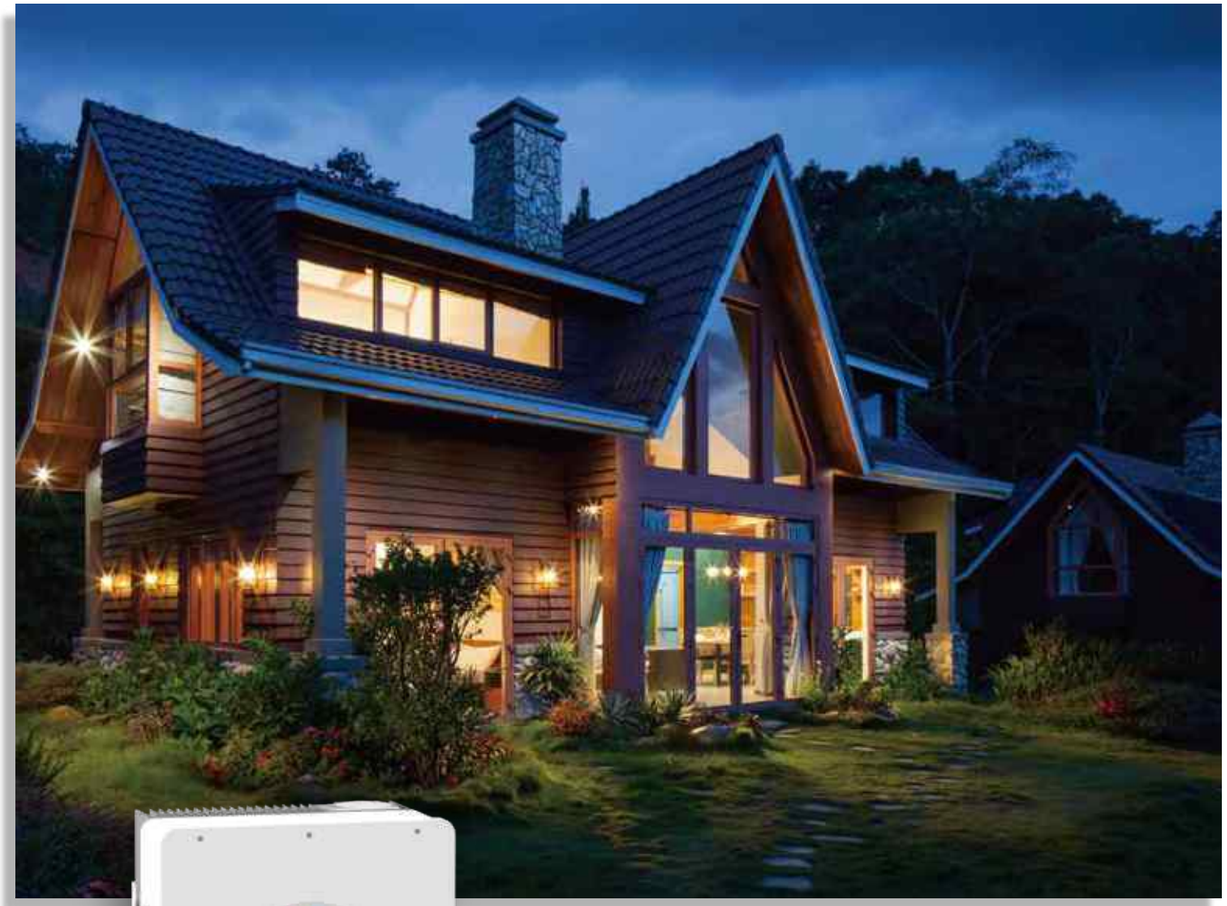
- 100% unbalanced output, each phase; Max. output up to 50% rated power
- AC couple to retrofit existing solar system
- Max. 10 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- Max. charging/discharging current of 240A
- 48V low voltage battery, transformer isolation design
- 6 time periods for battery charging/discharging
- Support storing energy from diesel generator

Technical Data

Model	SUN-5K-SG05 LP3-EU-SM2	SUN-6K-SG05 LP3-EU-SM2	SUN-8K-SG05 LP3-EU-SM2	SUN-10K-SG05 LP3-EU-SM2	SUN-12K-SG05 LP3-EU-SM2
Battery Input Data					
Battery Type	Lead-acid or Lithium-ion				
Battery Voltage Range (V)	40-60				
Max. Charging Current (A)	120	150	190	210	240
Max. Discharging Current (A)	120	150	190	210	240
External Temperature Sensor	Yes				
Charging Curve	3 Stages / Equalization				
Charging Strategy for Li-Ion Battery	Self-adaption to BMS				
PV String Input Data					
Max. DC Input Power (W)	6500	7800	10400	13000	15600
Rated PV Input Voltage (V)	550 (160-800)				
Start-up Voltage (V)	160				
MPPT Voltage Range (V)	200-650				
Full Load DC Voltage Range (V)	250-650			350-650	
PV Input Current (A)	20+20				
Max. PV I_{SC}(A)	30+30				
No.of MPP Trackers	2				
No.of Strings per MPP Tracker	1+1				
AC Output Data					
Rated AC Output Active Power (W)	5000	6000	8000	10000	12000
Max AC Output Active Power (W)	5500	6600	8800	11000	13200
AC Output Rated Current (A)	7.6/7.3	9.1/8.7	12.2/11.6	15.2/14.5	18.2/17.4
Max. AC Output Current (A)	8.4/8	10/9.6	13.4/12.8	16.7/16	20/19.2
Max. Three-phase Unbalanced Output Current (A)	11.4/10.9	13.6/13	18.2/17.4	22.7/21.7	27.3/26.1
Max Output short circuit current (A)	75				
Max. Continuous AC Passthrough (A)	45				
Peak Power (off grid)	2 time of rated power, 10 S				
Power Factor Adjustment Range	0.8 leading to 0.8 lagging				
Rated Input/Output Voltage/Range(V)	220/380, 230/400 0.85Un-1.1Un				
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz 60Hz/55Hz-65Hz				
Grid Connection Form	3L+N+PE				
Total Harmonics Current Distortion (THDi)	<3% (of nominal power)				
DC Current Injection	<0.5% In				
Efficiency					
Max. Efficiency	97.60%				
Euro Efficiency	97.00%				
MPPT Efficiency	99.90%				
Protection					
Integrated	Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection				
Surge Protection	DC Type III / AC Type III				
Over Voltage Category	DC Type II/AC Type III				
Certifications and Standards					
Grid Regulation	VDE4105, IEC61727/62116, VDE0126, AS4777.2, CEI 0 21, EN50549-1, G98, G99, C10-11, UNE217002, NBR16149/NBR16150				
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				
General Data					
Operating Temperature Range (**℃**)	-40 to +60°C, >45°C Derating				
Cooling	Smart Cooling				
Noise (dB)	≤45 dB				
Communication with BMS	RS485; CAN				
Weight (kg)	35.4				
Cabinet Size (WxHxD mm)	386×660×260 (Excluding Connectors and Brackets)				
Protection Degree	IP65				
Installation Style	Wall-mounted				
Warranty	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy				

Three Phase Hybrid Inverter

SUN-5/6/8/10/12/15/20/25K-SG01HP3-EU-AM2



- 100% unbalanced output, each phase
- AC couple to retrofit existing solar system
- Max. 10 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- Max. charging/discharging current of 50A
- High voltage battery, higher efficiency
- 6 time periods for battery charging/discharging
- Support storing energy from diesel generator

Technical Data

Model	SUN-5K-SG01 HP3-EU-AM2	SUN-6K-SG01 HP3-EU-AM2	SUN-8K-SG01 HP3-EU-AM2	SUN-10K-SG01 HP3-EU-AM2	SUN-12K-SG01 HP3-EU-AM2	SUN-15K-SG01 HP3-EU-AM2	SUN-20K-SG01 HP3-EU-AM2	SUN-25K-SG01 HP3-EU-AM2
Battery Input Data								
Battery Type	Lithium-ion							
Battery Voltage Range (V)	160-700							
Max. Charging Current (A)	30		37					50
Max. Discharging Current (A)	30		37					50
Number of Battery Input	1							
Charging Strategy for Li-Ion Battery	Self-adaption to BMS							
PV String Input Data								
Max. DC Input Power (W)	6500	7800	10400	13000	15600	19500	26000	32500
Max. DC Input Voltage (V)	1000							
Start-up Voltage (V)	180							
MPPT Range (V)	150-850							
Full Load DC Voltage Range (V)	195-850	195-850	260-850	325-850	340-850	420-850	500-850	625-850
Rated DC Input Voltage (V)	600							
PV Input Current (A)	20+20				26+20		26+26	
Max. PV I_{SC}(A)	30+30				39+30		39+39	
No.of MPP Trackers	2							
No.of Strings per MPP Tracker	1+1				2+1		2+2	
AC Output Data								
Rated AC Output and UPS Power (W)	5000	6000	8000	10000	12000	15000	20000	25000
Max. AC OutputActive Power (W)	5500	6600	8800	11000	13200	16500	22000	27500
AC Output Rated Current (A)	7.6/7.3	9.1/8.7	12.2/11.6	15.2/14.5	18.2/17.4	22.8/21.8	30.4/29	37.9/36.3
Max. AC Output Current (A)	8.4/8	10/9.6	13.4/12.8	16.7/16	20/19.2	25/24	33.4/31.9	41.7/39.9
Max. Three-phase Unbalanced Output Current(A)	13	13	18	22	25	30	35	41.7
Max. Continuous AC Passthrough (A)	40				80			
Peak Power (off grid)	1.5 time of rated power, 10 S							
Power Factor Adjustment Range	0.8 leading to 0.8 lagging							
Rated Input/Output Voltage/Range(V)	220/380, 230/400 0.85Un-1.1Un							
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz 60Hz/55Hz-65Hz							
Grid Connection Form	3L+N+PE							
Total Harmonics Current Distortion (THDi)	<3% (of nominal power)							
DC Current Injection	<0.5% In							
Efficiency								
Max. Efficiency	97.60%							
Euro Efficiency	97.00%							
MPPT Efficiency	99.90%							
Protection								
Integrated	Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge Protection, Arc Fault Circuit Interruption (AFCI optional)							
Over Voltage Category	DC Type II/AC Type III							
Certifications and Standards								
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							
General Data								
Operating Temperature Range (**℃**)	-40 to +60°C, >45°C Derating							
Cooling	Free Cooling		Smart Cooling					
Noise (dB)	≤55 dB							
Communication with BMS	CAN							
Weight (kg)	30.5							
Cabinet Size (WxHxD mm)	408×638×237 (Excluding Connectors and Brackets)							
Protection Degree	IP65							
Installation Style	Wall-mounted							
Warranty	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy							

Split Phase Hybrid Inverter

SUN-12/15K-SG01HP2-US-AM2

- 100% unbalanced output, each phase
- AC couple to retrofit existing solar system
- Max. 10pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- Max. charging/discharging current of 40A
- High voltage battery, higher efficiency
- 6 time periods for battery charging/discharging
- Support storing energy from diesel generator

Technical Data

Model	SUN-12K-SG01HP2-US-AM2	SUN-15K-SG01HP2-US-AM2
Battery Input Data		
Battery Type	Lithium-ion	
Battery Voltage Range (V)	160-500	
Max. Charging Current (A)	40	
Max. Discharging Current (A)	40	
Number of Battery Input	1	
Charging Strategy for Li-Ion Battery	Self-adaption to BMS	
PV String Input Data		
Max. DC Input Power (W)	15600	19500
Max. DC Input Voltage (V)	550	
Start-up Voltage (V)	180	
MPPT Range (V)	150-500	
Full Load DC Voltage Range (V)	300-500	375-500
Rated DC Input Voltage (V)	380	
PV Input Current (A)	26+26	
Max. PV I_{SC}(A)	39+39	
No.of MPP Trackers	2	
No.of Strings per MPP Tracker	2+2	
AC Output Data		
Rated AC Output Active Power (W)	12000	15000
Max AC Output Active Power (W)	12000	15000
AC Output Rated Current (A)	50	62.5
Max. AC Output Current (A)	50	62.5
Max. Three-phase Unbalanced Output Current (A)	50	62.5
Max. Continuous AC Passthrough (A)	150	
Peak Power (Off Grid)	1.5 time of rated power, 10 S	
Power Factor Adjustment Range	0.8 leading to 0.8 lagging	
Rated Input/Output Voltage/Range(V)	120/240,208 0.88Un-1.1Un	
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz 60Hz/55Hz-65Hz	
Grid Connection Form	2L+N+PE	
Total Harmonics Current Distortion (THDi)	<3% (of nominal power)	
DC Current Injection	<0.5% In	
Efficiency		
Max. Efficiency	97.60%	
Euro Efficiency	97.00%	
MPPT Efficiency	99.90%	
Protection		
Integrated	Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge Protection	
Over Voltage Category	DC Type II/AC Type III	
Certifications and Standards		
Grid Regulation	IEEE 1547.1, SRD V2.0	
Safety / EMC Standard	FCC, UL 1741	
General Data		
Operating Temperature Range (**℃**)	-40 to +60°C, >45°C Derating	
Cooling	Smart Cooling	
Noise (dB)	≤55 dB	
Communication with BMS	CAN	
Weight (kg)	30	
Cabinet Size (WxHxD mm)	408×678×247 (Excluding Connectors and Brackets)	
Protection Degree	TYPE 3R	
Installation Style	Wall-mounted	
Warranty	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy	

Three Phase Hybrid Inverter

SUN-10/12/15K-SG01HP3-US-AM2

- 100% unbalanced output, each phase
- AC couple to retrofit existing solar system
- Max. 10pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- Max. charging/discharging current of 40A
- High voltage battery, higher efficiency
- 6 time periods for battery charging/discharging
- Support storing energy from diesel generator

Technical Data

Model	SUN-10K-SG01HP3 -US-AM2	SUN-12K-SG01HP3 -US-AM2	SUN-15K-SG01HP3 -US-AM2
Battery Input Data			
Battery Type	Lithium-ion		
Battery Voltage Range (V)	160-500		
Max. Charging Current (A)	40		
Max. Discharging Current (A)	40		
Number of Battery Input	1		
Charging Strategy for Li-Ion Battery	Self-adaption to BMS		
PV String Input Data			
Max. DC Input Power (W)	13000	15600	19500
Max. DC Input Voltage (V)	550		
Start-up Voltage (V)	180		
MPPT Range (V)	150-500		
Full Load DC Voltage Range (V)	250-500	300-500	375-500
Rated DC Input Voltage (V)	380		
PV Input Current (A)	26+26		
Max. PV I_{SC}(A)	39+39		
No.of MPP Trackers	2		
No.of Strings per MPP Tracker	2+2		
AC Output Data			
Rated AC Output Active Power (W)	10000	12000	15000
Max AC Output Active Power (W)	10000	12000	15000
AC Output Rated Current (A)	27.8	33.4	41.7
Max. AC Output Current (A)	27.8	33.4	41.7
Max. Three-phase Unbalanced Output Current (A)	30	35	41.7
Max. Continuous AC Passthrough (A)	80		
Maximum Output Overcurrent Protection	195		
Peak Power (Off Grid)	1.5 time of rated power, 10 S		
Power Factor Adjustment Range	0.8 leading to 0.8 lagging		
Rated Input/Output Voltage/Range(V)	120/208 0.88Un-1.1Un		
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz 60Hz/55Hz-65Hz		
Grid Connection Form	3L+N+PE		
Total Harmonics Current Distortion (THDi)	<3% (of nominal power)		
DC Current Injection	<0.5% In		
Efficiency			
Max. Efficiency	97.60%		
Euro Efficiency	97.00%		
MPPT Efficiency	99.90%		
Protection			
Integrated	Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge Protection		
Over Voltage Category	DC Type II/AC Type III		
Certifications and Standards			
Grid Regulation	IEEE 1547.1, SRD V2.0		
Safety / EMC Standard	FCC, UL 1741		
General Data			
Operating Temperature Range (**℃**)	-40 to +60°C, >45°C Derating		
Cooling	Smart Cooling		
Noise (dB)	≤55 dB		
Communication with BMS	CAN		
Weight (kg)	31		
Cabinet Size (WxHxD mm)	408×648×247 (Excluding Connectors and Brackets)		
Protection Degree	TYPE 3R		
Installation Style	Wall-mounted		
Warranty	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy		

Three Phase Hybrid Inverter

SUN-29.9/30/35K-SG01HP3-EU-BM3
SUN-40/50K-SG01HP3-EU-BM4

- 100 — 100% unbalanced output, each phase
- AC couple to retrofit existing solar system
- 10 — Max. 10 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 100 — Max. charging/discharging current of 100A
- H — High voltage battery, higher efficiency
- 6 — 6 time periods for battery charging/discharging
- Support storing energy from diesel generator

Technical Data

Model	SUN-29.9K-SG01HP3-EU-BM3	SUN-30K-SG01HP3-EU-BM3	SUN-35K-SG01HP3-EU-BM3	SUN-40K-SG01HP3-EU-BM4	SUN-50K-SG01HP3-EU-BM4
Battery Input Data					
Battery Type	Lithium-ion				
Battery Voltage Range (V)	160-800				
Max. Charging Current (A)	50+50				
Max. Discharging Current (A)	50+50				
Number of Battery Input	2				
Charging Strategy for Li-Ion Battery	Self-adaption to BMS				
PV String Input Data					
Max. DC Input Power (W)	38870	39000	45500	52000	65000
Max. DC Input Voltage (V)	1000				
Start-up Voltage (V)	180				
MPPT Range (V)	150-850				
Full Load DC Voltage Range (V)	360-850	360-850	420-850	360-850	450-850
Rated DC Input Voltage (V)	600				
PV Input Current (A)	36+36+36	36+36+36	36+36+36	36+36+36+36	
Max. PV I_{SC}(A)	55+55+55	55+55+55	55+55+55	55+55+55+55	
No.of MPP Trackers	3			4	
No.of Strings per MPP Tracker	2+2+2			2+2+2+2	
AC Output Data					
Rated AC Output Active Power (W)	29900	30000	35000	40000	50000
Max AC Output Active Power (W)	29900	33000	38500	44000	55000
AC Output Rated Current (A)	45.4/43.4	45.5/43.5	53.1/50.8	60.7/58	75.8/72.5
Max. AC Output Current (A)	45.4/43.4	50/47.8	58.4/55.8	66.7/63.8	83.4/79.7
Max. Three-phase Unbalanced Output Current (A)	60	60	60	70	83.3
Max. Continuous AC Passthrough (A)	200				
Peak Power (Off Grid)	1.5 time of rated power, 10 S				
Power Factor Adjustment Range	0.8 leading to 0.8 lagging				
Rated Input/Output Voltage/Range(V)	220/380, 230/400 0.85Un-1.1Un				
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz 60Hz/55Hz-65Hz				
Grid Connection Form	3L+N+PE				
Total Harmonics Current Distortion (THDi)	<3% (of nominal power)				
DC Current Injection	<0.5% In				
Efficiency					
Max. Efficiency	97.60%				
Euro Efficiency	97.00%				
MPPT Efficiency	99.90%				
Protection					
Integrated	Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge Protection, Arc Fault Circuit Interruption (AFCI optional)				
Over Voltage Category	DC Type II/AC Type III				
Certifications and Standards					
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				
General Data					
Operating Temperature Range (**℃**)	-40 to +60°C, >45°C Derating				
Cooling	Smart Cooling				
Noise (dB)	≤65 dB				
Communication with BMS	CAN				
Weight (kg)	80				
Cabinet Size (WxHxD mm)	527×894×294 (Excluding Connectors and Brackets)				
Protection Degree	IP65				
Installation Style	Wall-mounted				
Warranty	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy				

Microinverter

SUN-M30/40/50G4-EU-Q0

1 MPP tracker, module level monitoring

IP67 protection degree, *10 years warranty

Rapid shutdown function

WIFI communication

Technical Data

Model	SUN-M30G4-EU-Q0	SUN-M40G4-EU-Q0	SUN-M50G4-EU-Q0
Input Data (DC)			
Recommended Input Power (STC)	210-420W (1 Piece)	210-560W (1 Piece)	210-700W (1 Piece)
Maximum Input DC Voltage (V)	60		
MPPT Voltage Range (V)	25-55		
Full Load DC Voltage Range (V)	30-55	33-55	40-55
Max. Input Current (A)	13		
Max. DC Short Circuit Current (A)	19.5		
No.of MPP Trackers	1		
No.of Strings per MPP Tracker	1		
Output Data (AC)			
Max. Output Apparent Power (VA)	300	400	500
Rated Output Power (W)	300	400	500
Rated Output Current (A)	1.4/1.4	1.9/1.8	2.3/2.2
Max.AC Output Current (A)	1.4/1.4	1.9/1.8	2.3/2.2
Grid Connection Form Rated output voltage/range (V)	L+N+PE 220V/184V-242V 230V/ 195.5V-253V		
Rated Grid Frequency/range (Hz)	50Hz/45Hz-55Hz 60Hz/55Hz-65Hz		
Power Factor Adjustment Range	>0.99		
Total Harmonics Current Distortion (THDi)	<3%		
DC Component Of Grid	<0.5%In		
Maximum Units per Branch	17	13	10
Efficiency			
Max Efficiency	96.5%		
MPPT Efficiency	>99%		
Mechanical Data			
Night Time Power Consumption	50mW		
Ambient Temperature Range	-40-65°C, >45°C Derating		
Cabinet Size (WxHxD mm)	144×189×31.5 (Excluding Connectors and Brackets)		
Weight (kg)	1.7		
Cooling	Free Cooling		
Enclosure Environmental Rating	IP67		
Features			
Communication	WIFI		
Grid Connection Standard	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G98, VDE-AR-N 4105		
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2		
Warranty	10 Years		

*Note: 15 Years Warranty (Only Installed in Germany and Austria)

Microinverter

SUN-M60/80/100G4-EU-Q0

2 MPP trackers, module level monitoring

IP67 protection degree, *10 years warranty

Rapid shutdown function

WIFI communication

Technical Data

Model	SUN-M60G4-EU-Q0	SUN-M80G4-EU-Q0	SUN-M100G4-EU-Q0
Input Data (DC)			
Recommended Input Power (STC)	210-420W (2 Pieces)	210-560W (2 Pieces)	210-700W (2 Pieces)
Maximum Input DC Voltage (V)	60		
MPPT Voltage Range (V)	25-55		
Full Load DC Voltage Range (V)	30-55	33-55	40-55
Max. Input Current (A)	2x13		
Max. DC Short Circuit Current (A)	2x19.5		
No.of MPP Trackers	2		
No.of Strings per MPP Tracker	1		
Output Data (AC)			
Max. Output Apparent Power (VA)	600	800	1000
Rated Output Power (W)	600	800	1000
Rated Output Current (A)	2.8/2.7	3.7/3.5	4.6/4.4
Max.AC Output Current(A)	2.8/2.7	3.7/3.5	4.6/4.4
Grid Connection Form Rated output voltage/range (V)	L+N+PE 220V/184V-242V 230V/ 195.5V-253V		
Rated Grid Frequency/range(Hz)	50Hz/45Hz-55Hz 60Hz/55Hz-65Hz		
Power Factor Adjustment Range	0.95 leading-0.95lagging		
Total Harmonics Current Distortion (THDi)	<3%		
DC Component Of Grid	<0.5%In		
Maximum Units per Branch	8	6	5
Efficiency			
Max Efficiency	96.5%		
MPPT Efficiency	>99%		
Mechanical Data			
Night Time Power Consumption	50mW		
Ambient Temperature Range	-40 to +65°C，>45°C Derating		
Cabinet Size (WxHxD mm)	280×190×40 (Excluding Connectors and Brackets)		
Weight (kg)	3		
Cooling	Free Cooling		
Enclosure Environmental Rating	IP67		
Features			
Communication	WIFI		
Grid Connection Standard	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G98, VDE-AR-N 4105		
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2		
Warranty	10 Years		

*Note: 15 Years Warranty (Only Installed in Germany and Austria)

Microinverter

SUN-M130/160/180/200/220G4-EU-Q0

- Max. DC input current of 18A, adapt to 700W PV module
- IP67 protection degree, *10 years warranty
- 4 MPP trackers, module level monitoring
- WIFI communication
- Rapid shutdown function

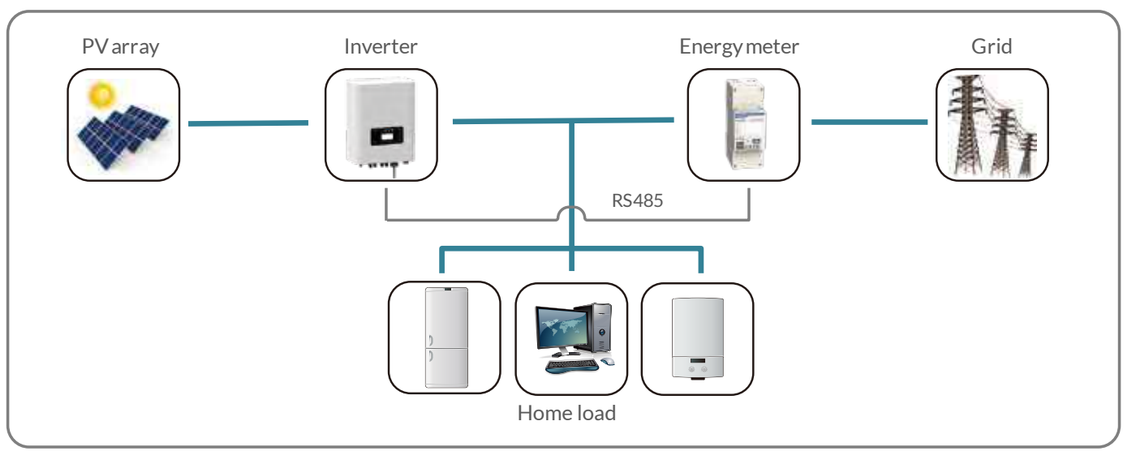
Technical Data

Model	SUN-M130G4 -EU-Q0	SUN-M160G4 -EU-Q0	SUN-M180G4 -EU-Q0	SUN-M200G4 -EU-Q0	SUN-M220G4 -EU-Q0
Input Data (DC)					
Recommended Input Power (STC)	210-460W (4 Pieces)	210-560W (4 Pieces)	210-630W (4 Pieces)	210-700W (4 Pieces)	210-770W (4 Pieces)
Maximum Input DC Voltage (V)	60				
MPPT Voltage Range (V)	25-55				
Full Load DC Voltage Range (V)	29-55	31.5-55	33-55	34.5-55	37.5-55
Max. Input Current (A)	4x18				
Max. DC Short Circuit Current (A)	4x27				
No.of MPP Trackers	4				
No.of Strings per MPP Tracker	1				
Output Data (AC)					
Max. Output Apparent Power (VA)	1300	1600	1800	2000	2200
Rated Output Power (W)	1300	1600	1800	2000	2200
Rated Output Current (A)	6/5.7	7.3/7	8.2/7.9	9.1/8.7	10/9.6
Max.AC Output Current (A)	6/5.7	7.3/7	8.2/7.9	9.1/8.7	10/9.6
Grid Connection Form Rated output voltage/range (V)	L+N+PE 220V/184V-242V 230V/ 195.5V-253V				
Rated Grid Frequency/range (Hz)	50Hz/45Hz-55Hz 60Hz/55Hz-65Hz				
Power Factor Adjustment Range	0.95leading-0.95lagging				
Total Harmonics Current Distortion (THDi)	<3%				
DC Component Of Grid	<0.5%In				
Maximum Units per Branch	4	3	3	3	2
Efficiency					
Max Efficiency	96.5%				
MPPT Efficiency	>99%				
Mechanical Data					
Night Time Power Consumption	50mW				
Ambient Temperature Range	--40 to +65°C，>45°C Derating				
Cabinet Size (WxHxD mm)	306×250×37.5 (Excluding Connectors and Brackets)				
Weight (kg)	5				
Cooling	Free Cooling				
Enclosure Environmental Rating	IP67				
Features					
Communication	WIFI				
Grid Connection Standard	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G98, VDE-AR-N 4105				
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				
Warranty	10 Years				

*Note: 15 Years Warranty (Only Installed in Germany and Austria)

Energy Meter

Typical Application Diagram



Technical Data

Model	CHNT DDSU666	CHNT DTSU666	EASTRON SDM 230 Modbus	EASTRON SDM 630-Modbus V2	EASTRON SDM 630 MCT
Battery Data					
Max. direct current measurement (A)	60	80	100	100	1-9999A (with CT)
Direct Voltage measurement between phases	/	176-458V	/	147-480V	50-950V
					50-550V
Direct measurement between phase and neutral	176-264V	100-265V	176-276V	85-480V	20-550V
Accuracy Class					
Active power	Class1				
Reactive power	Class2				
Power Supply					
Power consumption	≤1W / 8VA	≤1.5W / 6VA	≤2W / 10VA	≤2W / 10VA	≤2W / 10VA
AC power supply input voltage	176-264V	100-265V	176-276V	85-480V	85-275V / 120-380V
AC power supply input frequency	50/60Hz		50Hz	50/60Hz ±2%	50/60Hz ±2%
Generation Specifications					
Dimenstions (L/H/W) in mm	36×85×66	100×72×66	36×99×63	72×100×66	72×94.5×65
Weight (kg)	0.21	0.44	0.21	0.42	0.29
Mounting options	DIN Rail				
Degree of protection	IP51				
Display	LCD				
Communication interface	RS485				
Max. number of devices to connect	32				
Regulated working temperature range	-25-55°C	-10-45°C	-25-55°C		
Limited working temperature range	-40-70°C	25-75°C	/		
Humidity	≤75%		0~95%, non-Condensing		
Warranty	1.5 years				

Stick Logger

GPRS / WIFI / 4G / Ethernet

Monitor your system anywhere in the world.

- External light indicator, logging status at a glance;
- Plug & play, pick power within inverter, no external power needed, easy to install;
- Independent from inverter to protect parts inside inverter, eliminate potential problems;
- IP65 water-proof design, resistant to bad weather, enhance stability;
- External design, easier to replace faulty equipment;
- End-user can monitor yields at any time with SOLARMAN APP.

Technical Data

Product Model	LSG-3	LSG-4	LSW-3	LS4G-3	LSE-3
Remote Communication Interface	GPRS	GPRS	WiFi	4G	LAN
Working Frequency	GSM850 / EGSM900 / DCS1800 / PCS 1900MHz	GSM850 / EGSM900 / DCS1800 / PCS 1900MHz	2.142GHz-2.484GHz	704MHZ-960MHZ 1710MHZ-2690MHZ	Adaptive Network; 10M / 100M
Satellite Positioning	/	GPS / Beidou ＜15m	/	/	/
Antenna	External GPRS Stick Antenna	External GPRS Stick Antenna	External WiFi Stick Antenna	External 4G Stick Antenna	/
Data Interface	RS485 / RS232 / TTL				
Working Voltage	DC4.7V~DC15V				
Working Power	3W	3W	1.5W	5W	1W
SIM Card	Chip Card / MicroSIM	Chip Card / MicroSIM	/	MicroSIM	/
Memory	2M Flash (2M-16M Optional)				
Working Temperature	-40°C-85°C				
Working Humidity	＜90% (No Condensing)				
No.of Connections	One				
Serial Communication Rate	bps (1200-115200bps Configurable)				
Data Acquisition Interval	Default 5min (1-15min Configurable)				
User Configuration	AT+InstructionSet				
	Remote Server				
	Bluetooth		APP / Web	Local Serial Port	Web
Firmware Upgrade	Remote Upgrade				
Others	Real-time Control, Data resuming				

Stick logger supports GPRS, WIFI, 4G, Ethernet and other communication modes. Its bluetooth function enables local debugging configuration to collect operation and power generation data from inverters.

It pairs with solarman professional platform to enable remote PV system monitoring and to realize distributed power station management with lower cost and higher efficiency.

- 5KW
- Brazil
- SUN-5K-G

- 20KW
- Brazil
- SUN-10K-G

- 50KW
- Brazil
- SUN-25K-G

Project cases

- 200KW
- Brazil
- SUN-50K-G

- 200KW
- Vietnam
- SUN-50K-G

Project cases

- 320KW
- Brazil
- SUN-80K-G

- 16KW
- South Africa
- SUN-8K-SG

- 25KW
- Brazil
- SUN-5K-SG

- 32KW
- South Africa
- SUN-8K-SG

- 91KW
- USA
- SUN 1300G2

- 48KW
- Lebanon
- SUN-12K-SG

- 72KW
- Lebanon
- SUN-12K-SG

Project cases

- 24KW
- Philippines
- SUN-8K-SG

- 48KW
- Lebanon
- SUN-12K-SG