

# Deye

*Clean Power For You*

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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](mailto:market@deye.com.cn)

Ver: 3.0 2022



## *World-leading Residential Energy Storage System Provider*

Stock Code: 605117.SH

*Choose Deye — Choose a Green and Healthy Life*

**Deye**  
2022



Deye

# Company Profile

- 1** Ningbo Deye Inverter Technology Co., Ltd, founded in 2007 with registered capital 30 million USD, is one of the China's high-tech enterprises and a subsidiary of Deye Group. With a plant area over 15,000 m<sup>2</sup> 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 1.5-110kW, Hybrid inverter 3kW-12kW, and microinverter 300W-2000W.
- 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

**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 46 million USD.

LIMITLESS

# 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

**95.5**

Max. conversion efficiency of 97.6%;  
Max. battery charge efficiency of 95.5%

**240**

Max. charging/discharging current of 240A



# Core Features

Deye grid-connected inverter 1-110kW

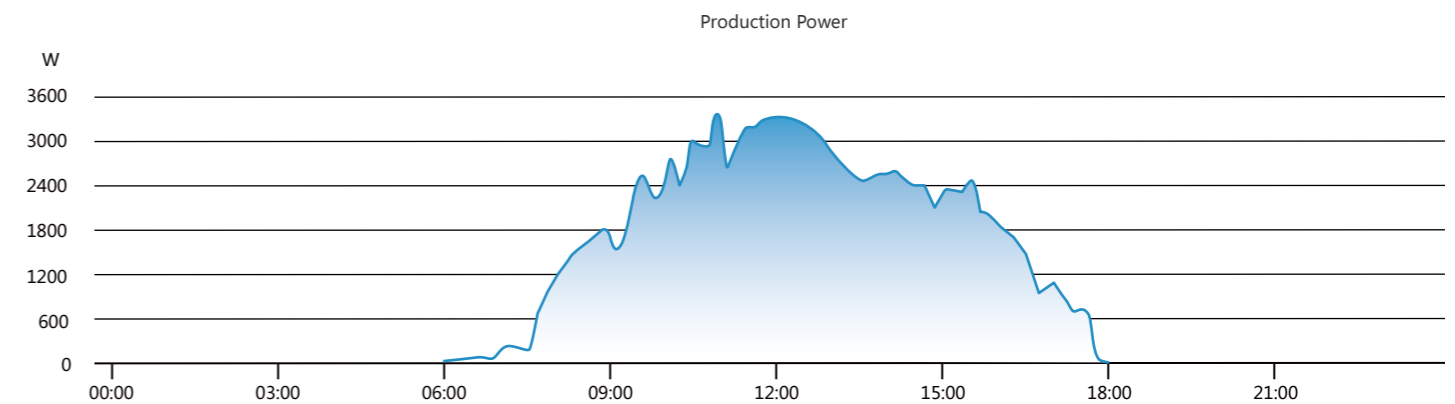
- ✓ Max. 8 MPP trackers, Max. efficiency up to 98.9%
- ✓ High DC/AC ratio 1.5 times for more yields
- ✓ Wide output voltage range 277-520Vac
- ✓ Zero export application, response speed within 0.5S
- ✓ T-type three-level topology and enhanced SVPWM
- ✓ Type II DC / AC SPD, frequency droop control technology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



# Main Highlights

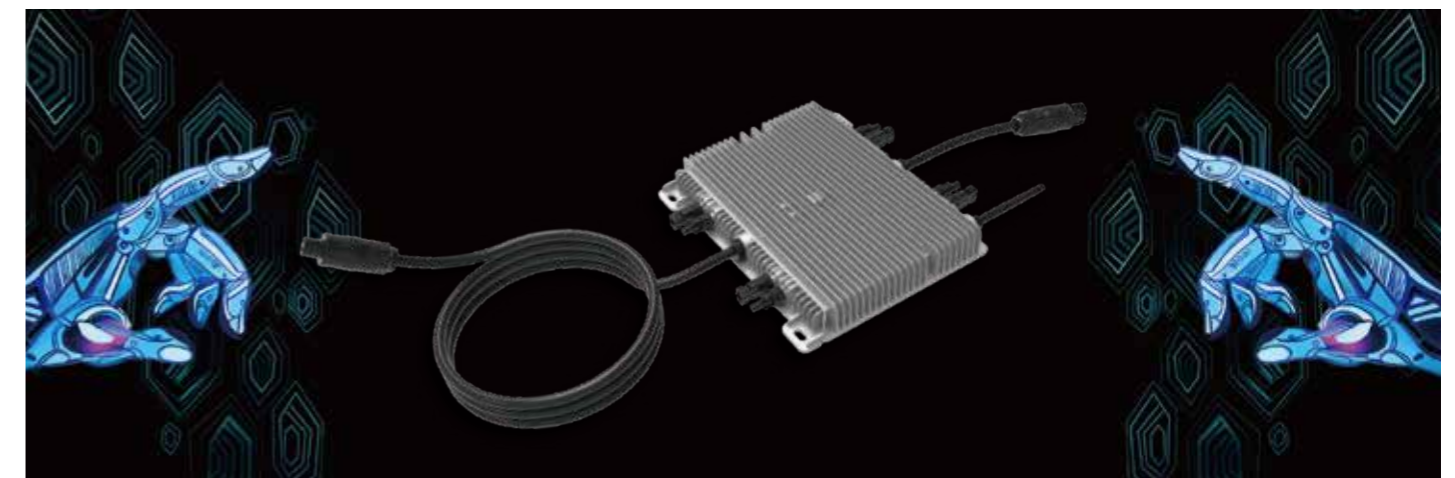
Deye microinverter 300-2000W

- ◆ Support reactive power compensation, comply with UL code.
- ◆ Module level monitoring, Max. 4 MPPTs design
- ◆ Max. DC input current 13A, adapt to 550W PV module
- ◆ Rapid shutdown function, safe and reliable
- ◆ PLC, 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





# World-Class Components Suppliers

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

MOSFET, IGBT



## Complete Manufacturing System



IC



Capacitor, Inductor



Diode



Relay



FAN



# Deye Inverter Portfolio



Single Phase  
String Inverter



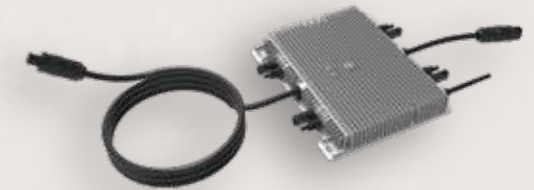
Three Phase  
String Inverter



Three Phase  
String Inverter (LV)



Single Phase  
Hybrid Inverter



Microinverter



Three Phase  
Hybrid Inverter






Accessory &  
monitoring

# Hybrid Inverter

SUN- 3.6 / 5 K-SG03LP1-EU



-  Colorful touch LCD, IP65 protection degree
-  DC couple and AC couple to retrofit existing solar system
- 16** Max. 16pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 120** Max. charging/discharging current of 120A
- 6** 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
<b>Battery Input Data</b>		
Battery Type	Lead-acid or Li-Ion	
Battery Voltage Range (V)	40~60	
Max. Charging Current (A)	90	120
Max. Discharging Current (A)	90	120
External Temperature Sensor	Yes	
Charging Curve	3 Stages / Equalization	
Charging Strategy for Li-Ion Battery	Self-adaption to BMS	
<b>PV String Input Data</b>		
Max. DC Input Power (W)	4680	6500
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)	13+13	
Max. PV ISC (A)	17+17	
Number of MPPT / Strings per MPPT	2/1+1	
<b>AC Output Data</b>		
Rated AC Output and UPS Power (W)	3600	5000
Max. AC Output Power (W)	3690	5500
AC Output Rated Current (A)	16.4	22.7
Max. AC Current (A)	18	25
Max. Continuous AC Passthrough (A)	35	
Peak Power (off grid)	2 time of rated power, 10 S	
Power Factor	0.8 leading to 0.8 lagging	
Output Frequency and Voltage	50/60Hz; L/N/PE 220/230Vac (single phase)	
Grid Type	Single Phase	
DC injection current (mA)	THD<3% (Linear load<1.5%)	
<b>Efficiency</b>		
Max. Efficiency	97.60%	
Euro Efficiency	97.00%	
MPPT Efficiency	99.90%	
<b>Protection</b>		
Integrated	PV Input Lightning Protection, 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	
Output Over Voltage Protection	DC Type II/AC Type III	
<b>Certifications and Standards</b>		
Grid Regulation	CEI 0-21, VDE-AR-N 4105, NRS 097, IEC 62116, IEC 61727, G99, G98, VDE 0126-1-1, RD 1699, C10-11	
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2	
<b>General Data</b>		
Operating Temperature Range ( )	-45~60 , >45 derating	
Cooling	Natural cooling	
Noise (dB)	<30 dB	
Communication with BMS	RS485; CAN	
Weight (kg)	20.5	
Size (mm)	330W x 580H x 233D	
Protection Degree	IP65	
Installation Style	Wall-mounted	
Warranty	5 years	

# Hybrid Inverter

SUN- 6 K-SG05LP1-EU



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

## Technical Data




Model	SUN-6K-SG05LP1-EU
<b>Battery Input Data</b>	
Battery Type	Lead-acid or Li-Ion
Battery Voltage Range (V)	40~60
Max. Charging Current (A)	135
Max. Discharging Current (A)	135
External Temperature Sensor	Yes
Charging Curve	3 Stages / Equalization
Charging Strategy for Li-Ion Battery	Self-adaption to BMS
<b>PV String Input Data</b>	
Max. DC Input Power (W)	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)	13+13
Max. PV ISC (A)	17+17
Number of MPPT / Strings per MPPT	2/1
<b>AC Output Data</b>	
Rated AC Output and UPS Power (W)	6000
Max. AC Output Power (W)	6600
AC Output Rated Current (A)	27.3
Max. AC Current (A)	30
Max. Continuous AC Passthrough (A)	40
Peak Power (off grid)	2 time of rated power, 10 S
Power Factor	0.8 leading to 0.8 lagging
Output Frequency and Voltage	50/60Hz; L/N/PE 220/230Vac (single phase)
Grid Type	Single Phase
DC injection current (mA)	THD<3% (Linear load<1.5%)
<b>Efficiency</b>	
Max. Efficiency	97.60%
Euro Efficiency	97.00%
MPPT Efficiency	99.90%
<b>Protection</b>	
Integrated	PV Input Lightning Protection, 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
Output Over Voltage Protection	DC Type II/AC Type III
<b>Certifications and Standards</b>	
Grid Regulation	CEI 0-21, VDE-AR-N 4105, NRS 097, IEC 62116, IEC 61727, G99, G98, VDE 0126-1-1, RD 1699, C10-11
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2
<b>General Data</b>	
Operating Temperature Range ( )	-45~60 , >45 derating
Cooling	Natural cooling
Noise (dB)	<30 dB
Communication with BMS	RS485; CAN
Weight (kg)	24
Size (mm)	330W x 580H x 232D
Protection Degree	IP65
Installation Style	Wall-mounted
Warranty	5 years



# Hybrid Inverter

SUN- 8 K-SG01LP1-EU



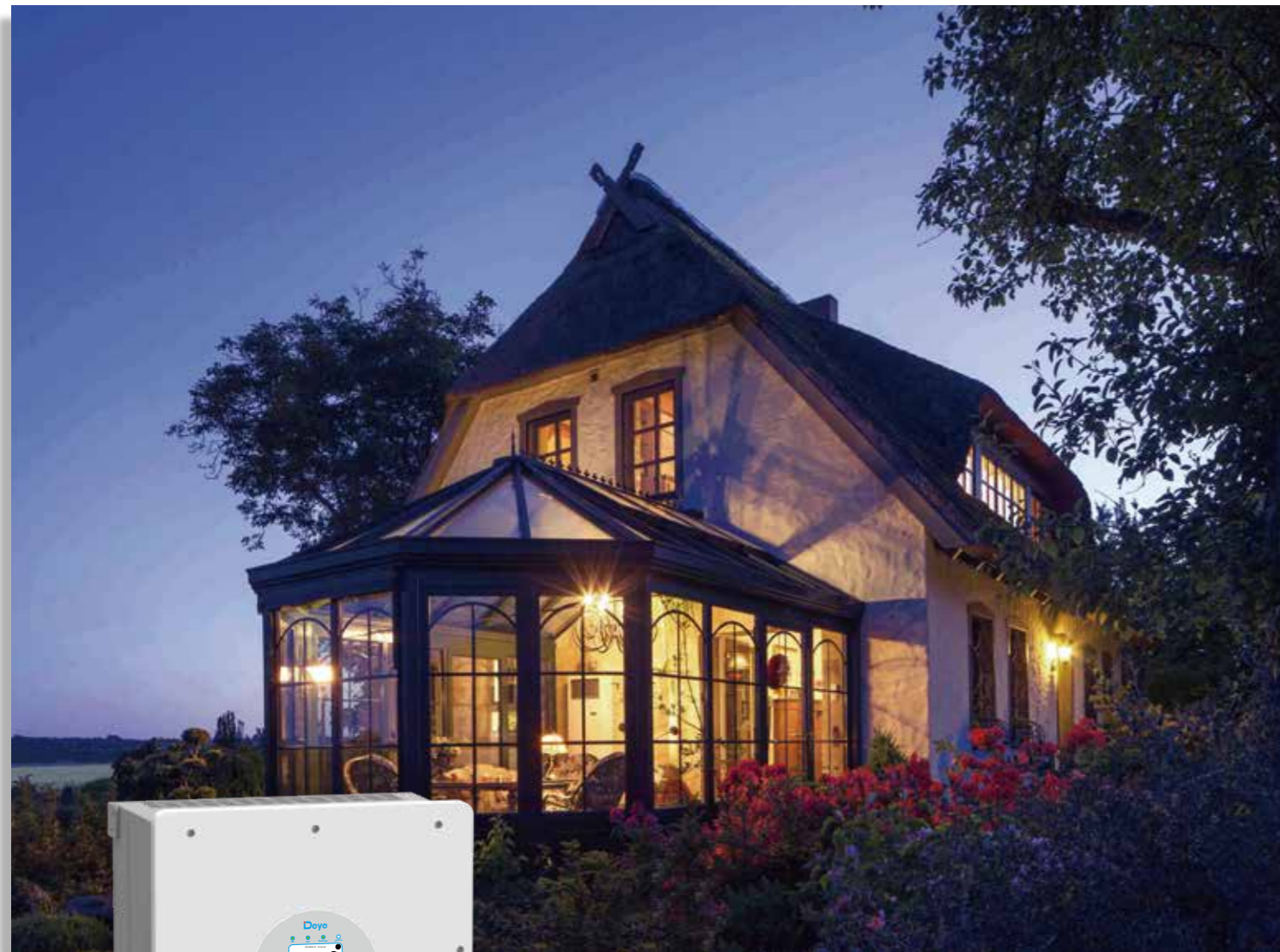
-  Colorful touch LCD, IP65 protection degree
-  DC couple and AC couple to retrofit existing solar system
- 16** Max. 16pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 190** Max. charging/discharging current of 190A
- 6** 6 time periods for battery charging/discharging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




## Technical Data

Model	SUN-8K -SG01LP1-US/EU
<b>Battery Input Data</b>	
Battery Type	Lead-acid or Li-Ion
Battery Voltage Range (V)	40~60
Max. Charging Current (A)	190
Max. Discharging Current (A)	190
External Temperature Sensor	Yes
Charging Curve	3 Stages / Equalization
Charging Strategy for Li-Ion Battery	Self-adaption to BMS
<b>PV String Input Data</b>	
Max. DC Input Power (W)	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 ISC (A)	44+44
Number of MPPT / Strings per MPPT	2/2+2
<b>AC Output Data</b>	
Rated AC Output and UPS Power (W)	8000
Max. AC Output Power (W)	8800
AC Output Rated Current (A)	36.4
Max. AC Current (A)	40
Max. Continuous AC Passthrough (A)	50
Peak Power (off grid)	2 time of rated power, 10 S
Power Factor	0.8 leading to 0.8 lagging
Output Frequency and Voltage	50 / 60Hz; L1/L2/N(PE) 120/240Vac (split phase), 208Vac (2/3 phase), L/N/PE 220/230Vac (single phase)
Grid Type	Split phase; 2/3 phase; Single Phase
DC injection current (mA)	THD<3% (Linear load<1.5%)
<b>Efficiency</b>	
Max. Efficiency	97.60%
Euro Efficiency	97.00%
MPPT Efficiency	99.90%
<b>Protection</b>	
Integrated	PV Input Lightning Protection, 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
Output Over Voltage Protection	DC Type II/AC Type III
<b>Certifications and Standards</b>	
Grid Regulation	CEI 0-21, VDE-AR-N 4105, NRS 097, IEC 62116, IEC 61727, G99, G98, VDE 0126-1-1, RD 1699, C10-11
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2
<b>General Data</b>	
Operating Temperature Range ( )	-45~60 , >45 derating
Cooling	Smart cooling
Noise (dB)	<30 dB
Communication with BMS	RS485; CAN
Weight (kg)	32
Size (mm)	420Wx670Hx233D
Protection Degree	IP65
Installation Style	Wall-mounted
Warranty	5 years

# Hybrid Inverter

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



-  Colorful touch LCD, IP65 protection degree
-  DC couple and AC couple to retrofit existing solar system
- 16** Max. 16pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 290** Max. charging/discharging current of 290A
- 6** 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
<b>Battery Data</b>			
Battery Type	Lead-acid or Li-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		
<b>PV String Input Data</b>			
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 <sub>sc</sub> (A)	44+44+44		
No. of MPP Trackers	3		
No. of Strings per MPP Tracker	2		
<b>AC Output Data</b>			
Rated AC Output Power (W)	12000	14000	16000
AC Output Rated Current (A)	54.5/52.2	63.6/60.9	72.7/69.6
Max. Continuous AC Passthrough (A)	100		
Peak Power (off grid)	2 time of rated power, 5 S		
Power Factor	0.8 leading to 0.8 lagging		
Output Frequency and Voltage	50/60Hz; L/N/PE 220/230Vac (single phase)		
Grid Type	Single Phase		
DC injection current (mA)	<0.5%1n		
<b>Backup Data</b>			
Backup Power (W)	10000	12000	14000
Backup Rated Current (A)	45.5/43.5	54.5/52.2	63.6/60.9
Backup UPS	6ms Automatic switchover time		
<b>Efficiency</b>			
Max. Efficiency	97.60%		
Euro Efficiency	96.50%		
MPPT Efficiency	99.90%		
Integrated	PV Input Lightning Protection, 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		
Output Over Voltage Protection	DC Type II/AC Type III		
<b>Certifications and Standards</b>			
Grid Regulation	CEI 0-21, VDE-AR-N 4105, NRS 097, IEC 62116, IEC 61727, G99, G98, VDE 0126-1-1, RD 1699, C10-11		
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2		
<b>General Data</b>			
Operating Temperature Range ( )	-40~60 , >45 derating		
Cooling	Smart cooling		
Noise (dB)	<30 dB		
Communication with BMS	RS485; CAN		
Weight (kg)	48.5		
Size (mm)	464Wx798.4Hx300D		
Protection Degree	IP65		
Installation Style	Wall-mounted		
Warranty	5 years		
<b>Features</b>			
Max. Number of Parallel (PCS)	16		

# Three Phase Hybrid Inverter

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



- 100** 100% unbalanced output, each phase; Max. output up to **50%** rated power
- DC** DC couple and AC couple to retrofit existing solar system
- 16** Max. 16pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 240** Max. charging/discharging current of 240A
- 48** 48V low voltage battery, transformer isolation design
- 6** 6 time periods for battery charging/discharging
- Generator** 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
<b>Battery Input Data</b>					
Battery Type	Lead-acid or Li-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				
<b>PV String Input Data</b>					
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 ISC (A)	17+17			34+17	
Number of MPPT / Strings per MPPT	2/1+1			2/2+1	
<b>AC Output Data</b>					
Rated AC Output and UPS Power (W)	5000	6000	8000	10000	12000
Max. AC Output Power (W)	5500	6600	8800	11000	13200
AC Output Rated Current (A)	7.6	9.1	12.1	15.2	18.2
Max. AC Current (A)	11.4	13.6	18.2	22.7	27.3
Max. Continuous AC Passthrough (A)	45				
Peak Power (off grid)	2 time of rated power, 10 S				
Power Factor	0.8 leading to 0.8 lagging				
Output Frequency and Voltage	50/60Hz; 3L/N/PE 220/380, 230/400Vac				
Grid Type	Three Phase				
DC injection current (mA)	THD<3% (Linear load<1.5%)				
<b>Efficiency</b>					
Max. Efficiency	97.60%				
Euro Efficiency	97.00%				
MPPT Efficiency	99.90%				
<b>Protection</b>					
Integrated	PV Input Lightning Protection, 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				
Output Over Voltage Protection	DC Type II/AC Type III				
<b>Certifications and Standards</b>					
Grid Regulation	CEI 0-21, VDE-AR-N 4105, NRS 097, IEC 62116, IEC 61727, G99, G98, VDE 0126-1-1, RD 1699, C10-11				
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				
<b>General Data</b>					
Operating Temperature Range ( )	-45~60 , >45 derating				
Cooling	Smart cooling				
Noise (dB)	<45 dB				
Communication with BMS	RS485; CAN				
Weight (kg)	33.6				
Size (mm)	422W x 699.3H x 279D				
Protection Degree	IP65				
Installation Style	Wall-mounted				
Warranty	5 years				

# Three Phase Hybrid Inverter

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



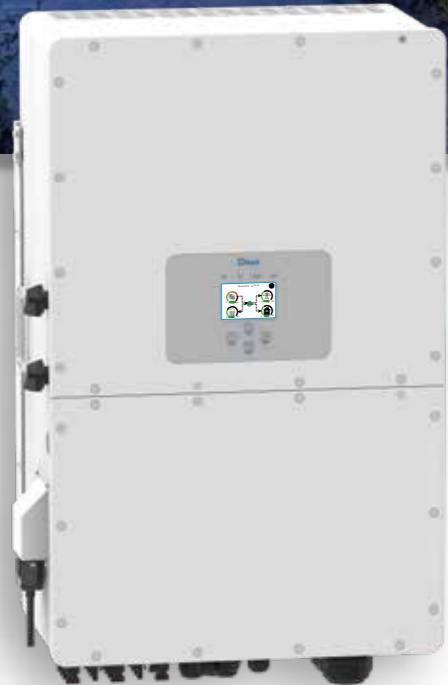
- 100** 100% unbalanced output, each phase; Max. output up to **50%** rated power
- DC** DC couple and AC couple to retrofit existing solar system
- 16** Max. 16pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 37** Max. charging/discharging current of 37A
- H** High voltage battery, higher efficiency
- 6** 6 time periods for battery charging/discharging
- EG** Support storing energy from diesel generator

## Technical Data

Model	SUN-6K-SG01HP3 -EU-AM2	SUN-8K-SG01HP3 -EU-AM2	SUN-10K-SG01HP3 -EU-AM2	SUN-12K-SG01HP3 -EU-AM2	SUN-15K-SG01HP3 -EU-AM2	SUN-20K-SG01HP3 -EU-AM2
<b>Battery Input Data</b>						
Battery Type	Li-Ion					
Battery Voltage Range (V)	150~700					
Max. Charging Current (A)	37					
Max. Discharging Current (A)	37					
Number of battery input	1					
Charging Strategy for Li-Ion Battery	Self-adaption to BMS					
<b>PV String Input Data</b>						
Max. DC Input Power (W)	7800	10400	13000	15600	19500	26000
Max. DC Input Voltage (V)	1000					
Start-up Voltage (V)	150					
MPPT Range (V)	200-850					
Full Load DC Voltage Range (V)	195-850	260-850	325-850	340-850	423-850	500-850
Rated DC Input Voltage (V)	600					
PV Input Current (A)	20+20			26+20		26+26
Max. PV I <sub>sc</sub> (A)	23+23			32+23		32+32
No. of MPP Trackers	2					
No. of Strings per MPP Tracker	1		2+1		2	
<b>AC Output Data</b>						
Rated AC Output and UPS Power (W)	6000	8000	10000	12000	15000	20000
Max. AC Output Power (W)	6600	8800	11000	13200	16500	22000
AC Output Rated Current (A)	9.1	12.2	15.2	18.2	22.8	30.3
Max. AC Current (A)	13	18	22	25	30	35
Max. Continuous AC Passthrough (A)	80					
Peak Power (off grid)	1.5 time of rated power, 10 S					
Generator input/Smart load /AC couple current (A)	9.1 / *80 / 9.1	12.2 / *80 / 12.2	15.2 / *80 / 15.2	18.2 / *80 / 18.2	22.8 / *80 / 22.8	30.3 / *80 / 30.3
Power Factor	0.8 leading to 0.8 lagging					
Output Frequency and Voltage	50/60Hz; 3L/N/PE 220/380, 230/400Vac					
Grid Type	Three Phase					
DC injection current (mA)	<0.5%I <sub>n</sub>					
<b>Efficiency</b>						
Max. Efficiency	97.60%					
Euro Efficiency	97.00%					
MPPT Efficiency	99.90%					
<b>Protection</b>						
Integrated	PV Input Lightning Protection, 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					
Output Over Voltage Protection	DC Type II/AC Type III					
<b>Certifications and Standards</b>						
Grid Regulation	CEI 0-21, VDE-AR-N 4105, NRS 097, IEC 62116, IEC 61727, G99, G98, VDE 0126-1-1, RD 1699, C10-11					
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2					
<b>General Data</b>						
Operating Temperature Range ( )	-40~60 , >45 derating					
Cooling	Smart cooling					
Noise (dB)	<45 dB					
Communication with BMS	RS485; CAN					
Weight (kg)	26					
Size (mm)	434W×645H×245D					
Protection Degree	IP65					
Installation Style	Wall-mounted					
Warranty	5 years					

# Three Phase Hybrid Inverter

SUN- 25 / 30 / 40 / 50 K-SG01HP3-EU-BM2/3/4



- 100** 100% unbalanced output, each phase; Max. output up to **50%** rated power
- DC** DC couple and AC couple to retrofit existing solar system
- 16** Max. 16pcs 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
- GEN** Support storing energy from diesel generator

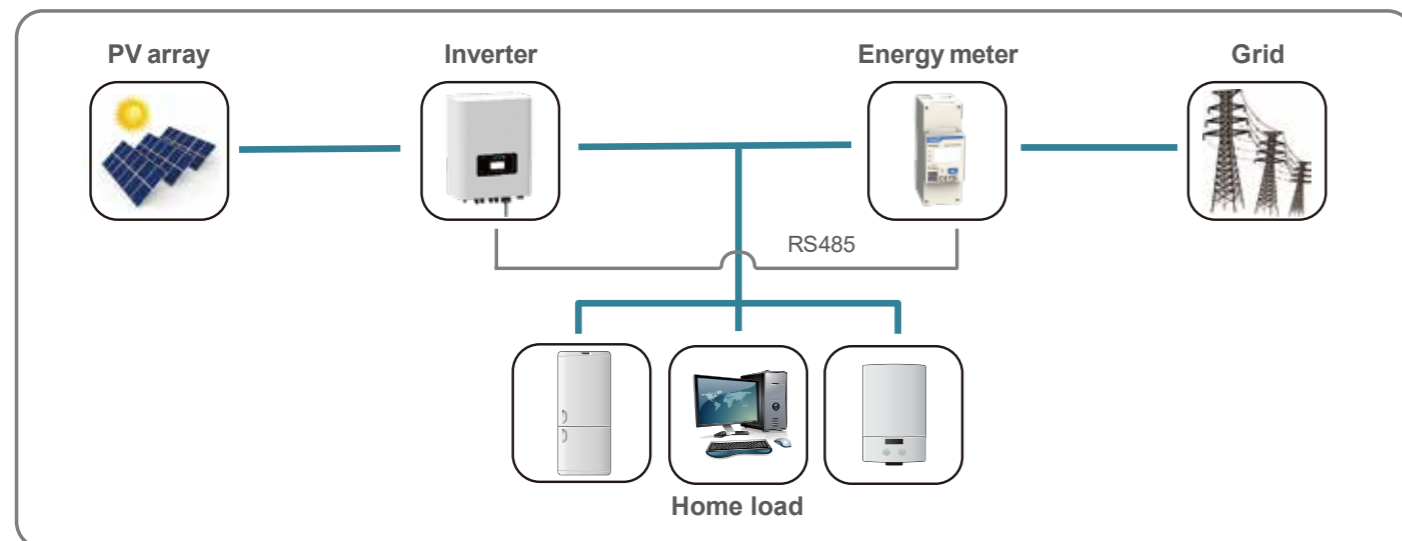
## Technical Data

Model	SUN-25K-SG01HP3 -EU-BM2	SUN-30K-SG01HP3 -EU-BM3	SUN-40K-SG01HP3 -EU-BM4	SUN-50K-SG01HP3 -EU-BM4
<b>Battery Input Data</b>				
Battery Type	Li-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			
<b>PV String Input Data</b>				
Max. DC Input Power (W)	32500	39000	52000	65000
Max. DC Input Voltage (V)	1000			
Start-up Voltage (V)	250			
MPPT Range (V)	200-850			
Min. DC Input Voltage (V)	150			
Full Load DC Voltage Range (V)	450-850	360-850	360-850	450-850
Rated DC Input Voltage (V)	600			
PV Input Current (A)	36+36	36+36+36	36+36+36+36	
Max. PV I <sub>SC</sub> (A)	55+55	55+55+55	55+55+55+55	
No. of MPP Trackers	2	3	4	
No. of Strings per MPP Tracker	2			
<b>AC Output Data</b>				
Rated AC Output and UPS Power (W)	25000	30000	40000	50000
Max. AC Output Power (W)	27500	33000	44000	55000
AC Output Rated Current (A)	38	45.6	60.8	75.8
Max. AC Current (A)	50	60	70	83.3
Max. Continuous AC Passthrough (A)	150			
Peak Power (off grid)	1.5 time of rated power, 10 S			
Generator input/Smart load /AC couple current (A)	38 / *150 / 38	45.6 / *150 / 45.6	60.8 / *150 / 60.8	75.8 / *150 / 75.8
Power Factor	0.8 leading to 0.8 lagging			
Output Frequency and Voltage	50/60Hz; 3L/N/PE 220/380, 230/400Vac			
Grid Type	Three Phase			
DC injection current (mA)	<0.5% I <sub>n</sub>			
<b>Efficiency</b>				
Max. Efficiency	97.60%			
Euro Efficiency	97.00%			
MPPT Efficiency	99.90%			
<b>Protection</b>				
Integrated	PV Input Lightning Protection, 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			
Output Over Voltage Protection	DC Type II/AC Type III			
<b>Certifications and Standards</b>				
Grid Regulation	CEI 0-21, VDE-AR-N 4105, NRS 097, IEC 62116, IEC 61727, G99, G98, VDE 0126-1-1, RD 1699, C10-11			
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2			
<b>General Data</b>				
Operating Temperature Range ( )	-40~60 , >45 derating			
Cooling	Smart cooling			
Noise (dB)	<45 dB			
Communication with BMS	RS485; CAN			
Weight (kg)	60			
Size (mm)	560.5W×837H×319D			
Protection Degree	IP65			
Installation Style	Wall-mounted			
Warranty	5 years			

# 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
<b>Battery Data</b>					
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
<b>Accuracy Class</b>					
Active power	Class1				
Reactive power	Class2				
<b>Power Supply</b>					
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%
<b>Generation Specifications</b>					
Dimensions (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°C~+55°C	-10°C~+45°C	-25°C~+55°C		
Limited working temperature range	-40°C~+70°C	25°C~+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℃~+85℃				
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.

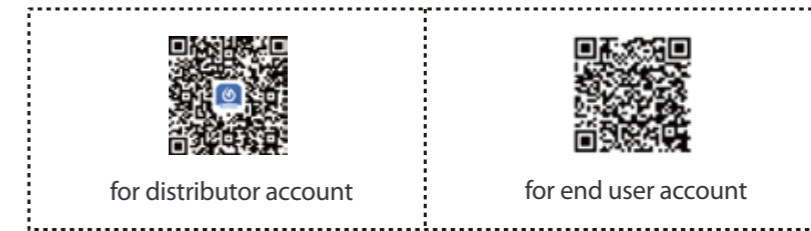
It pairs with solarman professional platform to enable remote PV system monitoring and to realize distributed power station management with lower cost and higher efficiency.

# Smart PV Management Platform



Deye residential monitoring solution takes great care to ensure that your PV system is in excellent operation throughout its entire life-cycle. This monitoring solution offer you details information of your power generating plant including Today energy, Monthly energy, yearly energy, total energy etc, through wireless communication with your router to the internet by a smart wifi plug. User can easily access to the monitoring page via PC web or phone APP.

Maximum your energy output while minimizing your costs. Scan the QR code to build your power station !

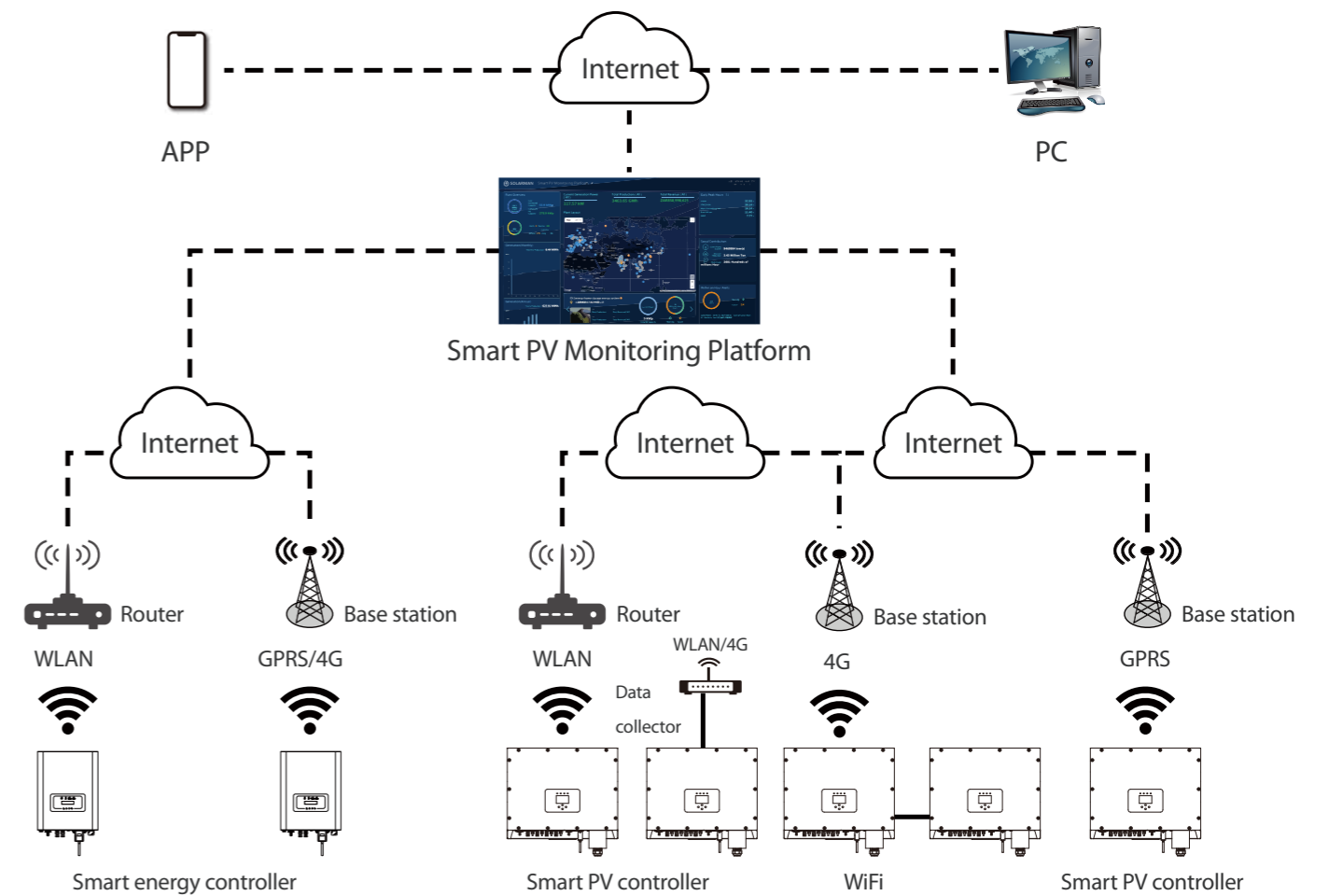


## Efficiency

- Open station supports one-click installation and registration;
- Problem support one-click dispatch and navigation.

## Safe

- Safe operation, traceable logs, etc;
- Support full lifecycle data storage to ensure data security and reliability.





# Project cases



- ▶ 5KW
- ▶ Brazil
- ▶ SUN-5K-G



- ▶ 20KW
- ▶ Brazil
- ▶ SUN-10K-G



- ▶ 50KW
- ▶ Brazil
- ▶ SUN-25K-G



- ▶ 200KW
- ▶ Brazil
- ▶ SUN-50K-G



- ▶ 200KW
- ▶ Vietnam
- ▶ SUN-50K-G

# Project cases



- ▶ 320KW
- ▶ Brazil
- ▶ SUN-80K-G



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



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



- ▶ 30KW
- ▶ China
- ▶ SUN 1200G



- ▶ 91KW
- ▶ USA
- ▶ SUN 1300G2