



Leading Inverter Manufacturer

String Inverter | Hybrid Inverter | Microinverter



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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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 600,000m² 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.

4 **Deye New Energy Australia**, a subsidiary of Deye, is focused on serving our local Australian clients better. We are establishing local warehouses and on-site technical services to enhance operations and ensure prompt, efficient service tailored to our customers' needs.

Milestones

2024

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

2022

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

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.

2007

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

2023

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

2021

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

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...

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

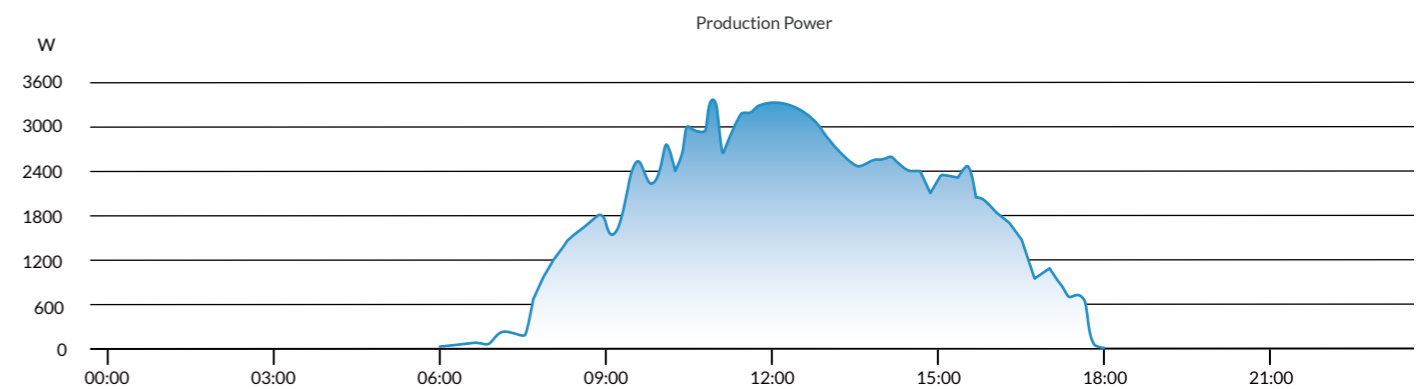
- ◆ Max. 8 MPP trackers, Max. efficiency up to 98.9%
- ◆ High DC/AC ratio 1.5 times for more yields
- ◆ Wide output voltage range 277-520Vac
- ◆ Zero export application, response speed within 0.5S
- ◆ T-type three-level topology and enhanced SVPWM
- ◆ Type II DC / AC SPD, frequency droop control technology
- ◆ 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 700W PV module
- ◆ Rapid shutdown function, safe and reliable
- ◆ WIFI communication
- ◆ IP67 protection degree, 15 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



Single Phase Hybrid Inverter

SUN-3/3.6/5/6K-SG04LP1-AU



-  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 135A
-  6 time periods for battery charging/discharging
-  Support storing energy from diesel generator







Technical Data

Model	SUN-3K -SG04LP1-24-AU	SUN-3K -SG04LP1-AU	SUN-3.6K -SG04LP1-AU	SUN-5K -SG04LP1-AU	SUN-6K -SG04LP1-AU
Battery Input Data					
Battery Type	Lead-acid or Lithium-ion				
Battery Voltage Range (V)	20-30	40-60			
Max. Charging Current (A)	140	70	90	120	135
Max. Discharging Current (A)	140	70	90	120	135
Charging Strategy for Li-Ion Battery	Self-adaption to BMS				
Number of Battery Input	1				
PV String Input Data					
Max. PV access power(W)	6000	6000	7200	10000	12000
Max. DC Input Power (W)	4500	4500	5400	7500	9000
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)	13		13+13		
Max. Input Short-Circuit Current (A)	19.5		19.5+19.5		
No. of MPP Trackers/ No. of Strings MPP Tracker	1/1		2/1+1		
AC Output Data					
Rated AC Output Active Power (W)	3000	3600	5000	6000	
Max AC Output Active Power (W)	3000	3600	5000	6000	
AC Output Rated Current (A)	13	15.7	21.7	26.1	
Max. AC Output Current (A)	13	15.7	21.7	26.1	
Max. Continuous AC Passthrough (A)	35				40
Peak Power (off grid)	2 time of rated power, 10 S				
Power Factor Adjustment Range	0.8 leading to 0.8 lagging				
Rated Input/Output Voltage/Range (V)	230 /240 0.85Un-1.1Un				
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz				
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				
Surge Protection Level	TYPE II(DC), TYPE II(AC)				
Interface					
Communication Interface	RS485/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 (solar/battery)	Transformerless/ HF Transformer				
Over Voltage Category	OVC II(DC), OVC III(AC)				
Weight (kg)	17				
Cabinet size (mm)	330W x 433H x229D (Excluding connectors and brackets)				
Protection Degree	IP65				
Type of Cooling	Intelligent Air Cooling				
Warranty	10 Years				
Grid Regulation	AS/NZS 4777.2				
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-SG05LP1-AU



-  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-SG05LP1-AU
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)	12000
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
Max. Input Short-Circuit Current (A)	39+39
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)	8000
AC Output Rated Current (A)	34.8
Max. AC Output Current (A)	34.8
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)	230 /240 0.85Un-1.1Un
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz
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
Surge Protection Level	TYPE II(DC), TYPE II(AC)
Interface	
Communication Interface	RS485/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 (solar/battery)	Transformerless/ HF Transformer
Over Voltage Category	OVC II(DC), OVC III(AC)
Weight (kg)	24.9
Cabinet size (mm)	330W x 580H x 232D (Excluding connectors and brackets)
Protection Degree	IP65
Type of Cooling	Intelligent Air Cooling
Warranty	10 Years
Grid Regulation	AS/NZS 4777.2
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2

Single Phase Hybrid Inverter

SUN-10/12K-SG02LP1-AU-AM3



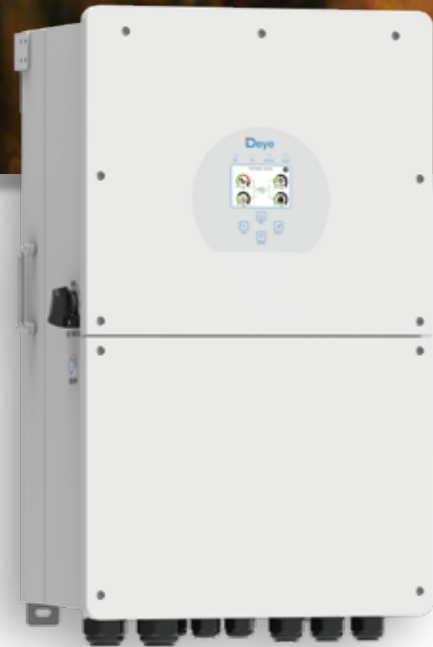
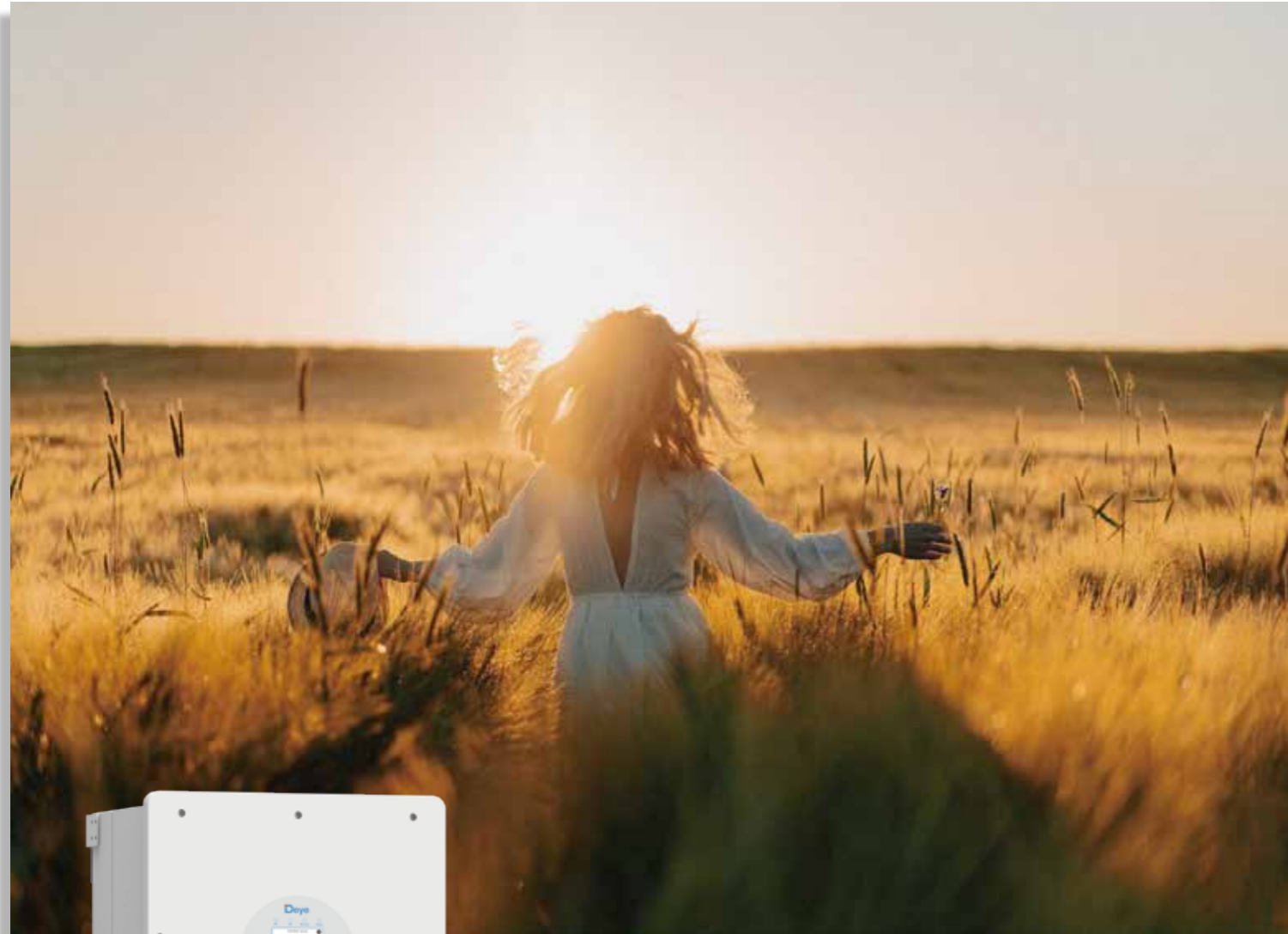
-  Colorful touch LCD, IP65 protection degree
-  AC couple to retrofit existing solar system
-  Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
-  Max. charging/discharging current of 250A
-  6 time periods for battery charging/discharging
-  Support storing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







Technical Data

Model	SUN-10K-SG02 LP1-AU-AM3	SUN-12K-SG02 LP1-AU-AM3
Battery Input Data		
Battery Type	Lead-acid or Lithium-ion	
Battery Voltage Range (V)	40-60	
Max. Charging Current (A)	220	250
Max. Discharging Current (A)	220	250
Charging Strategy for Li-Ion Battery	Self-adaption to BMS	
Number of Battery Input	1	
PV String Input Data		
Max. PV access power(W)	20000	24000
Max. DC Input Power (W)	15000	18000
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)	9999	12000
Max. AC Input/Output Apparent Power (VA)	9999	12000
AC Output Rated Current (A)	43.5	52.2
Max. AC Output Current (A)	43.5	52.2
Max. Continuous AC Passthrough (A)	60	
Peak Power (off grid)	2 time of rated power, 10 S	
Power Factor Adjustment Range	0.8 leading to 0.8 lagging	
Rated Input/Output Voltage/Range (V)	230 /240 0.85Un-1.1Un	
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz	
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	
Surge Protection Level	TYPE II(DC), TYPE II(AC)	
Interface		
Communication Interface	RS485/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)	<45 dB	
Inverter Topology (solar/battery)	Transformerless/ HF Transformer	
Over Voltage Category	OVC II(DC), OVC III(AC)	
Weight (kg)	35.6	
Cabinet size (mm)	420W×670H×233 D (Excluding connectors and brackets)	
Protection Degree	IP65	
Type of Cooling	Intelligent Air Cooling	
Warranty	10 Year	
Grid Regulation	AS/NZS 4777.2	
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-AU



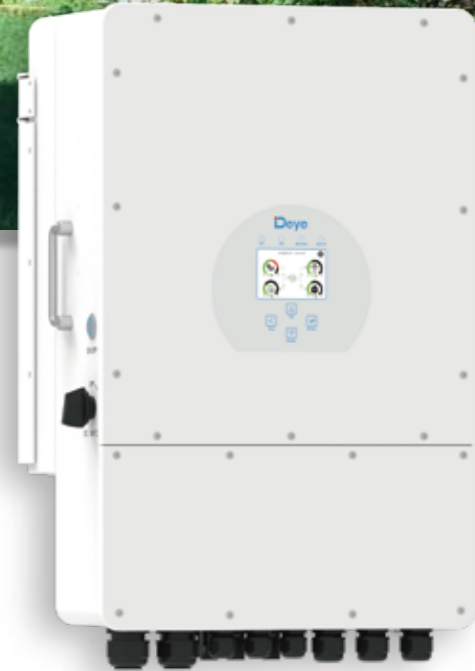
-  Colorful touch LCD, IP65 protection degree
-  AC couple to retrofit existing solar system
-  Max. 16pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
-  Max. charging/discharging current of 290A
-  6 time periods for battery charging/discharging
-  Support storing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

Technical Data

Model	SUN-12K-SG01LP1-AU	SUN-14K-SG01LP1-AU	SUN-16K-SG01LP1-AU
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	1		
PV String Input Data			
Max. PV access power(W)	24000	28000	32000
Max. DC Input Power (W)	18000	21000	24000
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)	12000	14000	16000
AC Output Rated Current (A)	52.2	60.9	69.6
Max. AC Output Current (A)	52.2	60.9	69.6
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)	230 /240 0.85Un-1.1Un		
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz		
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		
Surge Protection Level	TYPE II(DC), TYPE II(AC)		
Interface			
Communication Interface	RS485/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 (solar/battery)	Transformerless/ HF Transformer		
Over Voltage Category	OVC II(DC), OVC III(AC)		
Weight (kg)	48		
Cabinet size (mm)	464W x 763H x282D (Excluding connectors and brackets)		
Protection Degree	IP65		
Type of Cooling	Intelligent Air Cooling		
Warranty	10 Years		
Grid Regulation	AS/NZS 4777.2		
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-AU



- 100** 100% unbalanced output, each phase; Max. output up to 50% rated power
- AC** AC couple to retrofit existing solar system
- 10** Max. 10pcs 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-AU	SUN-6K -SG04LP3-AU	SUN-8K -SG04LP3-AU	SUN-10K -SG04LP3-AU	SUN-12K -SG04LP3-AU
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
Rated PV Input Voltage (V)	800				
Start-up Voltage (V)	160				
MPPT Voltage Range (V)	200-650				
Rated DC Input Voltage(V)	550				
Max. Operating PV Input Current (A)	13+13			26+13	
Max. Input Short-Circuit Current (A)	19.5+19.5			39+19.5	
No. of MPP Trackers/ No. of Strings MPP Tracker	2/1+1			2/2+1	
AC Output Data					
Rated AC Output Active Power (W)	5000	6000	8000	10000	12000
Max AC Output Active Power (W)	5000	6000	8000	10000	12000
AC Output Rated Current (A)	7.2	8.7	11.6	14.5	17.4
Max. AC Output Current (A)	7.2	8.7	11.6	14.5	17.4
Max. Continuous AC Passthrough (A)	45				
Peak Power (off grid)	2 time of rated power, 10 S				
Power Factor Adjustment Range	0.8 leading to 0.8 lagging				
Rated Input/Output Voltage/Range (V)	230 /240 0.85Un-1.1Un				
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz				
Grid Connection Form	3L+N+PE				
Total Harmonics Current Distortion (THDi)	<3% (of nominal power)				
DC Current Injection	<0.5% In				
Efficiency					
Max. Efficiency	97.60%				
Euro Efficiency	97.0%				
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				
Surge Protection Level	TYPE II(DC), TYPE II(AC)				
Interface					
Communication Interface	RS485/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				
Inverter Topology (solar/battery)	Transformerless/ HF Transformer				
Over Voltage Category	OVC II(DC), OVC III(AC)				
Noise (dB)	<55 dB				
Weight (kg)	38				
Cabinet size (mm)	422W x 658H x254D (Excluding connectors and brackets)				
Protection Degree	IP65				
Type of Cooling	Intelligent Air Cooling				
Warranty	10 Years				
Grid Regulation	AS/NZS 4777.2				
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				

Three Phase Hybrid Inverter

SUN-14/15/16/18/20K-SG05LP3-AU-SM2



- 100** 100% unbalanced output, each phase; Max. output up to 50% rated power
- AC** AC couple to retrofit existing solar system
- 10** Max. 10 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 350** Max. charging/discharging current of 350A
- 48** 48V low voltage battery, transformer isolation design
- 6** 6 time periods for battery charging/discharging
- Diesel** Support storing energy from diesel generator

Technical Data

Model	SUN-14K-SG05LP3-AU-SM2	SUN-15K-SG05LP3-AU-SM2	SUN-16K-SG05LP3-AU-SM2	SUN-18K-SG05LP3-AU-SM2	SUN-20K-SG05LP3-AU-SM2
Battery Input Data					
Battery Type	Lead-acid or Lithium-ion				
Battery Voltage Range (V)	40-60				
Max. Charging Current (A)	260	280	300	330	350
Max. Discharging Current (A)	260	280	300	330	350
Charging Strategy for Li-ion Battery	Self-adaption to BMS				
Number of Battery Input	1				
PV String Input Data					
Max. PV access power(W)	28000	30000	32000	36000	40000
Max. PV Input Power (W)	22400	24000	25600	28800	32000
Max. PV Input Voltage (V)	800				
Start-up Voltage (V)	160				
MPPT Voltage Range (V)	160-650				
Rated PV Input Voltage (V)	550				
Max. Operating PV Input Current (A)	36+36				
Max. Input Short-Circuit Current (A)	54+54				
No. of MPP Trackers/ No. of Strings MPP Tracker	2/2+2				
AC Input/Output Data					
Rated AC Input/Output Active Power (W)	14000	15000	16000	18000	20000
Max. AC Input/Output Apparent Power (VA)	14000	15000	16000	18000	20000
Rated AC Input/Output Current (A)	20.3	21.8	23.2	26.1	29
Max. AC Input/Output Current (A)	20.3	21.8	23.2	26.1	29
Max. Continuous AC Passthrough (grid to load) (A)	70				
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)	230/400V, 240/415V 0.85Un-1.1Un				
Rated Input/Output Grid Frequency/Range(Hz)	50/45-55				
Grid Connection Form	3L+N+PE				
Total Current Harmonic Distortion THDi	<3% (of nominal power)				
DC Injection Current	<0.5% In				
Efficiency					
Max. Efficiency	97.6%				
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/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	3000m				
Noise (dB)	<60				
Ingress Protection(IP) Rating	IP 65				
Inverter Topology (solar/battery)	Transformerless/ HF Transformer				
Over Voltage Category	OVC II(DC), OVC III(AC)				
Cabinet Size (WxHxD mm)	456×750×268.5 (Excluding Connectors and Brackets)				
Weight (kg)	51.9				
Type of Cooling	Intelligent Air Cooling				
Warranty	10 Years				
Grid Regulation	AS/NZS 4777.2				
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				

Three Phase Hybrid Inverter

SUN-10/12/15/20/25K-SG01HP3-AU-AM2



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



Technical Data

Model	SUN-10K-SG01 HP3-AU-AM2	SUN-12K-SG01 HP3-AU-AM2	SUN-15K-SG01 HP3-AU-AM2	SUN-20K-SG01 HP3-AU-AM2	SUN-25K-SG01 HP3-AU-AM2
Battery Input Data					
Battery Type	Lithium-ion				
Battery Voltage Range (V)	160-700				
Max. Charging Current (A)	37			50	
Max. Discharging Current (A)	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)	20000	24000	30000	40000	50000
Max. PV Input Power (W)	15000	18000	22500	30000	37500
Max. PV Input Voltage (V)	1000				
Start-up Voltage (V)	180				
MPPT Voltage Range (V)	150-850				
Rated PV Input Voltage (V)	600			700	
Max. Operating PV Input Current (A)	20+20	26+20		26+26	
Max. Input Short-Circuit Current (A)	30+30	39+30		39+39	
No. of MPP Trackers/ No. of Strings MPP Tracker	2/1+1	2/2+1		2/2+2	
AC Input/Output Data					
Rated AC Input/Output Active Power (W)	10000	12000	15000	20000	25000
Max. AC Input/Output Apparent Power (VA)	10000	12000	15000	20000	25000
Rated AC Input/Output Current (A)	14.5	17.4	21.8	29	36.3
Max. AC Input/Output Current (A)	14.5	17.4	21.8	29	36.3
Max. Continuous AC Passthrough (grid to load) (A)	40	80			
Peak Power (off-grid) (W)	1.5 times of rated power, 10s				
Power Factor Adjustment Range	0.8 leading to 0.8 lagging				
Rated Input/Output Voltage/Range (V)	230/400V 240/415V 0.85Un-1.1Un				
Rated Input/Output Grid Frequency/Range(Hz)	50Hz/45Hz-55Hz				
Grid Connection Form	3L+N+PE				
Total Current Harmonic Distortion THDi	<3% (of nominal power)				
DC Injection Current	<0.5% In				
Efficiency					
Max. Efficiency	97.6%				
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/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)	≤55				
Ingress Protection(IP) Rating	IP 65				
Inverter Topology	Transformerless				
Over Voltage Category	OVC II(DC), OVC III(AC)				
Cabinet Size (WxHxD mm)	408×638×237 (Excluding Connectors and Brackets)				
Weight (kg)	30.5				
Type of Cooling	Intelligent Air Cooling				
Warranty	10 Year				
Grid Regulation	AS/NZS 4777.2				
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				

Three Phase Hybrid Inverter

SUN-29.9/35K-SG01HP3-AU-BM3
SUN-40/50K-SG01HP3-AU-BM4



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

Technical Data

Model	SUN-29.9K-SG01HP3-AU-BM3	SUN-35K-SG01HP3-AU-BM3	SUN-40K-SG01HP3-AU-BM4	SUN-50K-SG01HP3-AU-BM4
Battery Input Data				
Battery Type	Lithium-ion			
Battery Voltage Range (V)	160-800			
Max. Charging Current (A)	50+50			
Max. Discharging Current (A)	50+50			
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	70000	80000	10000
Max. PV Input Power (W)	44850	52500	60000	75000
Max. PV Input Voltage (V)	1000			
Start-up Voltage (V)	180			
MPPT Voltage Range (V)	150-850			
Rated PV Input Voltage (V)	600			
Max. Operating PV Input Current (A)	36+36+36		36+36+36+36	
Max. Input Short-Circuit Current (A)	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	35000	40000	50000
Max. AC Input/Output Apparent Power (VA)	29900	35000	40000	50000
Rated AC Input/Output Current (A)	43.4	50.8	58	72.5
Max. AC Input/Output Current (A)	43.4	50.8	58	72.5
Max. Continuous AC Passthrough (grid to load) (A)	200			
Peak Power (off-grid) (W)	1.5 times of rated power, 10s			
Power Factor Adjustment Range	0.8 leading to 0.8 lagging			
Rated Input/Output Voltage/Range (V)	230/400V 0.85Un-1.1Un			
Rated Input/Output Grid Frequency/Range(Hz)	50Hz/45Hz-55Hz			
Grid Connection Form	3L+N+PE			
Total Current Harmonic Distortion THDi	<3% (of nominal power)			
DC Injection Current	<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/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)	≤65			
Ingress Protection(IP) Rating	IP 65			
Inverter Topology	Transformerless			
Over Voltage Category	OVC II(DC), OVC III(AC)			
Cabinet Size (WxHxD mm)	527×894×294 (Excluding Connectors and Brackets)			
Weight (kg)	80			
Type of Cooling	Intelligent Air Cooling			
Warranty	10 Years			
Grid Regulation	AS/NZS 4777.2			
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2			