Deye

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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Ver: 10.16.2024

Leading Inverter Manufacturer

String Inverter | Hybrid Inverter | Microinverter

Deye

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.

Milestones

2024

Launch of the next-generation hybrid inverters and microinverters with a fresh design.

2023

Cumulative shipments of hybrid inverters surpass **1 million** units.

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**.

2019

By the end of 2019, with total shipments **30,000+**, Deye hybrid inverter has become Top 3 in SouthAfrica, 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 andbattery DC / DC topology etc...

2007

Founded in 2007 with registered capital of **56 million USD**.

Core Technology

Deye hybrid inverter 3-80kW with 208/230/240/400Vac

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

Core Features

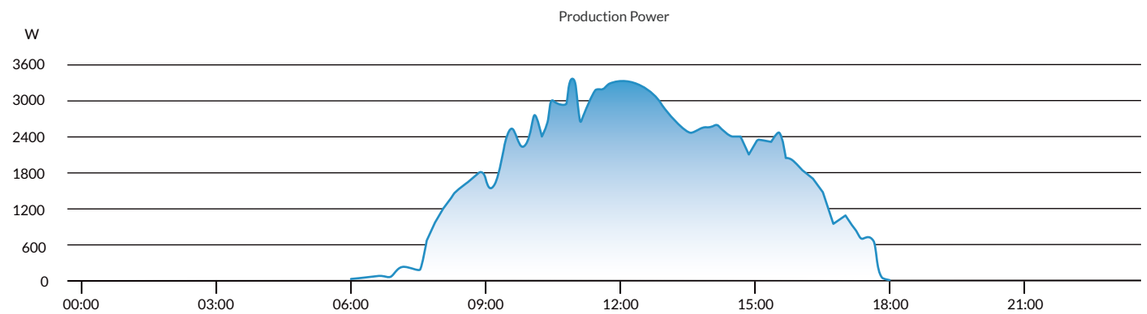
Deye grid-connected inverter 1-136kW

- 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, adapt to 600W solar panel
- String intelligent monitoring (optional), Ani-PID function (Optional)

Main Highlights

Deye microinverter 300-2250W

- Support reactive power compensation, comply with UL code.
- Module level monitoring, Max. 4 MPPTs design
- Max. DC input current 18A, adapt to 790W PV module
- Rapid shutdown function, safe and reliable
- WIFI communication
- IP67 protection degree, 15 years warranty



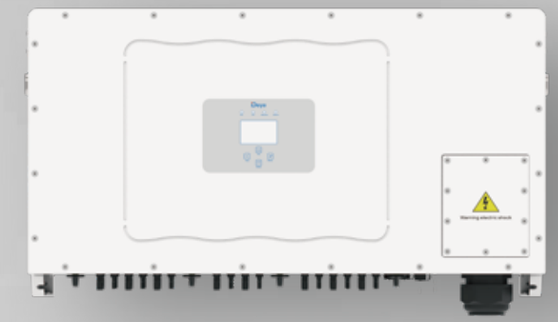
Physical Layout

Single Phase
String Inverter

Microinverter

Three Phase
String Inverter (LV)

Single Phase
Hybrid Inverter



Three Phase
String Inverter

Three Phase
Hybrid Inverter

Accessory &
monitoring

Single Phase String Inverter

SUN-1/1.5/2/2.5/3K-G04P1-EU-AM1

- 1 MPP tracker, Max. efficiency up to 97.5%
- Zero export application, VSG application
- String intelligent monitoring (optional)
- Wide output voltage range
- Anti-PID function (Optional)
- Low start-up voltage of 80V

Technical Data

Model	SUN-1K-G04P1-EU-AM1	SUN-1.5K-G04P1-EU-AM1	SUN-2K-G04P1-EU-AM1	SUN-2.5K-G04P1-EU-AM1	SUN-3K-G04P1-EU-AM1
PV String Input Data					
Max. PV Input Power (kW)	1.3	2	2.6	3.3	3.9
Max. PV Input Voltage (V)	550				
Start-up Voltage (V)	80				
MPPT Voltage Range (V)	70-500				
Rated PV Input Voltage (V)	360				
Max. Input Short Circuit Current (A)	30				
Max. Operating PV Input Current (A)	20				
No. of MPP Trackers/ No. of Strings MPP Tracker	1/1				
AC Output Data					
Rated AC Output Active Power(kW)	1	1.5	2	2.5	3
Max. AC Output Apparent Power(kVA)	1.1	1.65	2.2	2.75	3.3
Rated AC Output current (A)	4.5/4.3	6.8/6.5	9.1/8.7	11.4/10.9	13.6/13
Max. AC Output Current(A)	5/4.8	7.5/7.2	10/9.6	12.5/12	15/14.4
Rated Output voltage/range (V)	220/187-242, 230/195.5-253				
Grid Connection Form	L/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	97.3%				
Euro Efficiency	97.1%				
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				
Arc Fault Circuit Interrupter (AFCI)	Optional				
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				
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)				
General Data					
Operating Temperature Range (°C)	-25 to +65°C, >45°C Derating				
Permissible Ambient Humidity	0-100%				
Permissible Altitude (m)	2000m				
Noise (dB)	≤ 35 dB(A)				
Ingress Protection(IP) Rating	IP 65				
Inverter Topology	Non-Isolated				
Over Voltage Category	OVC II(DC), OVC III(AC)				
Cabinet Size (mm)	280W×310H×184 D (Excluding Connectors and Brackets)				
Weight (kg)	6.35				
Warranty	5 Years				
Type of Cooling	Natural Cooling				
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, G98, G99, VDE-AR-N 4105				
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				

Single Phase String Inverter

SUN- 3.6/4/5/6K-G04

- 2 MPP trackers, Max. efficiency up to 97.5%
- Zero export application, VSG application
- String intelligent monitoring (optional)
- Wide output voltage range
- Anti-PID function (Optional)
- Low start-up voltage of 80V

Technical Data

Model	SUN-3.6K-G04	SUN-4K-G04	SUN-5K-G04	SUN-6K-G04
PV String Input Data				
Max. PV Input Power (kW)	4.7	5.2	6.5	7.8
Max. PV Input Voltage (V)	550			
Start-up Voltage (V)	80			
MPPT Voltage Range (V)	70-500			
Rated PV Input Voltage (V)	360			
Max. Input Short Circuit Current (A)	13-13			
Max. Operating PV Input Current (A)	19.5+19.5			
No. of MPP Trackers/ No. of Strings MPP Tracker	2/1+1			
AC Output Data				
Rated AC Output Active Power(kW)	3.6	4	5	6
Max. AC Output Apparent Power(kVA)	3.96	4.4	5.5	6.6
Rated AC Output current (A)	16.4/15.7	18.2/17.4	22.7/21.7	27.3/26.1
Max. AC Output Current(A)	18/17.2	20/19.1	25/23.9	30/28.7
Rated Output voltage/range (V)	220/187-242, 230/195.5-253			
Grid Connection Form	L/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	97.3%	97.5%		
Euro Efficiency	96.9%	97.0%		
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			
Arc Fault Circuit Interrupter (AFCI)	Optional			
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			
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)			
General Data				
Operating Temperature Range (°C)	-25 to +65°C, >45°C Derating			
Permissible Ambient Humidity	0-100%			
Permissible Altitude (m)	2000m			
Noise (dB)	≤ 35 dB(A)			
Ingress Protection(IP) Rating	IP 65			
Inverter Topology	Non-Isolated			
Over Voltage Category	OVC II(DC), OVC III(AC)			
Cabinet Size (mm)	330W×323H×190D(Excluding Connectors and Brackets)			
Weight (kg)	8			
Warranty	5 Years			
Type of Cooling	Natural Cooling			
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, G98, G99, VDE-AR-N 4105			
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2			

Three Phase String Inverter

SSUN-3/4/5/6/7/8/10/12/15K-G06P3-EU-AM2

- 2 MPP trackers, Max. efficiency up to 98.3%
- Zero export application, VSG application
- String intelligent monitoring (optional)
- Wide output voltage range
- Anti-PID function (Optional)

Technical Data

Model	SUN-3K-G06 P3-EU-AM2	SUN-4K-G06 P3-EU-AM2	SUN-5K-G06 P3-EU-AM2	SUN-6K-G06 P3-EU-AM2	SUN-7K-G06 P3-EU-AM2	SUN-8K-G06 P3-EU-AM2	SUN-9K-G06 P3-EU-AM2	SUN-10K-G06 P3-EU-AM2	SUN-12K-G06 P3-EU-AM2	SUN-15K-G06 P3-EU-AM2
PV String Input Data										
Max. PV Input Power (kW)	4.5	6	7.5	9	10.5	12	13.5	15	18	22.5
Max. PV Input Voltage (V)	1100									
Start-up Voltage (V)	140									
MPPT Voltage Range (V)	120-1000									
Rated PV Input Voltage (V)	600									
Max. Operating PV Input Current (A)	13+13									13+26
Max. Input Short Circuit Current (A)	19.5+19.5									19.5+39
No. of MPP Trackers/ No. of Strings MPP Tracker	2/1+1									2/1+2
AC Output Side										
Rated AC Output Active Power (kW)	3	4	5	6	7	8	9	10	12	15
Max. AC Output Apparent Power (kVA)	3.3	4.4	5.5	6.6	7.7	8.8	9.9	11	13.2	16.5
Rated AC Output Current (A)	4.6/4.4	6.1/5.8	7.6/7.3	9.1/8.7	10.7/10.2	12.2/11.6	13.7/13.1	15.2/14.5	18.2/17.4	22.8/21.8
Max. AC Output Current (A)	5/4.8	6.7/6.4	8.4/8	10/9.6	11.7/11.2	13.4/12.8	15/14.4	16.7/16	20/19.2	25/24
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	98.1%		98.2%		98.3%					98.5%
Euro Efficiency	97.5%		97.6%		97.8%					98%
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									
Arc Fault Circuit Interrupter (AFCI)	Optional									
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									
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)									
General Data										
Operating Temperature Range (°C)	-25 to +60°C, >45°C Derating									
Permissible Ambient Humidity	0-100%									
Permissible Altitude (m)	4000m									
Noise (dB)	<45									
Ingress Protection(IP) Rating	IP 65									
Inverter Topology	Non-Isolated									
Over Voltage Category	OVC II(DC), OVC III(AC)									
Cabinet Size (WxHxD mm)	283×463×178 (Excluding Connectors and Brackets)									
Weight (kg)	11									
Warranty	5 Years									
Type of Cooling	Natural 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									

Three Phase String Inverter

SUN-3/4/5/6/7/8/10/12/15K-G06P3-EU-AM2-P1

- 2 MPP trackers, Max. efficiency up to 98.3%
- Zero export application, VSG application
- String intelligent monitoring (optional)
- Wide output voltage range
- Anti-PID function (Optional)

Technical Data

Model	SUN-3K-G06 P3-EU-AM2 -P1	SUN-4K-G06 P3-EU-AM2 -P1	SUN-5K-G06 P3-EU-AM2 -P1	SUN-6K-G06 P3-EU-AM2 -P1	SUN-7K-G06 P3-EU-AM2 -P1	SUN-8K-G06 P3-EU-AM2 -P1	SUN-9K-G06 P3-EU-AM2 -P1	SUN-10K-G06 P3-EU-AM2 -P1	SUN-12K-G06 P3-EU-AM2 -P1	SUN-15K-G06 P3-EU-AM2 -P1
PV String Input Data										
Max. PV Input Power (kW)	4.5	6	7.5	9	10.5	12	13.5	15	18	22.5
Max. PV Input Voltage (V)	1100									
Start-up Voltage (V)	140									
MPPT Voltage Range (V)	120-1000									
Rated PV Input Voltage (V)	600									
Max. Operating PV Input Current (A)	20+20									20+26
Max. Input Short Circuit Current (A)	30+30									30+39
No. of MPP Trackers/ No. of Strings MPP Tracker	2/1+1									2/1+2
AC Output Side										
Rated AC Output Active Power (kW)	3	4	5	6	7	8	9	10	12	15
Max. AC Output Apparent Power (kVA)	3.3	4.4	5.5	6.6	7.7	8.8	9.9	11	13.2	16.5
Rated AC Output Current (A)	4.6/4.4	6.1/5.8	7.6/7.3	9.1/8.7	10.7/10.2	12.2/11.6	13.7/13.1	15.2/14.5	18.2/17.4	22.8/21.8
Max. AC Output Current (A)	5/4.8	6.7/6.4	8.4/8	10/9.6	11.7/11.2	13.4/12.8	15/14.4	16.7/16	20/19.2	25/24
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	98.1%		98.2%		98.3%					98.5%
Euro Efficiency	97.5%		97.6%		97.8%					98%
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									
Arc Fault Circuit Interrupter (AFCI)	Optional									
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									
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)									
General Data										
Operating Temperature Range (°C)	-25 to +60°C, >45°C Derating									
Permissible Ambient Humidity	0-100%									
Permissible Altitude (m)	4000m									
Noise (dB)	<45									
Ingress Protection(IP) Rating	IP 65									
Inverter Topology	Non-Isolated									
Over Voltage Category	OVC II(DC), OVC III(AC)									
Cabinet Size (WxHxD mm)	283×463×178 (Excluding Connectors and Brackets)									
Weight (kg)	11									
Warranty	5 Years									
Type of Cooling	Natural 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									

Three Phase String Inverter

SUN- 18/20/25K-G05

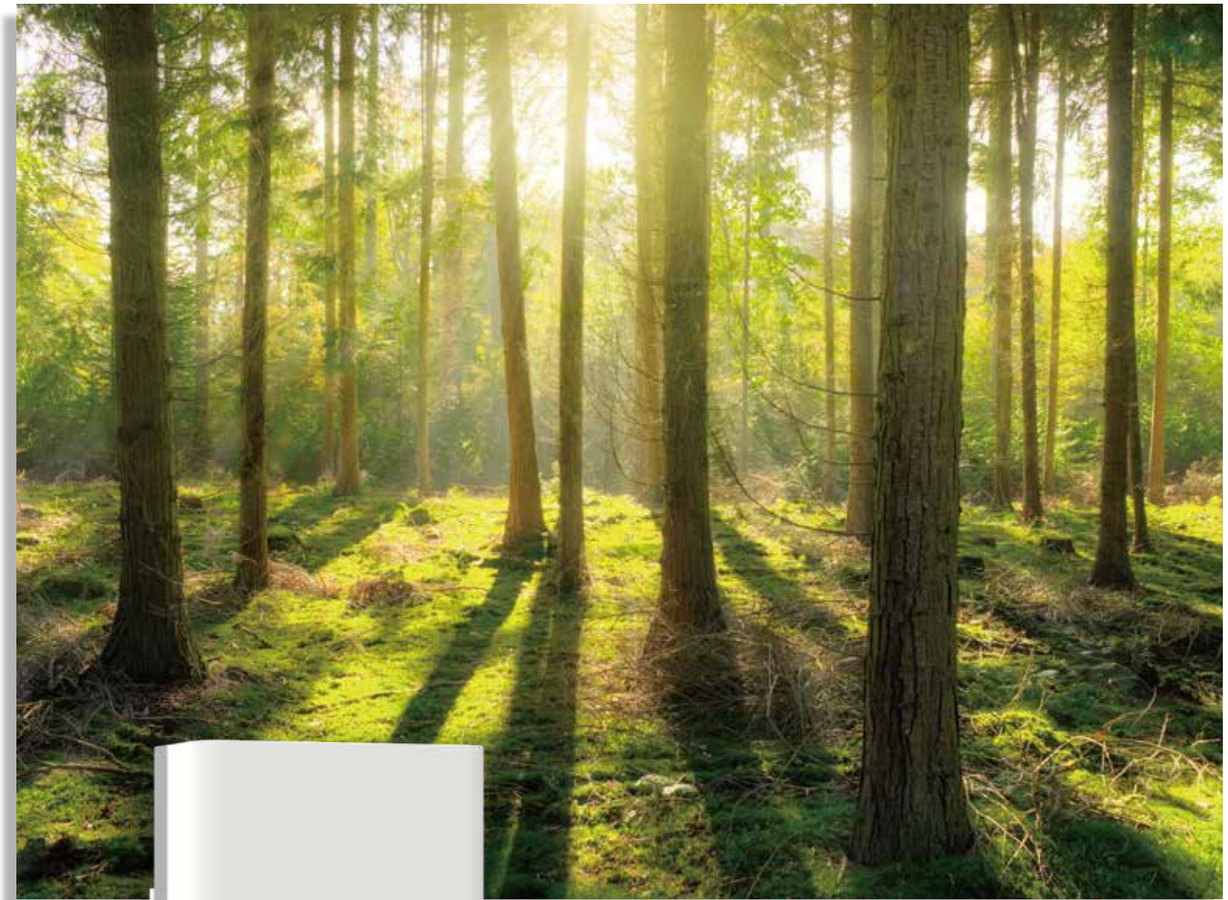
- 2 MPP trackers, Max. efficiency up to 98.6%
- Zero export application, VSG application
- String intelligent monitoring (optional)
- Wide output voltage range
- Anti-PID function (Optional)

Technical Data

Model	SUN-18K-G05	SUN-20K-G05	SUN-25K-G05
PV String Input Data			
Max. PV Input Power (kW)	23.4	26	32.5
Max. PV Input Voltage (V)	1000		
Start-up Voltage (V)	250		
MPPT Voltage Range (V)	200-850		
Rated PV Input Voltage (V)	600		
Max. Input Short Circuit Current (A)	32+32		
Max. Operating PV Input Current (A)	48+48		
No. of MPP Trackers/ No. of Strings MPP Tracker	2/2+2		
AC Output Data			
Rated AC Output Active Power(kW)	18	20	25
Max. AC Output Apparent Power(kVA)	19.8	22	27.5
Rated AC Output current (A)	27.3/26.1	30.3/29	37.9/36.2
Max. AC Output Current(A)	30/28.7	33.3/31.9	41.7/39.8
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	98.5%		
Euro Efficiency	98%		
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		
Arc Fault Circuit Interrupter (AFCI)	Optional		
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		
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)		
General Data			
Operating Temperature Range (°C)	-25 to +60°C, >45°C Derating		
Permissible Ambient Humidity	0-100%		
Permissible Altitude (m)	2000m		
Noise (dB)	≤ 40 dB(A)		
Ingress Protection(IP) Rating	IP 65		
Inverter Topology	Non-Isolated		
Over Voltage Category	OVC II(DC), OVC III(AC)		
Cabinet Size (mm)	362W×527H×220 D (Excluding Connectors and Brackets)		
Weight (kg)	20		
Warranty	5 Years		
Type of Cooling	Natural Cooling		
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, G98, G99, VDE-AR-N 4105		
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2		

Three Phase String Inverter

SUN- 30/33/36K-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-36K-G04
PV String Input Data			
Max. PV Input Power (kW)	39	42.9	46.8
Max. PV Input Voltage (V)	1100		
Start-up Voltage (V)	250		
MPPT Voltage Range (V)	200-1000		
Rated PV Input Voltage (V)	600		
Max. Input Short Circuit Current (A)	40+40		
Max. Operating PV Input Current (A)	60+60		
No. of MPP Trackers/ No. of Strings MPP Tracker	2/3+3		
AC Output Data			
Rated AC Output Active Power(kW)	30	33	36
Max. AC Output Apparent Power(kVA)	33	36.3	39.6
Rated AC Output current (A)	45.5/43.5	50/47.8	54.5/52.2
Max. AC Output Current(A)	50/47.9	55/52.6	60/57.4
Rated Output voltage/range (V)	380V/323V-418V, 400V/340V-440V		
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	98.6%		
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		
Arc Fault Circuit Interrupter (AFCI)	Optional		
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		
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)		
General Data			
Operating Temperature Range (°C)	-25 to +60°C, >45°C Derating		
Permissible Ambient Humidity	0-100%		
Permissible Altitude (m)	4000m		
Noise (dB)	≤ 60 dB(A)		
Ingress Protection(IP) Rating	IP 65		
Inverter Topology	Non-Isolated		
Over Voltage Category	OVC II(DC), OVC III(AC)		
Cabinet Size (mm)	330W×572H×206D (Excluding Connectors and Brackets)		
Weight (kg)	28.7		
Warranty	5 Years		
Type of Cooling	Natural Cooling		
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, G98, G99, VDE-AR-N 4105		
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2		

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
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. Input Short Circuit Current (A)	40+40+40		40+40+40+40
Max. Operating PV Input Current (A)	60+60+60		60+60+60+60
No. of MPP Trackers/ No. of Strings MPP Tracker	3/3+3+3		4/3+3+3+3
AC Output Data			
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		
Arc Fault Circuit Interrupter (AFCI)	Optional		
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		
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)		
General Data			
Operating Temperature Range (°C)	-25 to +60°C, >45°C Derating		
Permissible Ambient Humidity	0-100%		
Permissible Altitude (m)	4000m		
Noise (dB)	< 65 dB(A)		
Ingress Protection(IP) Rating	IP 65		
Inverter Topology	Non-Isolated		
Over Voltage Category	OVC II(DC), OVC III(AC)		
Cabinet Size (mm)	434W×570H×243D (Excluding Connectors and Brackets)		
Weight (kg)	39		
Warranty	5 Years		
Type of Cooling	Natural Cooling		
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, G98, G99, VDE-AR-N 4105		
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2		

Three Phase String Inverter

SUN-60K-G04P3-EU-AM4

- 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-G04P3-EU-AM4
PV String Input Data	
Max. PV Input Power (kW)	90
Max. PV Input Voltage (V)	1100
Start-up Voltage (V)	250
MPPT Voltage Range (V)	200-1000
Rated PV Input Voltage (V)	600
Max. Input Short Circuit Current (A)	40+40+40+40
Max. Operating PV Input Current (A)	60+60+60+60
No. of MPP Trackers/ No. of Strings MPP Tracker	4/3+3+3+3
AC Output Data	
Rated AC Output Active Power(kW)	60
Max. AC Output Apparent Power(kVA)	66
Rated AC Output current (A)	90.9/87
Max. AC Output Current(A)	100/95.7
Rated Output voltage/range (V)	380V/323V-418V, 400V/340V-440V
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
Arc Fault Circuit Interrupter (AFCI)	Optional
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
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)
General Data	
Operating Temperature Range (°C)	-25 to +60°C, >45°C Derating
Permissible Ambient Humidity	0-100%
Permissible Altitude (m)	2000m
Noise (dB)	≤ 55 dB(A)
Ingress Protection(IP) Rating	IP 65
Inverter Topology	Non-Isolated
Over Voltage Category	OVC II(DC), OVC III(AC)
Cabinet Size (mm)	698W×613H×236.5D (Excluding Connectors and Brackets)
Weight (kg)	53.7
Warranty	5 Years
Type of Cooling	Natural Cooling
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, G98, G99, VDE-AR-N 4105
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2

Three Phase String Inverter

SUN- 70/75/80/90/100/110K-G03

- Max. 6 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-70K-G03	SUN-75K-G03	SUN-80K-G03	SUN-90K-G03	SUN-100K-G03	SUN-110K-G03
PV String Input Data						
Max. PV Input Power (kW)	91	97.5	104	135	150	150
Max. PV Input Voltage (V)	1000					
Start-up Voltage (V)	250					
MPPT Voltage Range (V)	200-850					
Rated PV Input Voltage (V)	600					
Max. Input Short Circuit Current (A)	40+40+40+40			40+40+40+40+40+40		
Max. Operating PV Input Current (A)	60+60+60+60			60+60+60+60+60+60		
No. of MPP Trackers/ No. of Strings MPP Tracker	4/4+4+4+4			6/4+4+4+4+4+4		
AC Output Data						
Rated AC Output Active Power(kW)	70	75	80	90	100	110
Max. AC Output Apparent Power(kVA)	77	82.5	88	99	110	121
Rated AC Output current (A)	106.1/101.5	113.6/108.7	121.2/115.9	136.4/130.4	151.5/144.9	166.7/159.4
Max. AC Output Current(A)	116.7/111.6	125/119.6	133.3/127.5	150/143.5	166.7/159.4	183.3/175.4
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%			98.8%		
Euro Efficiency	98.1%			98.2%		
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					
Arc Fault Circuit Interrupter (AFCI)	Optional					
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					
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)					
General Data						
Operating Temperature Range (°C)	-25 to +60°C, >45°C Derating					
Permissible Ambient Humidity	0-100%					
Permissible Altitude (m)	4000m					
Noise (dB)	≤ 55 dB(A)					
Ingress Protection(IP) Rating	IP 65					
Inverter Topology	Non-Isolated					
Over Voltage Category	OVC II(DC), OVC III(AC)					
Cabinet Size (mm)	824W×516H×312.7D (Excluding Connectors and Brackets)					
Weight (kg)	81					
Warranty	5 Years					
Type of Cooling	Natural Cooling					
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, G98, G99, VDE-AR-N 4105					
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2					

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
PV String Input Data					
Max. PV Input Power (kW)	180	187.5	195	202.5	204
Max. PV Input Voltage (V)	1100				
Start-up Voltage (V)	250				
MPPT Voltage Range (V)	200-1000				
Rated PV Input Voltage (V)	600				
Max. Input Short Circuit Current (A)	40+40+40+40+40+40+40+40				
Max. Operating PV Input Current (A)	60+60+60+60+60+60+60+60				
No. of MPP Trackers/ No. of Strings MPP Tracker	8/4+4+4+4+4+4+4+4				
AC Output Data					
Rated AC Output Active Power(kW)	120	125	130	135	136
Max. AC Output Apparent Power(kVA)	132	135	135	135	136
Rated AC 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
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	98.8%				
Euro Efficiency	98.2%				
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				
Arc Fault Circuit Interrupter (AFCI)	Optional				
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				
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)				
General Data					
Operating Temperature Range (°C)	-25 to +60°C, >45°C Derating				
Permissible Ambient Humidity	0-100%				
Permissible Altitude (m)	4000m				
Noise (dB)	≤ 65 dB(A)				
Ingress Protection(IP) Rating	IP 65				
Inverter Topology	Non-Isolated				
Over Voltage Category	OVC II(DC), OVC III(AC)				
Cabinet Size (mm)	1006W×516H×325.5D (Excluding Connectors and Brackets)				
Weight (kg)	103				
Warranty	5 Years				
Type of Cooling	Natural Cooling				
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, G98, G99, VDE-AR-N 4105				
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				

Single Phase Hybrid Inverter

SUN- 3.6/5K-SG03LP1-EU

- Colorful touch LCD, IP65 protection degree
- AC couple to retrofit existing solar system
- Max. 16pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- Max. charging/discharging current of 120A
- 6 time periods for battery charging/discharging
- Support storing energy from diesel generator

Technical Data

Model	SUN-3.6K-SG03LP1-EU	SUN-5K-SG03LP1-EU
Battery Input Data		
Battery Type	Lead-acid or Lithium-ion	
Battery Voltage Range (V)	40-60	
Max. Charging Current (A)	90	120
Max. Discharging Current (A)	90	120
Charging Strategy for Li-Ion Battery	Self-adaption to BMS	
Number of Battery Input	1	
PV String Input Data		
Max. PV Access Power (W)	7200	10000
Max. DC Input Power (W)	4680	6500
Rated PV Input Voltage (V)	370 (125-500)	
Start-up Voltage (V)	125	
MPPT Voltage Range (V)	300-425	
Rated DC Input Voltage(V)	370	
Max. Operating PV Input Current (A)	13+13	
Max. Input Short-Circuit Current (A)	17+17	
No.of MPP Trackers/ No.of Strings MPP Tracker	2/1+1	
AC Output Data		
Rated AC Output Active Power (W)	3600	5000
Max AC Output Active Power (W)	3960	5500
AC Output Rated Current (A)	16.4/15.7	22.7/21.7
Max. AC Output Current (A)	18/17.2	25/23.9
Max. Continuous AC Passthrough (A)	35	
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)	220/380V, 230/400V 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	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current (RCD) Detection, Surge protection level	
Over Voltage Category	TYPE II(DC), TYPE II(AC)	
Interface		
Communication Interface	RS485/RS232/CAN	
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)	
General Data		
Operating Temperature Range (**℃**)	-40 to +60°C, >45°C derating	
Permissible Ambient Humidity	0-100%	
Permissible Altitude	2000m	
Noise (dB)	<30 dB	
Inverter Topology	Non-Isolated	
Weight (kg)	25	
Size (mm)	330W x 580H x232D（Excluding connectors and brackets）	
Protection Degree	IP65	
Type of Cooling	Natural Cooling	
Warranty	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy	
Grid Regulation	EC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G98, G99, VDE-AR-N 4105	
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2	

Single Phase Hybrid Inverter

SUN- 8K-SG01LP1-EU

- Colorful touch LCD, IP65 protection degree
- AC couple to retrofit existing solar system
- Max. 16pcs 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-8K-SG01LP1-EU
Battery Input Data	
Battery Type	Lead-acid or Lithium-ion
Battery Voltage Range (V)	40-60
Max. Charging Current (A)	190
Max. Discharging Current (A)	190
Charging Strategy for Li-Ion Battery	Self-adaption to BMS
Number of Battery Input	1
PV String Input Data	
Max. PV Access Power (W)	16000
Max. DC Input Power (W)	10400
Rated PV Input Voltage (V)	370 (125-500)
Start-up Voltage (V)	125
MPPT Voltage Range (V)	200-425
Rated DC Input Voltage(V)	370
Max. Operating PV Input Current (A)	26+26
Max. Input Short-Circuit Current (A)	44+44
No.of MPP Trackers/ No.of Strings MPP Tracker	2/2+2
AC Output Data	
Rated AC Output Active Power (W)	8000
Max AC Output Active Power (W)	8800
AC Output Rated Current (A)	36.4/34.8
Max. AC Output Current (A)	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)	220/380V, 230/400V 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	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current (RCD) Detection, Surge protection level
Over Voltage Category	TYPE II(DC), TYPE II(AC)
Interface	
Communication Interface	RS485/RS232/CAN
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)
General Data	
Operating Temperature Range (℃)	-40 to +60°C, >45°C derating
Permissible Ambient Humidity	0-100%
Permissible Altitude	2000m
Noise (dB)	<30 dB
Inverter Topology	Non-Isolated
Weight (kg)	30
Cabinet size (mm)	420W x 670H x233D（Excluding connectors and brackets）
Protection Degree	IP65
Type of Cooling	Intelligent Air Cooling
Warranty	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy
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

Single Phase Hybrid Inverter

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

- Colorful touch LCD, IP65 protection degree
- AC couple to retrofit existing solar system
- Max. 16pcs 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 Input 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
Charging Strategy for Li-Ion Battery	Self-adaption to BMS		
Number of Battery Input	2		
PV String Input Data			
Max. PV Access Power (W)	24000	28000	32000
Max. DC Input Power (W)	19200	22400	25600
Rated PV Input Voltage (V)	500		
Start-up Voltage (V)	125		
MPPT Voltage Range (V)	150-425		
Rated DC Input Voltage(V)	370		
Max. Operating PV Input Current (A)	26+26+26		
Max. Input Short-Circuit Current (A)	44+44+44		
No.of MPP Trackers/ No.of Strings MPP Tracker	3/2+2+2		
AC Output Data			
Rated AC Output Active Power (W)	12000	14000	16000
Max AC Output Active Power (W)	13200	15400	17600
AC Output Rated 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)	220/380V, 230/400V 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	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current (RCD) Detection, Surge protection level		
Over Voltage Category	TYPE II(DC), TYPE II(AC)		
Interface			
Communication Interface	RS485/RS232/CAN		
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)		
General Data			
Operating Temperature Range (℃)	-40 to +60°C, >45°C derating		
Permissible Ambient Humidity	0-100%		
Permissible Altitude	2000m		
Noise (dB)	<50 dB		
Inverter Topology	Non-Isolated		
Weight (kg)	52		
Cabinet size (mm)	464W×763H×282D（Excluding connectors and brackets）		
Protection Degree	IP65		
Type of Cooling	Intelligent Air Cooling		
Warranty	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy		
Grid Regulation	IEC 61727,IEC 62116,NRS 097		
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2		

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. 16pcs 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
Charging Strategy for Li-ion Battery	Self-adaption to BMS				
Number of Battery Input	1				
PV String Input Data					
Max. PV Access Power (W)	10000	12000	16000	20000	24000
Max. DC Input Power (W)	7500	9000	12000	15000	18000
Max. DC Input Voltage (V)	800				
Start-up Voltage (V)	160				
MPPT Voltage Range (V)	350-650				
Rated DC Input Voltage (V)	550				
Max. Operating PV Input Current (A)	13+13			26+13	
Max. Input Short-Circuit Current (A)	17+17			34+17	
No. of MPP Trackers/ No. of Strings MPP Tracker	2/1+1			2/2+1	
AC Input/Output Data					
Rated AC Input/Output Active Power (W)	5000	6000	8000	10000	12000
Max. AC Input/Output Apparent Power (VA)	5500	6600	8800	11000	13200
Rated AC Input/Output Current (A)	7.6/7.2	9.1/8.7	12.1/11.6	15.2/14.5	18.2/17.4
Max. AC Input/Output Current (A)	8.4/8	10/9.6	13.4/12.8	16.7/15.9	20/19.1
Max. Continuous AC Passthrough (grid to load) (A)	45				
Peak Power (off-grid) (W)	2 times of rated power, 10s				
Power Factor Adjustment Range	0.8 leading to 0.8 lagging				
Rated Input/Output Voltage/Range (V)	220/380V, 230/400V 0.85Un-1.1Un				
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz 60Hz/55Hz-65Hz				
Grid Connection Form	3L+N+PE				
Total Current Harmonic Distortion THDi	<3% (of nominal power)				
DC Component of Grid	<0.5% In				
Efficiency					
Max. Efficiency	97.60%				
Euro Efficiency	97.0%				
MPPT Efficiency	>99%				
Equipment Protection					
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current (RCD) Detection, Surge protection level				
Surge Protection Level	TYPE II(DC), TYPE II(AC)				
Interface					
Communication Interface	RS485/RS232/CAN				
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)				
General Data					
Operating Temperature Range (℃)	-40 to +60°C, >45°C Derating				
Permissible Ambient Humidity	0-100%				
Permissible Altitude	2000m				
Noise	≤55 dB(A)				
Ingress Protection(IP) Rating	IP 65				
Inverter Topology	Non-Isolated				
Over Voltage Category	OVC II(DC), OVC III(AC)				
Cabinet size (W*H*D) [mm]	422×658×254 (Excluding Connectors and Brackets)				
Weight (kg)	38				
Type of Cooling	Intelligent Air Cooling				
Warranty	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy				
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G98, G99, VDE-AR-N 4105				
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				

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. 16pcs 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	Lead-acid or Lithium-ion							
Battery Voltage Range (V)	160-700							
Max. Charging Current (A)	30		37					50
Max. Discharging Current (A)	30		37					50
Charging Strategy for Li-ion Battery	Self-adaption to BMS							
Number of Battery Input	1							
PV String Input Data								
Max. PV Access Power (W)	10000	12000	16000	20000	24000	30000	20000	50000
Max. DC Input Power (W)	8000	9600	12800	16000	19200	24000	32000	40000
Max. DC Input Voltage (V)	1000							
Start-up Voltage (V)	180							
MPPT Voltage Range (V)	150-850							
Rated DC Input Voltage (V)	600							700
Max. Operating PV Input Current (A)	20+20				26+20		26+26	26+26
Max. Input Short-Circuit Current (A)	30+30				39+30		39+39	39+39
No. of MPP Trackers/ No. of Strings MPP Tracker	2/1+1				2/2+1		2/2+2	2/2+2
AC Input/Output Data								
Rated AC Input/Output Active Power (W)	5000	6000	8000	10000	12000	15000	20000	25000
Max. AC Input/Output Apparent Power (VA)	5500	6600	8800	11000	13200	16500	22000	26000
Rated AC Input/Output 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 Input/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	41.7/37.7
Max. Continuous AC Passthrough (grid to load) (A)	40				80			
Peak Power (off-grid) (W)	2 times of rated power, 10s							
Power Factor Adjustment Range	0.8 leading to 0.8 lagging							
Rated Input/Output Voltage/Range (V)	220/380V, 230/400V 0.85Un-1.1Un							
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz 60Hz/55Hz-65Hz							
Grid Connection Form	3L+N+PE							
Total Current Harmonic Distortion THDi	<3% (of nominal power)							
DC Component of Grid	<0.5% In							
Efficiency								
Max. Efficiency	97.60%							
Euro Efficiency	97.0%							
MPPT Efficiency	>99%							
Equipment Protection								
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current (RCD) Detection, Surge protection level							
Surge Protection Level	TYPE II(DC), TYPE II(AC)							
Interface								
Communication Interface	RS485/RS232/CAN							
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)							
General Data								
Operating Temperature Range (℃)	-40 to +60°C, >45°C Derating							
Permissible Ambient Humidity	0-100%							
Permissible Altitude	2000m							
Noise	≤55 dB(A)							
Ingress Protection(IP) Rating	IP 65							
Inverter Topology	Non-Isolated							
Over Voltage Category	OVC II(DC), OVC III(AC)							
Cabinet size （mm）	408W×638H×237D (Excluding Connectors and Brackets)							
Weight (kg)	30.5							
Type of Cooling	Natural Cooling		Intelligent Air Cooling					
Warranty	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy							
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G98, G99, VDE-AR-N 4105							
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2							

Three Phase Hybrid Inverter

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

- 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 100A
- High voltage battery, higher efficiency
- 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	Lead-acid or Lithium-ion				
Battery Voltage Range (V)	160-700				
Max. Charging Current (A)	50				
Max. Discharging Current (A)	50				
Charging Strategy for Li-ion Battery	Self-adaption to BMS				
Number of Battery Input	2				
PV String Input Data					
Max. PV Access Power (W)	59800	60000	70000	80000	100000
Max. DC Input Power (W)	47840	48000	56000	64000	80000
Max. DC Input Voltage (V)	1000				
Start-up Voltage (V)	180				
MPPT Voltage Range (V)	150-850				
Rated DC Input Voltage (V)	600				
Max. Operating PV Input Current (A)	36+36+36	36+36+36	36+36+36	36+36+36+36	
Max. Input Short-Circuit Current (A)	55+55+55	55+55+55	55+55+55	55+55+55+55	
No. of MPP Trackers/ No. of Strings MPP Tracker	3/2+2+2			4/2+2+2+2	
AC Input/Output Data					
Rated AC Input/Output Active Power (W)	29900	30000	35000	40000	50000
Max. AC Input/Output Apparent Power (VA)	29900	33000	38500	44000	55000
Rated AC Input/Output Current (A)	45.4/43.4	45.5/43.5	53.1/50.8	60.7/58	75.8/72.5
Max. AC Input/Output Current (A)	45.4/43.4	50/47.8	58.4/55.8	66.7/63.8	83.4/79.7
Max. Continuous AC Passthrough (grid to load) (A)	200				
Peak Power (off-grid) (W)	2 times of rated power, 10s				
Power Factor Adjustment Range	0.8 leading to 0.8 lagging				
Rated Input/Output Voltage/Range (V)	220/380V, 230/400V 0.85Un-1.1Un				
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz 60Hz/55Hz-65Hz				
Grid Connection Form	3L+N+PE				
Total Current Harmonic Distortion THDi	<3% (of nominal power)				
DC Component of Grid	<0.5% In				
Efficiency					
Max. Efficiency	97.60%				
Euro Efficiency	97.0%				
MPPT Efficiency	>99%				
Equipment Protection					
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current (RCD) Detection, Surge protection level				
Surge Protection Level	TYPE II(DC), TYPE II(AC)				
Interface					
Communication Interface	RS485/RS232/CAN				
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)				
General Data					
Operating Temperature Range (℃)	-40 to +60°C, >45°C Derating				
Permissible Ambient Humidity	0-100%				
Permissible Altitude	2000m				
Noise	≤65 dB(A)				
Ingress Protection(IP) Rating	IP 65				
Inverter Topology	Non-Isolated				
Over Voltage Category	OVC II(DC), OVC III(AC)				
Cabinet size （mm）	527W×894H×294D (Excluding Connectors and Brackets)				
Weight (kg)	80				
Type of Cooling	Intelligent Air Cooling				
Warranty	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy				
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				

Micro Inverter

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

- ☑ 1 MPP tracker, module level monitoring
- ☑ IP67 protection degree
- ☑ WIFI communication
- ☑ Rapid shutdown function
- ☑ Easy installation, suitable for quick-plug balcony PV system
- ☑ <100ms AC fast discharge, compliant with new required standard DIN VDE 0620-1 (<200ms) to protect human safety
- ☑ Complete NS protection with self-check function
- ☑ External relay advantage with low temperature, long life, easier maintenance
- ☑ 25 years design lifetime and 15 years warranty
- ☑ With integrate WIFI

Technical Data

Model	SUN-M30G4-EU-Q0	SUN-M40G4-EU-Q0	SUN-M50G4-EU-Q0
PV String Input Data			
Max. PV Input Power (W)	210-420(1 Piece)	210-560(1 Piece)	210-700(1 Piece)
Max. PV Input Voltage (V)	60		
Start-up Voltage (V)	20		
MPPT Voltage Range (V)	25-55		
Rated PV Input Voltage (V)	42.5		
Max. Operating PV Input Current (A)	13		
Max. Input Short Circuit Current (A)	19.5		
No. of MPP Trackers/ No. of Strings MPP Tracker	1/1		
AC Output Side			
Rated AC Output Active Power (W)	300	400	500
Max. AC Output Apparent Power (VA)	300	400	500
Rated AC 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
Rated Output Voltage/Range (V)	220/230 0.85Un-1.1Un		
Grid Connection Form	L/N/PE		
Rated Output Grid Frequency/Range(Hz)	50/45-55, 60/55-65		
Max. Unit per Branch	17	13	10
Power Factor Adjustment Range	0.9 leading-0.9 lagging		
Total Current Harmonic Distortion THDi	<3%		
DC Injection Current	<0.5%In		
Efficiency			
Max. Efficiency	96.5%		
Euro Efficiency	96.0%		
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		
Power Network Monitoring	Yes		
Island Protection Monitoring	Yes		
Earth Fault Detection	Yes		
Overvoltage Load Drop Protection	Yes		
General Data			
Operating Temperature Range (°C)	-40 to +65°C, >45°C Derating		
Permissible Ambient Humidity	0-100%		
Permissible Altitude (m)	2000m		
Noise (dB)	≤25		
Ingress Protection(IP) Rating	IP 67		
Inverter Topology	Isolated		
Over Voltage Category	OVC II(DC), OVC III(AC)		
Communication	Wi-Fi		
Cabinet Size (WxHxD mm)	173×158.5×31.5 (Excluding connectors and brackets)		
Weight (kg)	1.85		
Warranty	15 Years		
Type of Cooling	Natural Cooling		
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, G98, G99, VDE-AR-N 4105		
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2		

Microinverter

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

- ☑ 2MPP tracker, module level monitoring
- ☑ IP67 protection degree
- ☑ WIFI communication
- ☑ Rapid shutdown function
- ☑ Easy installation, suitable for quick-plug balcony PV system
- ☑ <100ms AC fast discharge, compliant with new required standard DIN VDE 0620-1 (<200ms) to protect human safety
- ☑ Complete NS protection with self-check function
- ☑ External relay advantage with low temperature, long life, easier maintenance
- ☑ 25 years design lifetime and 15 years warranty
- ☑ With integrate WIFI

Technical Data

Model	SUN-M60G4-EU-Q0	SUN-M80G4-EU-Q0	SUN-M100G4-EU-Q0
PV String Input Data			
Max. PV Input Power (W)	210-420(2 Pieces)	210-560(2 Pieces)	210-700(2 Pieces)
Max. PV Input Voltage (V)	60		
Start-up Voltage (V)	20		
MPPT Voltage Range (V)	25-55		
Rated PV Input Voltage (V)	42.5		
Max. Operating PV Input Current (A)	13+13		
Max. Input Short Circuit Current (A)	19.5+19.5		
No. of MPP Trackers/ No. of Strings MPP Tracker	2/1		
AC Output Side			
Rated AC Output Active Power (W)	600	800	1000
Max. AC Output Apparent Power (VA)	600	800	1000
Rated AC 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
Rated Output Voltage/Range (V)	220/230 0.85Un-1.1Un		
Grid Connection Form	L/N/PE		
Rated Output Grid Frequency/Range(Hz)	50/45-55, 60/55-65		
Max. Unit per Branch	8	6	5
Power Factor Adjustment Range	0.9 leading-0.9 lagging		
Total Current Harmonic Distortion THDi	<3%		
DC Injection Current	<0.5%In		
Efficiency			
Max. Efficiency	96.5%		
Euro Efficiency	96.0%		
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		
Power Network Monitoring	Yes		
Island Protection Monitoring	Yes		
Earth Fault Detection	Yes		
Overvoltage Load Drop Protection	Yes		
General Data			
Operating Temperature Range (°C)	-40 to +65°C, >45°C Derating		
Permissible Ambient Humidity	0-100%		
Permissible Altitude (m)	2000m		
Noise (dB)	≤25		
Ingress Protection(IP) Rating	IP 67		
Inverter Topology	Isolated		
Over Voltage Category	OVC II(DC), OVC III(AC)		
Communication	Wi-Fi		
Cabinet Size (WxHxD mm)	280.5×190×40 (Excluding Connectors and Brackets)		
Weight (kg)	3		
Warranty	15 Years		
Type of Cooling	Natural Cooling		
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, G98, G99, VDE-AR-N 4105		
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2		

Microinverter

SUN-M130/160/180/200G4-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
- Wi-Fi communication
- Rapid shutdown function

Technical Data

Model	SUN-M130G4 -EU-Q0	SUN-M160G4 -EU-Q0	SUN-M180G4 -EU-Q0	SUN-M200G4 -EU-Q0
PV String Input Data				
Max. PV Input Power (W)	210-460 (4 Pieces)	210-560 (4 Pieces)	210-630 (4 Pieces)	210-700 (4 Pieces)
Max. PV Input Voltage (V)	60			
Start-up Voltage (V)	20			
MPPT Voltage Range (V)	25-55			
Rated PV Input Voltage (V)	42.5			
Max. Operating PV Input Current (A)	15+15+15+15			
Max. Input Short Circuit Current (A)	22.5+22.5+22.5+22.5			
No. of MPP Trackers/ No. of Strings MPP Tracker	4/1			
AC Output Side				
Rated AC Output Active Power (W)	1300	1600	1800	2000
Max. AC Output Apparent Power (VA)	1300	1600	1800	2000
Rated AC Output Current (A)	6/5.7	7.3/7	8.2/7.9	9.1/8.7
Max. AC Output Current (A)	6/5.7	7.3/7	8.2/7.9	9.1/8.7
Rated Output Voltage/Range (V)	220/230 0.85Un-1.1Un			
Grid Connection Form	L/N/PE			
Rated Output Grid Frequency/Range(Hz)	50/45-55, 60/55-65			
Max. Unit per Branch	5	4	3	3
Power Factor Adjustment Range	0.9 leading-0.9 lagging			
Total Current Harmonic Distortion THDi	<3%			
DC Injection Current	<0.5%In			
Efficiency				
Max. Efficiency	96.5%			
Euro Efficiency	96.0%			
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			
Power Network Monitoring	Yes			
Island Protection Monitoring	Yes			
Earth Fault Detection	Yes			
Overvoltage Load Drop Protection	Yes			
General Data				
Operating Temperature Range (°C)	-40 to +65°C, >45°C Derating			
Permissible Ambient Humidity	0-100%			
Permissible Altitude (m)	2000m			
Noise (dB)	≤25			
Ingress Protection(IP) Rating	IP 67			
Inverter Topology	Isolated			
Over Voltage Category	OVC II(DC), OVC III(AC)			
Communication	Wi-Fi			
Cabinet Size (WxHxD mm)	311×250.5×36.5 (Excluding Connectors and Brackets)			
Weight (kg)	5.1			
Warranty	10 Years			
Type of Cooling	Natural Cooling			
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, G98, G99, VDE-AR-N 4105			
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2			

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

Microinverter

SUN-M220/225G4-EU-Q0

- Max. DC input current of 18A, adapt to 790W PV module
- IP67 protection degree, *10 years warranty
- 4 MPP trackers, module level monitoring
- Wi-Fi communication
- Rapid shutdown function

Technical Data

Model	SUN-M220G4 -EU-Q0	SUN-M225G4 -EU-Q0
PV String Input Data		
Max. PV Input Power (W)	210-770 (4 Pieces)	210-790 (4 Pieces)
Max. PV Input Voltage (V)	60	
Start-up Voltage (V)	20	
MPPT Voltage Range (V)	25-55	
Rated PV Input Voltage (V)	42.5	
Max. Operating PV Input Current (A)	18+18+18+18	
Max. Input Short Circuit Current (A)	27+27+27+27	
No. of MPP Trackers/ No. of Strings MPP Tracker	4/1	
AC Output Side		
Rated AC Output Active Power (W)	2200	2250
Max. AC Output Apparent Power (VA)	2200	2250
Rated AC Output Current (A)	10/9.6	10.3/9.8
Max. AC Output Current (A)	10/9.6	10.3/9.8
Rated Output Voltage/Range (V)	220/230 0.85Un-1.1Un	
Grid Connection Form	L/N/PE	
Rated Output Grid Frequency/Range(Hz)	50/45-55, 60/55-65	
Max. Unit per Branch	3	3
Power Factor Adjustment Range	0.9 leading-0.9 lagging	
Total Current Harmonic Distortion THDi	<3%	
DC Injection Current	<0.5%In	
Efficiency		
Max. Efficiency	96.5%	
Euro Efficiency	96.0%	
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	
Power Network Monitoring	Yes	
Island Protection Monitoring	Yes	
Earth Fault Detection	Yes	
Overvoltage Load Drop Protection	Yes	
General Data		
Operating Temperature Range (°C)	-40 to +65°C, >45°C Derating	
Permissible Ambient Humidity	0-100%	
Permissible Altitude (m)	2000m	
Noise (dB)	≤25	
Ingress Protection(IP) Rating	IP 67	
Inverter Topology	Isolated	
Over Voltage Category	OVC II(DC), OVC III(AC)	
Communication	Wi-Fi	
Cabinet Size (WxHxD mm)	358×255.5×36.5 (Excluding Connectors and Brackets)	
Weight (kg)	5.2	
Warranty	10 Years	
Type of Cooling	Natural Cooling	
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, G98, G99, VDE-AR-N 4105	
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2	

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

Microinverter

SUN-M130/160/180/200/220/225G4-EU-Q0-I

Wireless wifi communication, no wiring required

Bidirectional measurement can record electricity consumption data while also preventing backflow

IP67 protection degree, *10 years warranty

Max. DC input current of 18A, adapt to 790W PV module

4 MPP trackers, module level monitoring

Rapid shutdown function

Technical Data

Model	SUN-M130G4 -EU-Q0-I	SUN-M160G4 -EU-Q0-I	SUN-M180G4 -EU-Q0-I	SUN-M200G4 -EU-Q0-I	SUN-M220G4 -EU-Q0-I	SUN-M225G4 -EU-Q0-I
PV String Input Data						
Max. PV Input Power (W)	210-460 (4 Pieces)	210-560 (4 Pieces)	210-630 (4 Pieces)	210-700 (4 Pieces)	210-770 (4 Pieces)	210-790 (4 Pieces)
Max. PV Input Voltage (V)	60					
Start-up Voltage (V)	20					
MPPT Voltage Range (V)	25-55					
Rated PV Input Voltage (V)	42.5					
Max. Operating PV Input Current (A)	18+18+18+18					
Max. Input Short Circuit Current (A)	27+27+27+27					
No. of MPP Trackers/ No. of Strings MPP Tracker	4/1					
AC Output Side						
Rated AC Output Active Power (W)	1300	1600	1800	2000	2200	2250
Max. AC Output Apparent Power (VA)	1300	1600	1800	2000	2200	2250
Rated AC Output Current (A)	6/5.7	7.3/7	8.2/7.9	9.1/8.7	10/9.6	10.3/9.8
Max. AC Output Current (A)	6/5.7	7.3/7	8.2/7.9	9.1/8.7	10/9.6	10.3/9.8
Rated Output Voltage/Range (V)	220/230 0.85Un-1.1Un					
Grid Connection Form	L/N/PE					
Rated Output Grid Frequency/Range(Hz)	50/45-55, 60/55-65					
Max. Unit per Branch	5	4	3	3	3	3
Power Factor Adjustment Range	0.9 leading-0.9 lagging					
Total Current Harmonic Distortion THDi	<3%					
DC Injection Current	<0.5%In					
Efficiency						
Max. Efficiency	96.5%					
Euro Efficiency	96.0%					
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					
Power Network Monitoring	Yes					
Island Protection Monitoring	Yes					
Earth Fault Detection	Yes					
Overvoltage Load Drop Protection	Yes					
General Data						
Operating Temperature Range (°C)	-40 to +65°C, >45°C Derating					
Permissible Ambient Humidity	0-100%					
Permissible Altitude (m)	2000m					
Noise (dB)	≤25					
Ingress Protection(IP) Rating	IP 67					
Inverter Topology	Isolated					
Over Voltage Category	OVC II(DC), OVC III(AC)					
Communication	Wi-Fi					
Cabinet Size (WxHxD mm)	358×255.5×36.5 (Excluding Connectors and Brackets)					
Weight (kg)	4.95					
Warranty	10 Years					
Type of Cooling	Natural Cooling					
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, G98, VDE-AR-N 4105					
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2					

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

Balcony Energy Storage Microinverter

SUN-BK60/80/100SG01-EU-AM2

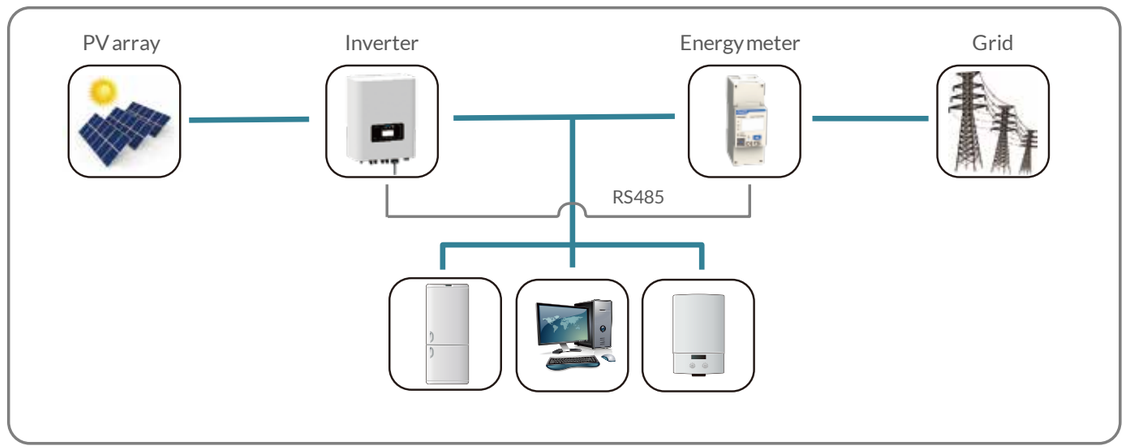
- IP67 protection degree
- WIFI communication
- Wireless CT, Wireless Smart Switch and Wireless BMS communication
- AC couple to retrofit existing solar system
- Max. charging/discharging current 25A
- Expand two independent PV inputs
- Working in Microinverter mode or storage inverter mode
- Supports UPS load, fast switching within 4ms

Technical Data

Model	SUN-BK60SG01-EU-AM2	SUN-BK80SG01-EU-AM2	SUN-BK100SG01-EU-AM2
Battery Input Data			
Battery Type	Lead-acid or Lithium-ion		
Battery Voltage Range (V)	40-60		
Max. Charging Current (A)	25		
Max. Discharging Current (A)	25		
Charging Strategy for Li-ion Battery	Self-adaption to BMS		
Number of Battery Input	1		
PV String Input Data			
Max. PV Input Power (W)	1320	1760	2200
Max. PV Input Voltage (V)	60		
Start-up Voltage (V)	25		
MPPT Voltage Range (V)	20-55		
Rated PV Input Voltage (V)	42.5		
Max. Operating PV Input Current (A)	18+18		
Max. Input Short-Circuit Current (A)	27+27		
No. of MPP Trackers/ No. of Strings per MPP Tracker	2/1		
AC Input/Output Data			
Rated AC Input/Output Active Power (W)	600	800	800
Max. AC Input/Output Apparent Power (VA)	660	880	880
Rated AC Input/Output Current (A)	2.8/2.7	3.7/3.5	4.6/4.4
Max. AC Input/Output Current (A)	3/2.9	4/3.9	5/4.8
Max. Continuous AC Passthrough (grid to load) (A)	10		
Peak Power (off-grid) (W)	2 times of rated power, 10s		
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(Hz)	50/45-55, 60/55-65		
Grid Connection Form	L+N+PE		
Total Current Harmonic Distortion THDi	<3% (of nominal power)		
DC Injection Current	<0.5% In		
Efficiency			
Max. Efficiency	96.5%		
Euro Efficiency	96.0%		
MPPT Efficiency	>99%		
Equipment Protection			
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection AC Output Overvoltage Protection, AC Output Short Circuit Protection, Thermal Protection DC Terminal Insulation Impedance Monitoring, DC Component Monitoring, Ground Fault Current Monitoring Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch Overvoltage Load Drop Protection, Residual Current (RCD) Detection, Surge protection level		
Surge Protection Level	TYPE II(DC), TYPE II(AC)		
General Data			
Operating Temperature Range (℃)	-40 to +65°C, >45°C Derating		
Permissible Ambient Humidity	0-100%		
Permissible Altitude	2000m		
Noise (dB)	≤25		
Ingress Protection(IP) Rating	IP 67		
Inverter Topology	Isolated		
Over Voltage Category	OVC II(DC), OVC III(AC)		
Communication	WIFI		
Cabinet Size (WxHxD mm)	364.5×183×32.85 (Excluding Connectors and Brackets)		
Weight (kg)	4.3		
Type of Cooling	Natural Cooling		
Warranty	10 Years/15 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy		
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, G98, VDE-AR-N 4105		
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2		

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.

Deye Cloud

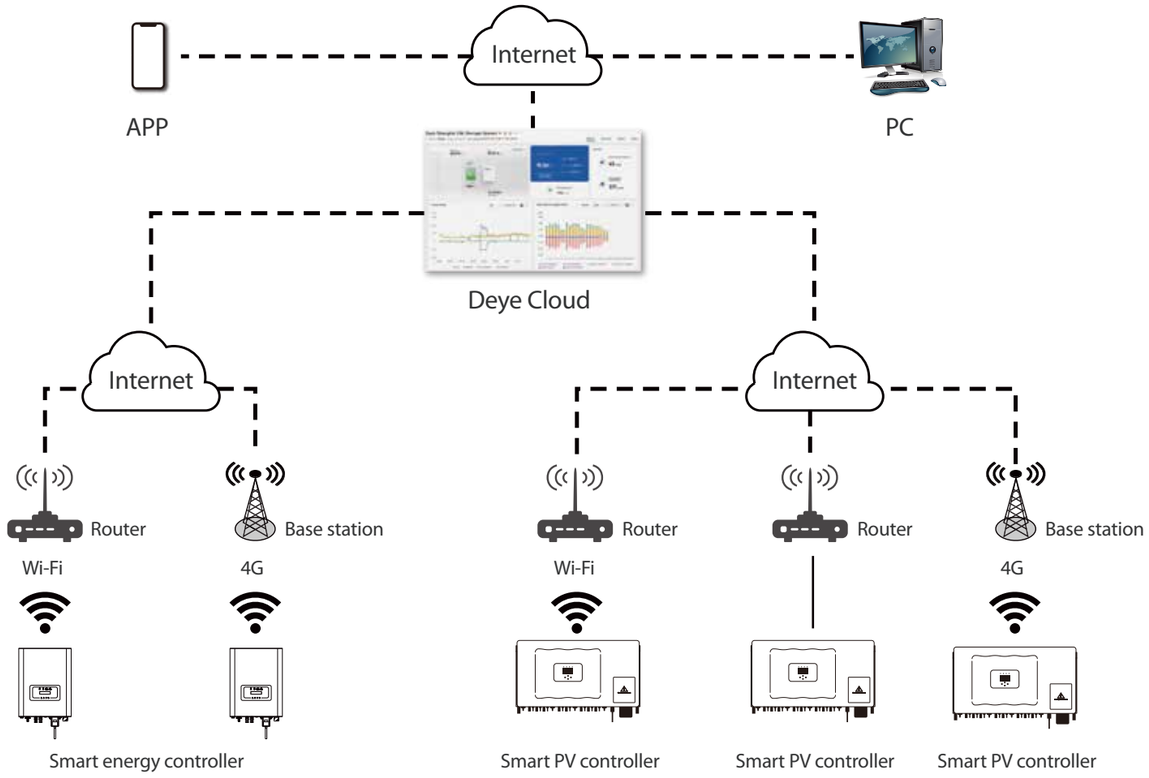
Support the establishment, data collection, monitoring, operation, maintenance, and after-sales services for new energy power stations like photovoltaic, energy storage, and micro-inverters.
The Deye Smart Cloud Big Data platform enables transparent management of all power station types, enhancing their value. It offers a variety of power station and equipment types, comprehensive monitoring, efficient troubleshooting, intelligent data analysis, energy flow visualization, and diverse management modes.
Additionally, our new data center feature allows collaboration with merchants for shared operation and maintenance, ensuring power station security and stability.

All in one

·Supports multiple devices such as photovoltaic, batteries, wind turbines, power grids, micro-inverters, diesel generators, loads, UPS, and Smartload in all aspects;
·Supports both business users and owners in one APP.

Security

·Separate data centers in Europe and America;
·Comply with ETSI/EN 303645, GDPR.



Project cases

- 20kW
- Germany
- SUN-10K-G

- 220kW
- China
- SUN-110K-G

- 5kW
- Australia
- SUN-5K-G

- 660kW
- Ching
- SUN-110K-G

- 50kW
- Brazil
- SUN-25K-G

Project cases

- 320kW
- Brazil
- SUN-80K-G

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

- 150kW
- South Africa
- SUN-50K-SG

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

- 6kW
- Italy
- SUN-6K-SG

Project cases

- 48kW
- Lebanon
- SUN-12K-SG

- 12kW
- Myanmar
- SUN-12K-SG

- 50kW
- India
- SUN-50K-SG

- 120kW
- Philippines
- SUN-12K-SG

- 12kW
- Vietnam
- SUN-12K-SG