



Solar Systems 2022





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Mission Statement

Our mission is to provide high-quality green technology that will benefit both our customers and the environment. We will achieve this by innovative design, high standards in production, and great value for money within the world of renewable energy.

About Us

Established over 20 years ago, Sunsynk® is part of the Global Tech China Group and is based out of Hong Kong with manufacturing and design based in Ningbo, China. We are closely partnered with the Science Department of Ningbo University, where our technology is jointly developed. The company has approximately 80 staff working on our projects at any one time.

Our key products fall within the categories described in this catalogue with further information appearing on our website.

The Global Tech China Group was founded in 2004 and is a company registered in Hong Kong, made up of British & Chinese engineers. The company has over 30 registered patents covering a wide spectrum of products, some of which have directly influenced the development of electrical appliances within the world since 2004.

Currently, Sunsynk exports to over 20 countries, including South Africa, the Philippines, Thailand, Australia, New Zealand, and the United Kingdom, where our solar lighting and power storage products have proven to be very popular.

Homes of the Future

It is sensible that new-build houses both in the UK and abroad will simply adopt solar power and battery storage as part of the initial building design. As the mains electricity price rises, it will be a severe disadvantage to selling a house without having an installed means to power generation and power storage. As electric vehicles (EVs) become the norm, the amount of power consumed by a household will double and families will be paying careful attention to the number of kWhs on their monthly bills. It will become essential that power management systems are installed to allow consumers to make informed decisions on the amount of power their appliances consume and what can be turned off. Smart-Metering is the beginning of this change and later, once houses have their own battery storage and power management systems, customers will be able to economically manage their own consumption.

The range of Sunsynk products covers all aspects of power generation, storage and management and brings the future of green, environmentally friendly energy to households and industry.

Sunsynk Parity Inverter with Storage & Programmable Export Facility

Our inverter can power all kinds of appliances in the home or office environment, including motor type appliances such as tube lights, fans, refrigerators, and air conditioners. It works rather like a water tank when storing electricity in that you fill the tank up from a generator or solar array and silently use the power until the tank is empty or close to empty. Subsequently, it can be topped back up again by the generating facilities.

When excess power is diverted to the grid, it is possible in countries such as the UK or Hong Kong to receive payback from the mains supplier. This will allow the customer to earn money and cover the cost of the inverter within a short period of time.

The Sunsynk® range of solar products is the culmination of years of research and development. This inverter is one of our newest products. This device combines the functions of the inverter, solar charger, and battery charger to offer uninterrupted power support in a convenient size. Its comprehensive LCD display offers users configurable and accessible button operation to adjust functions such as battery charging current, AC/Solar charger priority, and acceptable input voltage in order to match different applications.

In addition to producing power via solar panels the Sunsynk Inverters can be connected to an engine generator system thereby assisting in the reduction of diesel. Power is generated, stored and used by the appliance / load in preference to the engine's direct power.

SUN  SYNK[®]



Warning electric shock



AN INTRODUCTION TO OUR HYBRID INVERTERS

Hybrid Storage Inverters

Inverters have been around for a very long time. The solar panel links to the inverter, and this converts the DC power from the solar panel, into AC power that you can use in your home! This system works great, but only when the sun is out, and any energy that you don't use during that time will be fed back to the grid. Depending on your electricity tariff, you can receive some payback for this, usually a few pence per kWh. However, in the evening when there is no sun, you could be buying that power back at 20 times the price!



You may have heard the term inverter, especially if you have solar panels on your roof. But the type of inverter that connects to a battery is very different, this is called a storage inverter.

Sunsynk have invented a new type of storage inverter, called a bi-directional inverter. This allows you to fast charge a storage battery during the day, saving the excess power that you're not using, so that you can use your stored power in the evenings. Our inverters range from 3.6kW to 12kW in single and 3 phase, with the option to pair multiple units for more power. Our Inverters can also be referred to as Hybrid Inverters. This means that you can use these in both on and off-grid applications!



STANDARD FEATURES

Hybrid Storage Inverters

All of our hybrid inverters feature a very user-friendly touch screen LCD display, IP65 protection and a five-year-warranty, with optional extended warranty! They all work in both on and off-grid applications and can also be used as a UPS (Uninterruptable power supply).

Features:

- 5 year warranty.
- IP65 protected.
- Compact design.
- Works both on and off-grid.
- Rapid battery charging.
- Built in DC isolator.

All Sunsynk Hybrid Inverters are compatible with our new Data Logger and Mobile / PC app! Allowing you to get the most out of your on or off grid set-up. This gives you complete control over your Hybrid Inverter from anywhere in the world!

3.6KW HYBRID STORAGE INVERTER

Storage Inverters

The Sunsynk 3.6kW hybrid inverter is ideal for small-scale AC applications. This is our flagship inverter for use in places where you are limited to the inverter size, such as United Kingdom and Australia.

The Sunsynk hybrid inverter has many operating modes and it can be connected to several input types, such as PV, AC grid, batteries, generator, microinverter, and wind turbines. It is a complete solution.

This includes 7kW MPPT which is perfect for the UK market. Now you can have enough solar power to charge your batteries and provide the load the whole day.



With multiple operating modes for this model, the array size ranges between 1.2kW to 7kW and it has several software features common with our larger models. It carries a weatherproofing rating of IP65 and is fitted with two MPPT ports.

Features:

- Maximum efficiency of 97.6% with a wide input range.
- Double MPPT design with precise MPPT algorithm.
- Natural cooling - IP65 protection.
- Compact and light design for easy installation.
- Transformerless GT technology.
- RS485 Wi-Fi interface.
- Built-in protection features.
- 25 years lifespan.
- Built in anti-overflow protection.
- 5 year warranty.



5.5KW HYBRID STORAGE INVERTER

Storage Inverters

This is our mid-range hybrid inverter that carries the same features as the larger inverters. The 5.5kW inverter is our best-selling hybrid inverter. It is perfect for most applications.

This size is aimed at domestic premises with sufficient roof space for solar or wind power. Ideal for solar arrays ranging from 2.5kW to 6.5kW. It carries a weatherproofing rating of IP65 and is fitted with 2 x MPPT ports.



Features:

- Maximum efficiency of 97.6% with a wide input range.
- Double MPPT design with precise MPPT algorithm.
- Fan cooling - IP65 protection.
- Compact and light design for easy installation.
- Transformer-less GT technology.
- RS485 Wi-Fi interface.
- Built-in protection features.
- Built-in anti-overflow function.
- 25 years lifespan.
- 5 year warranty.

8.8KW HYBRID STORAGE INVERTER

Storage Inverters

The Sunsynk hybrid inverter is a highly efficient power management tool that allows the user to hit those 'parity' targets by managing power flow from multiple sources such as solar, wind turbines, main electrical grids, and generator, and then effectively storing and releasing electric power as the utilities require. It also carries a weatherproofing rating of IP65 and is fitted with two MPPT ports. Its convenient LCD display offers the user a configurable and accessible button operation, and once the Wi-Fi Data Logger has been attached, the user can monitor and adjust the inverter's functions remotely to make the most of installed power generation and storage.



The 8.8kW inverter is ideal when we need a bit more power, especially for systems that are totally off-grid or where you need a powerful UPS. It has a 50% surge power and the main advantage of these super inverters is that they can reverse and charge the batteries with very high power when required. In addition, since Sunsynk Hybrid Inverters use IGBT, they are much more reliable against surges and back EMF.

Features:

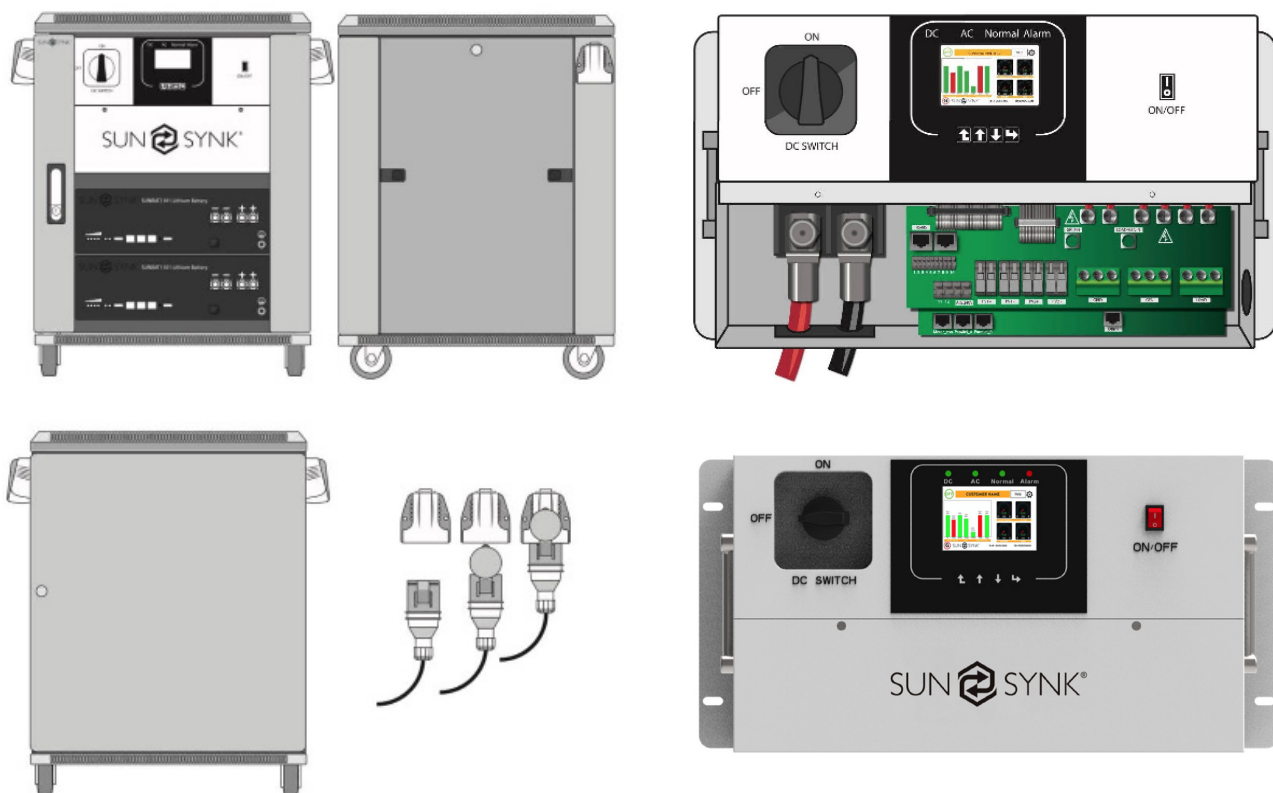
- Overload / temperature / short circuit protection.
- RS485 Wi-Fi interface.
- 3-Stage MPPT charging for optimal battery performance.
- Timing adjustable for convenient and efficient operation.
- On-grid, off-grid or uninterrupted power supply (UPS).
- Fan Cooling – IP65 protection.
- 5-year warranty.
- 25 years lifespan.
- 5 year warranty.
- PV Arc Fault Detection - Integrated (Except European Type)

Model Battery Input Data	SUNSYNK-3.6K-SG02LP1	SUNSYNK-5.5K-SG01LP1	SUNSYNK-8.8K-SG01LP1
Battery Type	Lead-acid or Lithium-ion	Lead-acid or Lithium-ion	Lead-acid or Lithium-ion
Battery Voltage Range	40~60V	40~60V	40~60V
Max. Charging Current	90A	120A	190A
Max. Discharging Current	90A	120A	190A
Charging Curve	3 Stages/Equalisation	3 Stages/Equalisation	3 Stages/Equalisation
External Temperature Sensor	Optional	Optional	Optional
Charging Strategy for Li-Ion Battery	Self-Adaptation to BMS	Self-Adaptation to BMS	Self-Adaptation to BMS
PV String Input Data			
Max. DC Input Power	7200W	6500W	10400W
PV Input Voltage	500V	370V (100V~500V)	370V (100V~500V)
MPPT Range	125~425V	125~425V	125~425V
Full Load DC Voltage Range	240~425V	240~425V	240~425V
Start-up Voltage	150V	150V	150V
PV Input Current	11A+11A	11A+11A	22A+22A
No. of MPPT Trackers	2	2	2
No. of Strings per MPPT Tracker	1+1	1+1	2+2
AC Output Data			
Rated AC Output and UPS Power	3600W	5000W	8000W
Max. AC Power	3960W	5500W	8800W
Peak Power (off-grid)	2 times of rated power, 10 S	2 times of rated power, 10 S	2 times of rated power, 10 S
AC Output Rated Current	15.7A	21.7A	33.4A/35A
Max AC Output Current	18A	25A	138A/40A
Max Continuous AC Passthrough	35A	35A	90A
Power Factor	0.8 leading to 0.8 lagging	0.8 leading to 0.8 lagging	50/60Hz; 120/240Vac (split phase), 280Vac (2/3), 230Vac (single phase)
Output Frequency and Voltage	50/60Hz; 220/230/240Vac (single phase)	50/60Hz; 220/230/240Vac (single phase)	Split phase, 2/3 phase (single phase)
Grid Type	Single Phase	Single Phase	THD<3% (Linear load<1.5%)
Current Harmonic Distortion	THD<3% (Linear load<1.5%)	THD<3% (Linear load<1.5%)	THD<3% (Linear load<1.5%)
Efficiency			
Max. Efficiency	97.60%	97.60%	97.60%
MPPT Efficiency	96.50%	96.50%	96.50%
Euro Efficiency	99.90%	99.90%	99.90%
Protection			
PV Input Lightning Protection	Integrated	Integrated	Integrated
Anti-islanding Protection	Integrated	Integrated	Integrated
Pv String Input Reverse Polarity Protection	Integrated	Integrated	Integrated
Insulation Resistor Detection	Integrated	Integrated	Integrated
Residual Current Monitoring Unit	Integrated	Integrated	Integrated
Output Over Current Protection	Integrated	Integrated	Integrated
Output Shorted Protection	Integrated	Integrated	Integrated
Output Over Voltage Protection	Integrated	Integrated	Integrated
Certifications and Standards			
Grid Regulation	VDE 0126, AS4777, NRS2017, G98, G99, IEC61683, IEC62116, IEC61727, RD1699:2011, XP C15-712-3:2019-05	VDE 0126, AS4777, NRS2017, G98, G99, IEC61683, IEC62116, IEC61727, RD1699:2011, XP C15-712-3:2019-05	UL1741, IEEE1547, RULE21, VDE0126, AS4777, NRS2017, G98, G99, IEC61683, IEC6116, IEC61727
Safety Regulation	IEC62109-1, IEC62109-2	IEC62109-1, IEC62109-2	IEC62109-1, IEC62109-2
EMC	EN61000-6-1, EN61000-6-3	EN61000-6-1, EN61000-6-3	EN61000-6-1, EN61000-6-3, FCC 15 Class B
General Data			
Operating Temperature Range	-25~60°C, >45°C Derating	-25~60°C, >45°C Derating	-25~60°C, >45°C Derating
Cooling	Natural Cooling	Fan	Fan
Noise	<30dB	<30dB	<30dB
Communication with BMS	RS485; CAN	RS485; CAN	RS485; CAN
Weight	20.5kg	20.5kg	32kg
Size (Length x Width x Height)	580 x 330 x 208 mm	580 x 330 x 208 mm	670 x 420 x 233 mm
Protection Degree	IP65	IP65	IP65
Installation Style	Wall-mounted	Wall-mounted	Wall-mounted

5.5KW / 7.6KW RACK MOUNTED HYBRID STORAGE INVERTERS

Storage Inverters

The rack mounted inverters, 5.5kW and 7.6kW, are perfect for use where space is of a premium. They can be stacked up with batteries for several applications, for example, telecommunications systems and office UPS. Its convenient LCD display offers the user a configurable and accessible button operation, and once the Wi-Fi Data Logger has been attached, the user can monitor and adjust the inverter's functions remotely to make the most of installed power generation and storage.



In addition, similarly to our other hybrids, they can be connected to several input types, such as PV, AC grid, batteries, generator, microinverter, and wind turbines.

Model Battery Input Data	SUNSYNK-6K-SG02LP1	SUNSYNK-7.6K-SG02LP1
Battery Type	Lead-acid or Lithium-ion	
Battery Voltage Range	40~60V	
Max. Charging Current	135A	190A
Max. Discharging Current	135A	190A
Charging Curve	3 Stages/Equalisation	
External Temperature Sensor	Optional	
Charging Strategy for Li-Ion Battery	Self-Adaptation to BMS	
PV String Input Data		
Max. DC Input Power	7800W	9880W
PV Input Voltage	370V (100V~500V)	
MPPT Range	125~425V	
Start-up Voltage	150V	
PV Input Current	18A+9A	22A+22A
No. of MPPT Trackers	2	
No. of Strings per MPPT Tracker	2+1	2+2
AC Output Data		
Rated AC Output and UPS Power	6000W	7600W
Max. AC Power	6600W	8360W
Peak Power (off-grid)	2 times of rated power, 10 S	
AC Output Rated Current	25A	31.7A/33A
Max AC Output Current	27.5A	34.9A/36.3A
Max Continuous AC Passthrough	40A	50A
Output Frequency and Voltage	50/60Hz; 120/240Vac (split phase), 208Vac(2/3), 230Vac (single phase)	
Grid Type	Split phase, 2/3 phase, single phase	
Current Harmonic Distortion	THD<3% (Linear load<1.5%)	
Efficiency		
Max. Efficiency	97.60%	
MPPT Efficiency	97.00%	
Euro Efficiency	99.90%	
Protection		
PV Arc Fault Detection	Integrated (Except European Type)	
PV Input Lightning Protection	Integrated	
Anti-islanding Protection	Integrated	
Pv String Input Reverse Polarity Protection	Integrated	
Insulation Resistor Detection	Integrated	
Residual Current Monitoring Unit	Integrated	
Output Over Current Protection	Integrated	
Output Shorted Protection	Integrated	
Output Over Voltage Protection	Integrated	
Certifications and Standards		
Grid Regulation	UL1741, IEE1547, RULE21, VDE0126, AS4777, NRS2017, G98, G99, IEC61683, IEC62116, IEC61727	
Safety Regulation	IEC62109-1, IEC62109-2	
EMC	EN61000-6-1, EN61000-6-3, FCC 15 Class B	
General Data		
Operating Temperature Range	-25~60°C, >45°C Derating	
Cooling	Fan	
Noise	<30dB	
Communication with BMS	RS485; CAN	
Warranty	5 years	

8KW / 10KW / 12KW 3 PHASE HYBRID STORAGE INVERTERS

3-Phase Storage Inverters

The Sunsynk three-phase hybrid storage inverters are highly efficient power management tools for three-phase grid applications. These inverters allow the user to control power flow from multiple sources such as solar, main electrical grids, and generator, and effectively storing and delivering electric power to your applications.



These amazing three-phase inverters have a unique feature. They can operate and balance the load, which means you can have 20% connected to one phase, 20% to another, and 60% to the third phase, and it still gives perfect phase rotation. No other inverter in their class can offer this feature.

Features:

- Maximum charging/discharging current of 250A.
- Frequency droop control.
- Up to 4 inverters in parallel.
- Interactive Display.
- RS485 Wi-Fi interface.
- 5 year warranty.

Model Battery Input Data	SUN-8K-SG01LP3	SUN-10K-SG01LP3	SUN-12K-SG01LP3
Battery Type	Lead-acid or Lithium-ion		
Battery Voltage Range	40~60V		
Max. Charging Current	190A	210A	240A
Max. Discharging Current	190A	210A	240A
Charging Curve	3 Stages/Equalisation		
External Temperature Sensor	Optional		
Charging Strategy for Li-Ion Battery	Self-Adaptation to BMS		
PV String Input Data			
Max. DC Input Power	9880W	13000W	15000W
PV Input Voltage	450V (140V~800V)		
MPPT Range	140~800V		
Start-up Voltage	160V		
PV Input Current	12.5A+12.5A	25A+12.5A	25A+12.5A
No. of MPPT Trackers	2		
No. of Strings per MPPT Tracker	1+1	2+1	2+1
AC Output Data			
Rated AC Output and UPS Power	8000W	10000W	12000W
Max. AC Power	6800W	11000W	13200W
Peak Power (off-grid)	2 times of rated power, 10 S		
AC Output Rated Current	11.6A	14.5A	17.4A
Max AC Output Current	12.8A	16A	19.1A
Max Continuous AC Passthrough	60A	60A	60A
Output Frequency and Voltage	50/60Hz; 230/400Vac (Three Phase)		
Grid Type	Three Phase		
Current Harmonic Distortion	THD<3% (Linear load<1.5%)		
Efficiency			
Max. Efficiency	97.60%		
MPPT Efficiency	97.00%		
Euro Efficiency	99.90%		
Protection			
PV Arc Fault Detection	Integrated (Except European Type)		
PV Input Lightning Protection	Integrated		
Anti-islanding Protection	Integrated		
Pv String Input Reverse Polarity Protection	Integrated		
Insulation Resistor Detection	Integrated		
Residual Current Monitoring Unit	Integrated		
Output Over Current Protection	Integrated		
Output Shorted Protection	Integrated		
Output Over Voltage Protection	Integrated		
Surge Protection	DC Type II / AC Type II		
Certifications and Standards			
Grid Regulation	UL1741, IEE1547, RULE21, VD0126, AS4777, NRS2017, G98, G99, IEC61683, IEC62116, IEC61727		
Safety Regulation	IEC2109-1, IEC62109-2		
EMC	EN61000-6-1, EN61000-6-3, FCC 15 Class B		
General Data			
Operating Temperature Range	-25~60°C, >45°C Derating		
Cooling	Fan		
Noise	<30dB		
Communication with BMS	RS485; CAN		
Weight	45kg		
Size (Length x Width x Height)	673 x 462 x 265mm		
Warranty	5 years		



LITHIUM BATTERIES

5.12kWh / 51.2V / 100Ah

Sunsynk have produced a perfect battery storage solution. The module consists of Lithium-ion rechargeable batteries with 5.12kWh capacity rated at 51.2V 100Ah with built-in battery management system.



Long Life Span:

The battery can be expected to remain serviceable for more than 10 years and this takes into consideration that it is charged and discharged once per day at room temperature (25°C).

Stable:

Olivine Lithium-ion phosphate batteries provide excellent thermal stability and storage. The module also incorporates a self-monitoring function for the detection of any abnormalities in power storage.

Compact Design:

The height is nicely designed as per standard industrial rack size (3U).

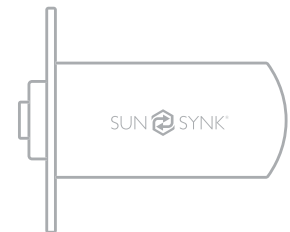
High Scalability:

Multiple energy storage modules can be connected in parallel and the capacity customised according to the intended usage.

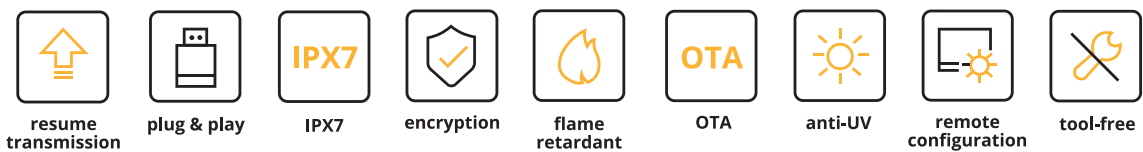
Power Lite Lithium Battery System L051100-A	
Cell Type	Lithium Ferro Phosphate (LifePO4 or LFP)
Nominal Operating Voltage	51.2V
Nominal Capacity	100Ah / 5.12kWh
Depth of Discharge (DoD)	100%
Usuable Capacity	5.12kWh
Packing	1P16S
IP Rating	IP40
Minimum Operating Voltage	44.8V
Maximum Operating Voltage	57.6V
Standard Charging Current	50A
Max. Continuous Charging Current	50A
Standard Discharging Current	50A
Max. Continuous Discharging Current	100A (1C, 25°C ± 2°C)
Max. Pulse Discharging Current	200A (2C, 30S, 25°C ± 2°C SOC≥40%)
Standard Charging Method	0.5C CC to 57.6V, CV at 57.6V till current is 0.05C
Min. Operating Temperature (no derating)	Charging: 0°C / Discharging: -20°C
Max. Operating Temperature (no derating)	Charging: 50°C / Discharging: 55°C
Operating ROH	20% ~ 80%
Storage Temperature	-20 ~ 50°C
Self-discharging rate	≤5% (25°C, 59% SoC)
Soc @ end of product line	40%
Insulation Resistance	>100MΩ
Voltage Difference in each module	≤20mV
Inner Resistance of single cell	0.34 ± 0.05m (fresh cell 30 ~ 40% SoC)
Altitude	Below 2000mΩ
Weight	48kg
Dimensions	440 x 530 x 132mm (not include connector, MSD and other parts)
Expected Life @ 25°C	Greater than 10 years if used as per warranty terms



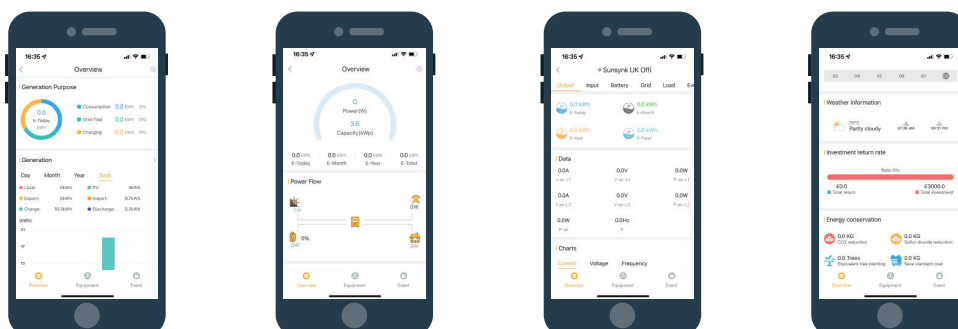
SUNSYNK DATA LOGGER & SUNSYNK LOGGER APP



- ▶ The Sunsynk data logger & Sunsynk logger app has been completely developed to help you get the most out of your Sunsynk inverter. It has been specially tailored for both customers and installers.
- ▶ The Sunsynk data logger has been manufactured to the highest standards. It is IPX7 rated, flame retardant, anti-UV and encrypted, making it ideal for most indoor or outdoor applications.



- ▶ Using the Sunsynk app with your Sunsynk data logger gives you complete control of your system from anywhere in the world, provided that you have an internet connection.





PLUG IN AND START SAVING

- ▶ **Change all settings remotely.** Our data logger allows you to change and edit all settings and parameters remotely, all settings that can be accessed on the inverter LCD are available within the app and once saved will instantly update on your inverter LCD display.
- ▶ **Fully Integrated with Octopus Agile.** Our app is fully integrated with Octopus Agile. From the app you can view the current rates for that day, with this information you can choose what you want to pay for your electricity. You can setup and monitor your charge and discharge prices so that you charge your battery at the cheapest rates. When the price increases your battery discharges and saves you money by shortening the peak electricity window.
- ▶ **Reporting.** You can generate custom reports and graphs to help you monitor and understand how your system is operating and where you are saving money.
- ▶ **Live stats and monitoring.** You have access to multiple stats including live monitoring. Using this app allows you to see peaks in your energy usage, you can then customize your system to work around this to help you save money on your electricity bills.
- ▶ **System Power Flow.** The system power flow display shows you a fundamental overview of what your system is currently implementing, whether that be charging your battery from the grid, genset or turbine.
- ▶ **Push notifications and alerts.** Your app will also notify you if you have any faults or warnings on your system. If there is a power cut, your app will notify you of this and show that your load is running on your stored energy (UPS).
- ▶ **Export system settings.** From an installers point of view, installing Sunsynk inverters day after day can be a lengthy process when it comes to configuring the system settings. Using the Sunsynk app you can save a lot of time by exporting one of your previously installed inverter settings files and uploading it to the one you are currently working on.
- ▶ **Recommended system files.** Sunsynk engineers have come together to build the best recommended system setting files for all applications such as AC coupled, off grid, generator coupled, turbine coupled (to name a few). This allows you to upload all the essential settings to give you a head start on your install and cut down on your installation time.
- ▶ **Sharing / transferring connection.** Next to the plant information with the app you have an option to share or transfer. Using this you can share the connection with another user such as your installer or a Sunsynk engineer so that they can investigate any issues or make amendments that you have requested. If an installer configures the system via their app, they can transfer the plant connection to the customer, this way only the customer can only monitor and make changes to their plant until the connection is shared.



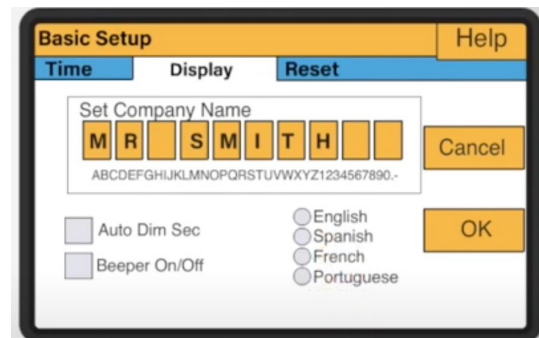
GETTING TO KNOW OUR INVERTERS

The Sunsynk operating system is one of the best in its class. It provides real-time information as well as the daily cumulative readings for power consumption and generation. The screen is an interactive touch-screen and users can adjust it by their finger-tips. Special attention should be paid to the bar chart and the cog icons.

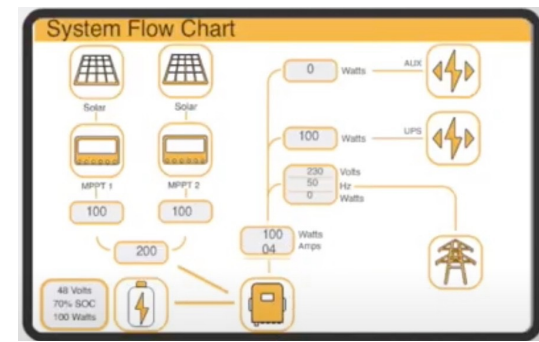
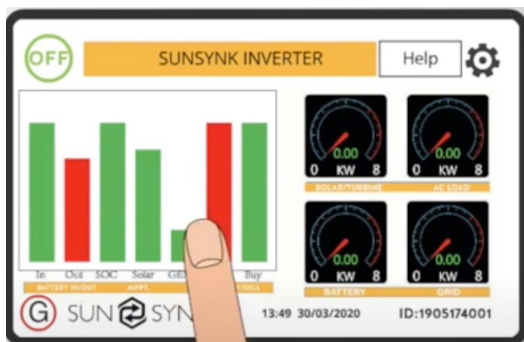
By clicking the various icons on the Home page, the user can access lots more information, like this simple spread sheet providing real-time data.

Let's start with the basic setup features which include setting date & time as well as the installer's name or telephone number.

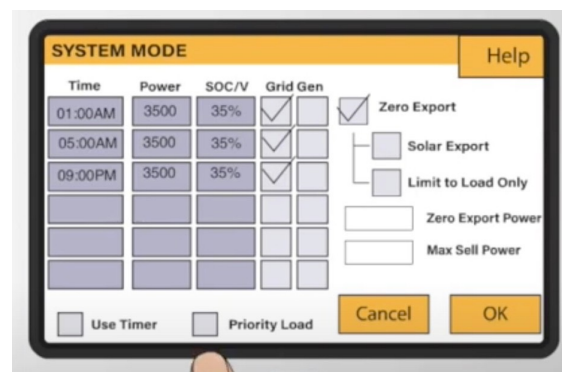
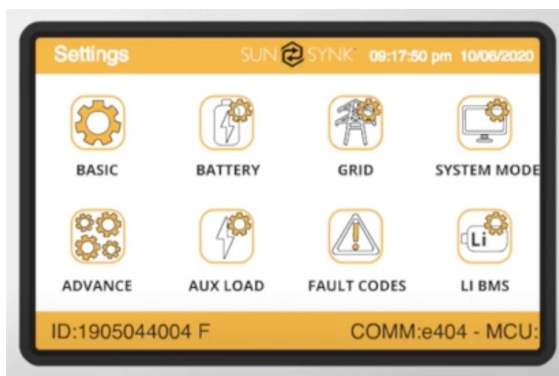
From the basic setup page, you also have a choice of pre-installed languages. These are Spanish, French, Portuguese and English.



If you click on the bar chart icon you can access this system flow chart, showing exactly what the inverter is doing at any particular time and how the power is flowing through the device.



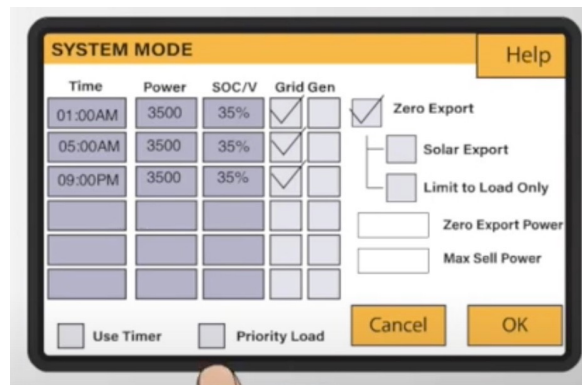
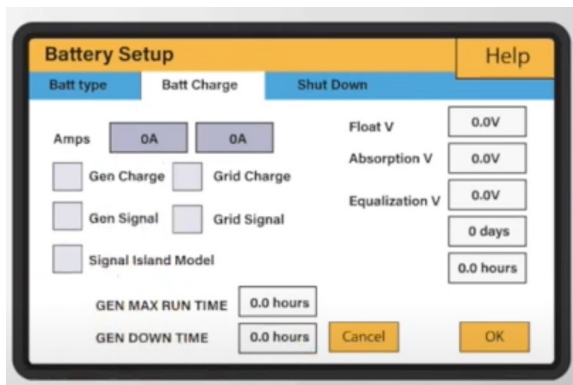
If you click the cog icon in the top right-hand corner you can now access the settings navigation page which will take you to the various programming pages.



The battery setup allows the user to choose between AGM-battery, lithium battery or no battery.

On the battery charge page, besides solar charging, the user can select to charge the battery packs from either the grid or by generator. If a signal is required to trigger a generator to start, this function can be selected from this page. In addition, we have the option of using the relay as an automatic response when the inverter is in island-mode

Also, the battery setup page lets you select the shutdown voltages when the inverter's power is OFF or if the battery is LOW.



If you are using lithium batteries and have connected a communication cable between the lithium batteries, BMS and inverter, you need to make sure the circuit is correct and communicating. By clicking the icon on the bottom right hand side of the SETTINGS page the user can confirm the status of this function.

Grid setup is fairly simple and provides the parameters of the grid voltage and frequency upper and lower settings. In most cases the default settings will be fine unless you have a particular problem with your mains power.

System mode is the heart of the inverter and enables the user to set timings for the inverter to do various tasks. From here you can also select your solar to export power to the load or to the battery. In addition, you can control the maximum power of the inverter and the import power from the grid to help prevent zero export.

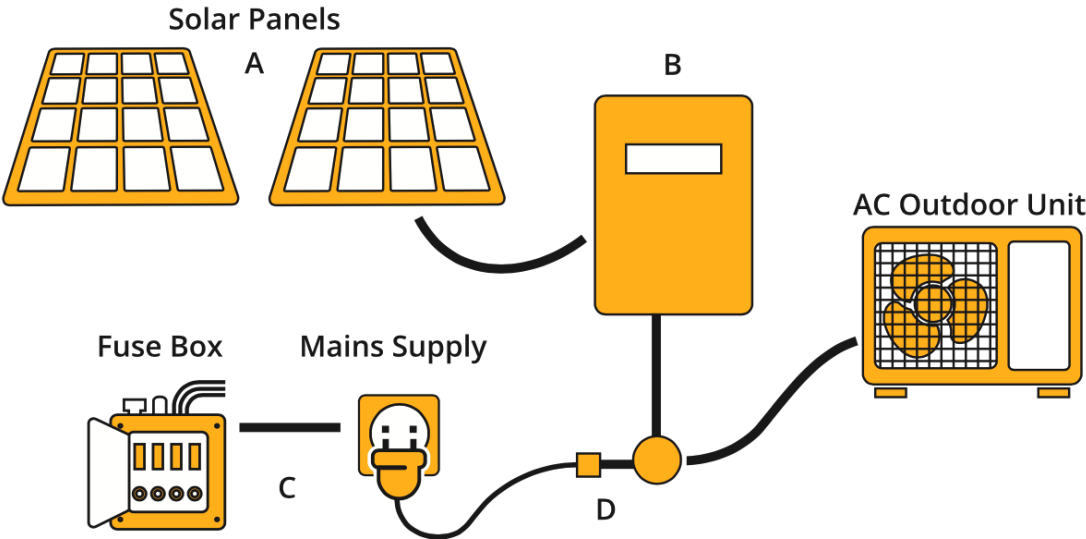
SINGLE PHASE ON GRID INVERTERS

SUN-1.5 / 2 / 3 / 3.6 / 5 / 6 / 7.5 / 8 / 10K-G

Sunsynk have produced inverters specifically designed to handle solar systems that power heaters and water pumps fitted to swimming pools, greenhouses and other power-hungry applications. But, they can also be utilized to provide power for homes and businesses.



Some of these models are perfect for heating your hot water on sunny days and, if there is low sunshine, it will automatically pull power from the mains grid. The CT coil built into these inverters will control when power is drawn from the grid or from the solar array. A Wi-Fi connection allows the user to remotely monitor and control this inverter and all connections are IP65 rated.



Model Input	SUN-1.5K-G	SUN-2K-G	SUN-3K-G
Max. DC Input Power	1.95kW	2.6kW	3.6kW
Max. DC Input Voltage	550V		
Start-up DC Input Voltage	80V		
MPPT Operating Range	70~550V		
Max. DC Input Current	12.5A		
Number of MPPT / Strings per MPPT	1 / 1		
Output			
Rated Output Power	1.5kW	2kW	3kW
Max. Active Power	1.65kW	2.2kW	3.3kW
Rated AC Grid Voltage	230V		
AC Grid Voltage Range	160~300V		
Rated Grid Frequency	50/60Hz (Optional)		
Operating Phase	Single-Phase		
Rated AC Grid Output Current	6.5A	8.7A	13.1A
Max. AC Output Current	7.2A	9.6A	14A
Output Power Factor	0.8 leading to 0.8 lagging		
Grid Current THD	<2%		
DC Injection	<0.5%		
Grid Frequency Range	47~52 or 57~62 (Optional)		
Efficiency			
Max. Efficiency	97.3%	97.3%	97.5%
Euro Efficiency	97.1%	97.1%	97.3%
MPPT Efficiency	>99%		
Protection			
DC Reverse-Polarity Protection	Yes		
AC Short Circuit Protection	Yes		
AC Output Overcurrent Protection	Yes		
Output Overvoltage Protection	Yes		
Insulation Resistance Protection	Yes		
Ground Fault Monitoring	Yes		
Islanding Protection	Yes		
Temperature Protection	Yes		
Intergrated DC Switch	Yes		
Remote Software Upload	Yes		
Remote Change of Operating Parameters	Yes		
Surge Protection	DC Type II / AC Type II		
General Data			
Size (W x H x D)	330 x 310 x 115mm		
Weight	6kg		
Internal Consumption	<1W (Night)		
Running Temperature	-25°C~65°C		
Ingress Protection	IP65		
Noise Emission (Typical)	<25dB		
Cooling Concept	Natural Cooling		
Max. Operating Altitude Without Derating	2000m		
Designed Lifetime	> 20 years		
Grid Connection Standard	EN50549, IEC61727, VDE 0126-1-1, IEC62109-1-2		
Operating Surroundings Humidity	0-100%		
Safety EMC / Standard	IEC62109-1/-2, EN61000-6-1, EN61000-6-3		
Features			
DC Connection	MC-4 mateable		

Model Input	SUN-3.6K-G	SUN-5K-G	SUN-6K-G
Max. DC Input Power	4.68kW	6.5kW	6.6kW
Max. DC Input Voltage	550V		
Start-up DC Input Voltage	80V		
MPPT Operating Range	70~550V		
Max. DC Input Current	12.5A + 12.5A		
Number of MPPT / Strings per MPPT	2 / 1		
Output			
Rated Output Power	3.6kW	5kW	6kW
Max. Active Power	4kW	5.5kW	6.6kW
Rated AC Grid Voltage	230V		
AC Grid Voltage Range	180~300V		
Rated Grid Frequency	50/60Hz (Optional)		
Operating Phase	Single-Phase		
Rated AC Grid Output Current	15.7A	21.7A	26A
Max. AC Output Current	17.4A	23.9A	28.7A
Output Power Factor	0.8 leading to 0.8 lagging		
Grid Current THD	<2%		
DC Injection	<0.5%		
Grid Frequency Range	47~52 or 57~62 (Optional)		
Efficiency			
Max. Efficiency	97.3%	97.3%	97.5%
Euro Efficiency	97.1%	97.1%	97.3%
MPPT Efficiency	>99%		
Protection			
DC Reverse-Polarity Protection	Yes		
AC Short Circuit Protection	Yes		
AC Output Overcurrent Protection	Yes		
Output Overvoltage Protection	Yes		
Insulation Resistance Protection	Yes		
Ground Fault Monitoring	Yes		
Islanding Protection	Yes		
Temperature Protection	Yes		
Intergrated DC Switch	Yes		
Remote Software Upload	Yes		
Remote Change of Operating Parameters	Yes		
Surge Protection	DC Type II / AC Type II		
General Data			
Size (W x H x D)	330 x 310 x 172mm		
Weight	11kg		
Internal Consumption	<1W (Night)		
Running Temperature	-25°C~65°C		
Ingress Protection	IP65		
Noise Emission (Typical)	<25dB		
Cooling Concept	Natural Cooling		
Max. Operating Altitude Without Derating	2000m		
Designed Lifetime	> 20 years		
Grid Connection Standard	EN50549, IEC61727, VDE 0126-1-1, IEC62109-1-2		
Operating Surroundings Humidity	0-100%		
Safety EMC / Standard	IEC62109-1/-2, EN61000-6-1, EN61000-6-3		
Features			
DC Connection	MC-4 mateable		

Model Input	SUN-7.5K-G	SUN-8K-G	SUN-10K-G
Max. DC Input Power	9.75kW	10.4kW	13kW
Max. DC Input Voltage	550V		
Start-up DC Input Voltage	120V		
MPPT Operating Range	100~550V		
Max. DC Input Current	12.5A + 25A	12.5A + 25A	25A + 25A
Number of MPPT / Strings per MPPT	2 / 1	2 / 1 + 2	2 / 2 + 2
Output			
Rated Output Power	7.5kW	8kW	10kW
Max. Active Power	8.25kW	8.8kW	11kW
Rated AC Grid Voltage	230V		
AC Grid Voltage Range	180~300V		
Rated Grid Frequency	50/60Hz (Optional)		
Operating Phase	Single-Phase		
Rated AC Grid Output Current	32.6A	34.8A	43.5A
Max. AC Output Current	35.9A	38.3A	47.8A
Output Power Factor	0.8 leading to 0.8 lagging		
Grid Current THD	<2%		
DC Injection	<0.5%		
Grid Frequency Range	47~52 or 57~62 (Optional)		
Efficiency			
Max. Efficiency	97.7%		
Euro Efficiency	97.5%		
MPPT Efficiency	>99%		
Protection			
DC Reverse-Polarity Protection	Yes		
AC Short Circuit Protection	Yes		
AC Output Overcurrent Protection	Yes		
Output Overvoltage Protection	Yes		
Insulation Resistance Protection	Yes		
Ground Fault Monitoring	Yes		
Islanding Protection	Yes		
Temperature Protection	Yes		
Intergrated DC Switch	Yes		
Remote Software Upload	Yes		
Remote Change of Operating Parameters	Yes		
Surge Protection	DC Type II / AC Type II		
General Data			
Size (W x H x D)	330 x 310 x 198.5mm		
Weight	11kg		
Internal Consumption	<1W (Night)		
Running Temperature	-25°C~65°C		
Ingress Protection	IP65		
Noise Emission (Typical)	<25dB		
Cooling Concept	Natural Cooling		
Max. Operating Altitude Without Derating	2000m		
Designed Lifetime	> 20 years		
Grid Connection Standard	EN50549, IEC61727, VDE 0126-1-1, IEC62109-1-2		
Operating Surroundings Humidity	0-100%		
Safety EMC / Standard	IEC62109-1/-2, EN61000-6-1, EN61000-6-3		
Features			
DC Connection	MC-4 mateable		

3-PHASE STRING INVERTERS

SUN-4 / 5 / 6 / 7 / 8 / 10 K-G03

The Sunsynk three-phase inverters are the perfect solution for grid-tied applications, ranging from medium to high power. These rugged machines have excellent harmonics, high efficiency, wide output voltage range, and are approved for use in many countries.



These lower power models are ideal for most small commercial and domestic applications. All inverters come with a user-friendly display.

Features:

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

Model Input	SUN-4K-G03	SUN-5K-G03	SUN-6K-G03	SUN-7K-G03	SUN-8K-G03	SUN-10K-G03
Max. DC Input Power	5.2kW	6.5kW	7.8kW	9.1kW	10.4kW	13kW
Max. DC Input Voltage	1000V					
Start-up DC Input Voltage	140V					
MPPT Operating Range	120~850V					
Max. DC Input Current	12.5A + 12.5A					
Number of MPPT / Strings per MPPT	2 / 1					
Output						
Rated Output Power	4kW	5kW	6kW	7kW	8kW	10kW
Max. Active Power	4.4kW	5.5kW	6.6kW	7.7kW	8.8kW	11kW
Rated AC Grid Voltage	380/400V					
AC Grid Voltage Range	277~460V					
Rated Grid Frequency	50/60Hz (Optional)					
Operating Phase	Three-Phase					
Rated AC Grid Output Current	5.8A	7.2A	8.7A	10.1A	11.6A	14.5A
Max. AC Output Current	6.3A	8A	9.6A	11.1A	12.7A	16A
Output Power Factor	0.8 leading to 0.8 lagging					
Grid Current THD	<2%					
DC Injection	<0.5%					
Grid Frequency Range	47~52 or 57~62 (Optional)					
Efficiency						
Max. Efficiency	98.3%					
Euro Efficiency	97.5%					
MPPT Efficiency	>99%					
Protection						
DC Reverse-Polarity Protection	Yes					
AC Short Circuit Protection	Yes					
AC Output Overcurrent Protection	Yes					
Output Overvoltage Protection	Yes					
Insulation Resistance Protection	Yes					
Ground Fault Monitoring	Yes					
Islanding Protection	Yes					
Temperature Protection	Yes					
Intergrated DC Switch	Yes					
Remote Software Upload	Yes					
Remote Change of Operating Parameters	Yes					
Surge Protection	DC Type II / AC Type II					
General Data						
Size (W x H x D)	330 x 430 x 177mm					
Weight	15kg					
Internal Consumption	<1W (Night)					
Running Temperature	-25°C~65°C					
Ingress Protection	IP65					
Noise Emission (Typical)	<25dB					
Cooling Concept	Natural Cooling					
Max. Operating Altitude Without Derating	2000m					
Designed Lifetime	> 20 years					
Grid Connection Standard	EN50549, IEC61727, VDE 0126-1-1, IEC62109-1-2					
Operating Surroundings Humidity	0-100%					
Safety EMC / Standard	IEC62109-1/-2, EN61000-6-1, EN61000-6-3					
Features						
DC Connection	MC-4 mateable					
AC Connection	IP65 rated plug					
Display	LCD1602					
Interface	RS485/RS232/Wi-Fi/LAN					

3-PHASE STRING INVERTERS

SUN-12 / 15 K-G03

The 12 / 15kW 3-Phase String Inverters are the big brothers of the smaller units, and they are perfect for most small commercial and large domestic applications.



These machines are safe and reliable and can reach 98.5% efficiency with a high power factor. They also have a user-friendly LCD display plus the ability via Wi-Fi to be monitored and managed remotely by smartphone or PC.

Features:

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

Model Input	SUN-12K-G	SUN-15K-G
Max. DC Input Power	15.6kW	18kW
Max. DC Input Voltage	1000V	
Start-up DC Input Voltage	250V	
MPPT Operating Range	200~800V	
Max. DC Input Current	11A + 22A	
Number of MPPT / Strings per MPPT	2 / 1 + 2	
Output		
Rated Output Power	12kW	15kW
Max. Active Power	13.2kW	16.5kW
Rated AC Grid Voltage	380/400V	
AC Grid Voltage Range	277~460V	
Rated Grid Frequency	50/60Hz (Optional)	
Operating Phase	Three-Phase	
Rated AC Grid Output Current	17.4A	21.8A
Max. AC Output Current	19.14A	23.9A
Output Power Factor	0.8 leading to 0.8 lagging	
Grid Current THD	<2%	
DC Injection	<0.5%	
Grid Frequency Range	47~52 or 57~62 (Optional)	
Efficiency		
Max. Efficiency	98.5%	
Euro Efficiency	97.5%	
MPPT Efficiency	>99%	
Protection		
DC Reverse-Polarity Protection	Yes	
AC Short Circuit Protection	Yes	
AC Output Overcurrent Protection	Yes	
Output Overvoltage Protection	Yes	
Insulation Resistance Protection	Yes	
Ground Fault Monitoring	Yes	
Islanding Protection	Yes	
Temperature Protection	Yes	
Intergrated DC Switch	Yes	
Remote Software Upload	Yes	
Remote Change of Operating Parameters	Yes	
Surge Protection	DC Type II / AC Type II	
General Data		
Size (W x H x D)	330 x 430 x 193.5mm	
Weight	17kg	
Topology	Transformerless	
Internal Consumption	<1W (Night)	
Running Temperature	-25°C~65°C	
Ingress Protection	IP65	
Noise Emission (Typical)	<45dB	
Cooling Concept	Smart cooling	
Max. Operating Altitude Without Derating	2000m	
Designed Lifetime	> 20 years	
Grid Connection Standard	EN50549, IEC61727, VDE 0126-1-1, IEC62109-1-2	
Operating Surroundings Humidity	0-100%	
Safety EMC / Standard	IEC62109-1/-2, EN61000-6-1, EN61000-6-3	
Features		
DC Connection	MC-4 mateable	
AC Connection	IP65 rated plug	
Display	LCD1602	
Interface	RS485/RS232/Wi-Fi/LAN	

3-PHASE STRING INVERTERS

SUN-18 / 20 / 25 K-G02

The 18 / 20 / 25kW models are very useful for larger commercial applications that require a compact design.



These models feature intelligent cooling, high efficiency, remote monitoring, and also support VSG function, which is helpful to poor grid areas.

Features:

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

Model Input	SUN-18K-G02	SUN-20K-G02	SUN-25K-G02
Max. DC Input Power	21.6kW	26kW	32.5kW
Max. DC Input Voltage	1000V		
Start-up DC Input Voltage	250V		
MPPT Operating Range	200~800V		
Max. DC Input Current	22A + 22A	25A + 25A	30A + 30A
Number of MPPT / Strings per MPPT	2 / 2 + 2	2 / 2	2 / 3
Output			
Rated Output Power	18kW	20kW	25kW
Max. Active Power	19.8kW	22kW	27.5kW
Rated AC Grid Voltage	380/400V		
AC Grid Voltage Range	277~460V		
Rated Grid Frequency	50/60Hz (Optional)		
Operating Phase	Three-Phase		
Rated AC Grid Output Current	26.1A	29A	36.2A
Max. AC Output Current	28.71A	31.9A	39.9A
Output Power Factor	0.8 leading to 0.8 lagging		
Grid Current THD	<2%		
DC Injection	<0.5%		
Grid Frequency Range	47~52 or 57~62 (Optional)		
Efficiency			
Max. Efficiency	98.60%		
Euro Efficiency	97.80%		
MPPT Efficiency	>99%		
Protection			
DC Reverse-Polarity Protection	Yes		
AC Short Circuit Protection	Yes		
AC Output Overcurrent Protection	Yes		
Output Overvoltage Protection	Yes		
Insulation Resistance Protection	Yes		
Ground Fault Monitoring	Yes		
Islanding Protection	Yes		
Temperature Protection	Yes		
Intergrated DC Switch	Yes		
Remote Software Upload	Yes		
Remote Change of Operating Parameters	Yes		
Surge Protection	DC Type II / AC Type II		
General Data			
Size (W x H x D)	400 x 520 x 240.5mm		
Weight	28kg		
Topology	Transformerless		
Internal Consumption	<1W (Night)		
Running Temperature	-25°C~65°C		
Ingress Protection	IP65		
Noise Emission (Typical)	<45dB		
Cooling Concept	Smart cooling		
Max. Operating Altitude Without Derating	2000m		
Designed Lifetime	> 20 years		
Grid Connection Standard	EN50549, IEC61727, VDE 0126-1-1, IEC62109-1-2		
Operating Surroundings Humidity	0-100%		
Safety EMC / Standard	IEC62109-1/-2, EN61000-6-1, EN61000-6-3		
Features			
DC Connection	MC-4 mateable		
AC Connection	IP65 rated plug		
Display	LCD 240 x 160		
Interface	RS485/RS232/Wi-Fi/LAN		

30KW - 50KW THREE PHASE

SUN-30 / 33 / 35 / 40 / 45 / 50 K-G03

These are the largest inverters in their class yet remain stylish with high efficiency plus many features such as Smart cooling, multiple MPPT inputs and remote monitoring and control.



Features:

- 4 MPPT 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.

Model Input	SUN-30K-G03	SUN-33K-G03	SUN-35K-G03	SUN-40K-G03	SUN-45K-G03	SUN-50K-G03
Max. DC Input Power	39kW	42.9kW	45.5kW	52kW	55kW	65kW
Max. DC Input Voltage	1000V					
Start-up DC Input Voltage	250V					
MPPT Operating Range	200~850V					
Max. DC Input Current	40A + 40A	40A + 40A + 40A	40A + 40A + 40A	40A + 40A + 40A	40A + 40A + 40A	40A + 40A + 40A + 40A
Number of MPPT / Strings per MPPT	2 / 3	3 / 3	3 / 3	3 / 3	3 / 3	4 / 3
Output						
Rated Output Power	30kW	33kW	35kW	40kW	45kW	50kW
Max. Active Power	33kW	36kW	38.5kW	44kW	49.5kW	55kW
Rated AC Grid Voltage	380/400V					
AC Grid Voltage Range	277~460V					
Rated Grid Frequency	50/60Hz (Optional)					
Operating Phase	Three-Phase					
Rated AC Grid Output Current	43.5A	48A	50.7A	58A	65.2A	72.4A
Max. AC Output Current	47.85A	52.8A	55.8A	63.8A	71.7A	79.64A
Output Power Factor	0.8 leading to 0.8 lagging					
Grid Current THD	<2%					
DC Injection	<0.5%					
Grid Frequency Range	47~52 or 57~62 (Optional)					
Efficiency						
Max. Efficiency	98.70%					
Euro Efficiency	98.00%					
MPPT Efficiency	>99%					
Protection						
DC Reverse-Polarity Protection	Yes					
AC Short Circuit Protection	Yes					
AC Output Overcurrent Protection	Yes					
Output Overvoltage Protection	Yes					
Insulation Resistance Protection	Yes					
Ground Fault Monitoring	Yes					
Islanding Protection	Yes					
Temperature Protection	Yes					
Intergrated DC Switch	Yes					
Remote Software Upload	Yes					
Remote Change of Operating Parameters	Yes					
Surge Protection	DC Type II / AC Type II					
General Data						
Size (W x H x D)	647 x 537 x 303.5mm					
Weight	44.5kg					
Topology	Transformerless					
Internal Consumption	<1W (Night)					
Running Temperature	-25°C~65°C					
Ingress Protection	IP65					
Noise Emission (Typical)	<45dB					
Cooling Concept	Smart cooling					
Designed Lifetime	> 20 years					
Grid Connection Standard	EN50549, IEC61727, VDE 0126-1-1, IEC62109-1-2					
Operating Surroundings Humidity	0-100%					
Safety EMC / Standard	IEC62109-1/-2, EN61000-6-1, EN61000-6-3					
Features						
DC Connection	MC-4 mateable					
AC Connection	IP65 rated plug					
Display	LCD 240 x 160					
Interface	RS485/RS232/Wi-Fi/LAN					

HIGH POWER STRING INVERTERS

Sun-60 / 70 / 75 / 80 k-G02

These are large style commercial string inverters to be used with solar farms and large solar arrays. Reaching 98.7% of efficiency, these rugged machines are the perfect solution for three-phase grid-tied applications.



These models feature a user-friendly LCD display, AC/DC surge protection and the ability to be monitored and managed remotely over Wi-Fi via our smartphone, PC.

Features:

- 4 MPPT 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 DC/AC SPD.

Model Input	SUN-60K-G02	SUN-70K-G02	SUN-75K-G02	SUN-80K-G02
Max. DC Input Power	78kW	91kW	97.5kW	104kW
Max. DC Input Voltage	1000V			
Start-up DC Input Voltage	250V			
MPPT Operating Range	200~800V			
Max. DC Input Current	40A + 40A + 40A + 40A			
Number of MPPT / Strings per MPPT	4 / 3	4 / 4	4 / 4	4 / 4
Output				
Rated Output Power	60kW	70kW	75kW	80kW
Max. Active Power	66kW	77kW	82.5kW	88kW
Rated AC Grid Voltage	380/400V			
AC Grid Voltage Range	277~460V			
Rated Grid Frequency	50/60Hz (Optional)			
Operating Phase	Three-Phase			
Rated AC Grid Output Current	87.8A	101.5A	108.7A	115.9A
Max. AC Output Current	95.7A	111.6A	119.6A	127.5A
Output Power Factor	0.8 leading to 0.8 lagging			
Grid Current THD	<2%			
DC Injection	<0.5%			
Grid Frequency Range	47~52 or 57~62 (Optional)			
Efficiency				
Max. Efficiency	98.70%			
Euro Efficiency	98.30%			
MPPT Efficiency	>99%			
Protection				
DC Reverse-Polarity Protection	Yes			
AC Short Circuit Protection	Yes			
AC Output Overcurrent Protection	Yes			
Output Overvoltage Protection	Yes			
Insulation Resistance Protection	Yes			
Ground Fault Monitoring	Yes			
Islanding Protection	Yes			
Temperature Protection	Yes			
Intergrated DC Switch	Yes			
Remote Software Upload	Yes			
Remote Change of Operating Parameters	Yes			
Surge Protection	DC Type II / AC Type II			
General Data				
Size (W x H x D)	700 x 575 x 297mm			
Weight	60kg			
Topology	Transformerless			
Internal Consumption	<1W (Night)			
Running Temperature	-25°C~65°C			
Ingress Protection	IP65			
Noise Emission (Typical)	<45dB			
Cooling Concept	Smart cooling			
Max. Operating Altitude Without Derating	2000m			
Designed Lifetime	> 20 years			
Grid Connection Standard	EN50549, IEC61727, VDE 0126-1-1, IEC62109-1-2			
Operating Surroundings Humidity	0-100%			
Safety EMC / Standard	IEC62109-1/-2, EN61000-6-1, EN61000-6-3			
Features				
DC Connection	MC-4 mateable			
AC Connection	IP65 rated plug			
Display	LCD 240 x 160			
Interface	RS485/RS232/Wi-Fi/LAN			

HIGH POWER STRING INVERTERS

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

These are the largest inverters that we currently produce, reaching 100kW. Only 10 of these inverters are needed for a Megawatt solar farm. All this with an ultra-compact design and cool operation. It is an amazing investment for your system.



Features:

- 6 MPPT 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 DC/AC SPD.

Model Input	SUN-70K-G03	SUN-75K-G03	SUN-80K-G03	SUN-100K-G03
Max. DC Input Power	105kW	112.5kW	120kW	150kW
Max. DC Input Voltage	1000V			
Start-up DC Input Voltage	250V			
MPPT Operating Range	200~800V			
Max. DC Input Current	40A + 40A + 40A + 40A	40A + 40A + 40A + 40A	40A + 40A + 40A + 40A	40A + 40A + 40A + 40A
Number of MPPT / Strings per MPPT	4 / 4	4 / 4	4 / 4	6 / 4
Output				
Rated Output Power	70kW	75kW	80kW	100kW
Max. Active Power	77kW	82.5kW	88kW	110kW
Rated AC Grid Voltage	380/400V			
AC Grid Voltage Range	277~460V			
Rated Grid Frequency	50/60Hz (Optional)			
Operating Phase	Three-Phase			
Rated AC Grid Output Current	87.8A	101.5A	108.7A	115.9A
Max. AC Output Current	95.7A	111.6A	119.6A	127.5A
Output Power Factor	>0.99			
Grid Current THD	<2%			
DC Injection	<0.5%			
Grid Frequency Range	47~52 or 57~62 (Optional)			
Efficiency				
Max. Efficiency	98.70%			
Euro Efficiency	98.30%			
MPPT Efficiency	>99%			
Protection				
DC Reverse-Polarity Protection	Yes			
AC Short Circuit Protection	Yes			
AC Output Overcurrent Protection	Yes			
Output Overvoltage Protection	Yes			
Insulation Resistance Protection	Yes			
Ground Fault Monitoring	Yes			
Islanding Protection	Yes			
Temperature Protection	Yes			
Intergrated DC Switch	Yes			
Remote Software Upload	Yes			
Remote Change of Operating Parameters	Yes			
Surge Protection	DC Type II / AC Type II			
General Data				
Size (W x H x D)	838 x 577 x 323mm			
Weight	73.7kg			
Topology	Transformerless			
Internal Consumption	<1W (Night)			
Running Temperature	-25°C~65°C			
Ingress Protection	IP65			
Noise Emission (Typical)	<55dB			
Cooling Concept	Smart cooling			
Max. Operating Altitude Without Derating	2000m			
Designed Lifetime	> 20 years			
Grid Connection Standard	EN50549, IEC61727, VDE 0126-1-1, IEC62109-1-2			
Operating Surroundings Humidity	0-100%			
Safety EMC / Standard	IEC62109-1/-2, EN61000-6-1, EN61000-6-3			
Features				
DC Connection	MC-4 mateable			
AC Connection	IP65 rated plug			
Display	LCD 240 x 160			
Interface	RS485/RS232/Wi-Fi/LAN			

LOW VOLTAGE 3-PHASE INVERTERS

SUN-6 / 8 K-G03-LV

The Sunsynk low-voltage three-phase inverters are the perfect solution for grid-tied applications involving split phase, ranging from medium to high power. These rugged machines have excellent harmonics, high efficiency, wide output voltage range, and are approved for use in many countries.



These lower power models are ideal for most small commercial and domestic applications. All of these models come with a user-friendly display.

Features:

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

Model Input	SUN-6K-G03-LV	SUN-8K-G03-LV
Max. DC Input Power	7.8kW	10.4kW
Max. DC Input Voltage	800V	
Start-up DC Input Voltage	250V	
MPPT Operating Range	200~700V	
Max. DC Input Current	11A + 22A	
Number of MPPT / Strings per MPPT	2 / 1 + 2	
Output		
Rated Output Power	6kW	8kW
Max. Active Power	6.6kW	8.8kW
Rated AC Grid Voltage	127/220V	
AC Grid Voltage Range	176~242V	
Rated Grid Frequency	50/60Hz (Optional)	
Operating Phase	Three-Phase	
Rated AC Grid Output Current	15.7A	21A
Max. AC Output Current	17.3A	23.1A
Output Power Factor	0.8 leading to 0.8 lagging	
Grid Current THD	<2%	
DC Injection	<0.5%	
Grid Frequency Range	47~52 or 57~62 (Optional)	
Efficiency		
Max. Efficiency	98.5%	
Euro Efficiency	97.5%	
MPPT Efficiency	>99%	
Protection		
DC Reverse-Polarity Protection	Yes	
AC Short Circuit Protection	Yes	
AC Output Overcurrent Protection	Yes	
Output Overvoltage Protection	Yes	
Insulation Resistance Protection	Yes	
Ground Fault Monitoring	Yes	
Islanding Protection	Yes	
Temperature Protection	Yes	
Intergrated DC Switch	Yes	
Remote Software Upload	Yes	
Remote Change of Operating Parameters	Yes	
Surge Protection	DC Type II / AC Type II	
General Data		
Size (W x H x D)	330 x 430 x 193.5mm	
Weight	17kg	
Topology	Transformerless	
Internal Consumption	<1W (Night)	
Running Temperature	-25°C~65°C	
Ingress Protection	IP65	
Noise Emission (Typical)	<45dB	
Cooling Concept	Smart cooling	
Max. Operating Altitude Without Derating	2000m	
Designed Lifetime	> 20 years	
Grid Connection Standard	EN50549, IEC61727, VDE 0126-1-1, IEC62109-1-2	
Operating Surroundings Humidity	0-100%	
Safety EMC / Standard	IEC62109-1/-2, EN61000-6-1, EN61000-6-3	
Features		
DC Connection	MC-4 mateable	
AC Connection	IP65 rated plug	
Display	LCD1602	
Interface	RS485/RS232/Wi-Fi/LAN	

LOW VOLTAGE 3-PHASE INVERTERS

SUN-10 / 12 / 15 K-G03-LV

The 10 / 12 / 15kW are the big brothers of the smaller units, and they are perfect for most small commercial and large domestic applications.

These safe and reliable machines reach 98.6% of efficiency with a high power factor. They also have a user-friendly LCD display and can be monitored and managed remotely by smartphone or PC.



Features:

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

Model Input	SUN-10K-G03-LV	SUN-12K-G03-LV	SUN-15K-G03-LV
Max. DC Input Power	13kW	15.6kW	19.5kW
Max. DC Input Voltage	800V		
Start-up DC Input Voltage	250V		
MPPT Operating Range	200~700V		
Max. DC Input Current	25A + 25A	25A + 25A	25A + 25A
Number of MPPT / Strings per MPPT	2 / 2 + 2	2 / 2	2 / 3
Output			
Rated Output Power	10kW	12kW	15kW
Max. Active Power	11kW	13.2kW	16.5kW
Rated AC Grid Voltage	127/220V		
AC Grid Voltage Range	176~242V		
Rated Grid Frequency	50/60Hz (Optional)		
Operating Phase	Three-Phase		
Rated AC Grid Output Current	26.25A	31.5A	39.4A
Max. AC Output Current	28.87A	34.64A	43.31A
Output Power Factor	0.8 leading to 0.8 lagging		
Grid Current THD	<2%		
DC Injection	<0.5%		
Grid Frequency Range	47~52 or 57~62 (Optional)		
Efficiency			
Max. Efficiency	98.60%		
Euro Efficiency	97.80%		
MPPT Efficiency	>99%		
Protection			
DC Reverse-Polarity Protection	Yes		
AC Short Circuit Protection	Yes		
AC Output Overcurrent Protection	Yes		
Output Overvoltage Protection	Yes		
Insulation Resistance Protection	Yes		
Ground Fault Monitoring	Yes		
Islanding Protection	Yes		
Temperature Protection	Yes		
Intergrated DC Switch	Yes		
Remote Software Upload	Yes		
Remote Change of Operating Parameters	Yes		
Surge Protection	DC Type II / AC Type II		
General Data			
Size (W x H x D)	400 x 520 x 240.5mm		
Weight	28kg		
Topology	Transformerless		
Internal Consumption	<1W (Night)		
Running Temperature	-25°C~65°C		
Ingress Protection	IP65		
Noise Emission (Typical)	<45dB		
Cooling Concept	Smart cooling		
Max. Operating Altitude Without Derating	2000m		
Designed Lifetime	> 20 years		
Grid Connection Standard	EN50549, IEC61727, VDE 0126-1-1, IEC62109-1-2		
Operating Surroundings Humidity	0-100%		
Safety EMC / Standard	IEC62109-1/-2, EN61000-6-1, EN61000-6-3		
Features			
DC Connection	MC-4 mateable		
AC Connection	IP65 rated plug		
Display	LCD 240 x 160		
Interface	RS485/RS232/Wi-Fi/LAN		

LOW VOLTAGE 3-PHASE INVERTERS

SUN-20 / 25 / 30 / 35 K-G02-LV

The 20 / 25 / 30 / 35kW models are designed for larger commercial applications that would benefit from an inverter with a compact design.

These models feature intelligent cooling, high efficiency, remote monitoring, and support VSG function, which is useful in those areas that have an unreliable grid power supply.



Features:

- 4 MPPT 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.

Model Input	SUN-20K-G02-LV	SUN-25K-G02-LV	SUN-30K-G02-LV	SUN-35K-G02-LV
Max. DC Input Power	26kW	32.5kW	39kW	45.5kW
Max. DC Input Voltage	800V			
Start-up DC Input Voltage	250V			
MPPT Operating Range	200~700V			
Max. DC Input Current	40A + 40A	40A + 40A + 40A	40A + 40A + 40A + 40A	40A + 40A + 40A + 40A
Number of MPPT / Strings per MPPT	2 / 3	3 / 3	4 / 3	4 / 3
Output				
Rated Output Power	20kW	25kW	30kW	35kW
Max. Active Power	22kW	27.5kW	33kW	38.5kW
Rated AC Grid Voltage	127/220V			
AC Grid Voltage Range	176~242V			
Rated Grid Frequency	60Hz			
Operating Phase	Three-Phase			
Rated AC Grid Output Current	52.5A	65.6A	78.7A	91.9A
Max. AC Output Current	57.8A	72.2A	86.6A	101.1A
Output Power Factor	0.8 leading to 0.8 lagging			
Grid Current THD	<2%			
DC Injection	<0.5%			
Grid Frequency Range	57~62			
Efficiency				
Max. Efficiency	98.70%			
Euro Efficiency	98.00%			
MPPT Efficiency	>99%			
Protection				
DC Reverse-Polarity Protection	Yes			
AC Short Circuit Protection	Yes			
AC Output Overcurrent Protection	Yes			
Output Overvoltage Protection	Yes			
Insulation Resistance Protection	Yes			
Ground Fault Monitoring	Yes			
Islanding Protection	Yes			
Temperature Protection	Yes			
Intergrated DC Switch	Yes			
Remote Software Upload	Yes			
Remote Change of Operating Parameters	Yes			
Surge Protection	DC Type II / AC Type II			
General Data				
Size (W x H x D)	647.5 x 537 x 303mm			
Weight	44.5kg			
Topology	Transformerless			
Internal Consumption	<1W (Night)			
Running Temperature	-25°C~65°C			
Ingress Protection	IP65			
Noise Emission (Typical)	<45dB			
Cooling Concept	Smart cooling			
Max. Operating Altitude Without Derating	2000m			
Designed Lifetime	> 20 years			
Grid Connection Standard	EN50549, IEC61727, VDE 0126-1-1, IEC62109-1-2			
Operating Surroundings Humidity	0-100%			
Safety EMC / Standard	IEC62109-1/-2, EN61000-6-1, EN61000-6-3			
Features				
DC Connection	MC-4 mateable			
AC Connection	IP65 rated plug			
Display	LCD 240 x 160			
Interface	RS485/RS232/Wi-Fi/LAN			

LOW VOLTAGE 3-PHASE INVERTERS

SUN-40 / 45 / 50 K-G-LV

These are large style commercial string inverters to be used with solar farms and large solar arrays.

Reaching 98.7% of efficiency, these rugged machines are the perfect solution for three-phase grid-tied applications.



These models feature a user-friendly display, AC/DC surge protection, remote monitoring, VSG function, intelligent cooling, and wide output voltage range.

Features:

- 4 MPPT 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.

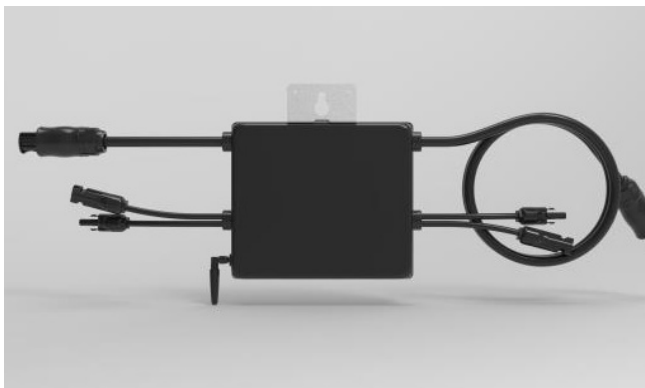
Model Input	SUN-40K-G-LV	SUN-45K-G-LV	SUN-50K-G-LV
Max. DC Input Power	52kW	58.5kW	65kW
Max. DC Input Voltage	800V		
Start-up DC Input Voltage	250V		
MPPT Operating Range	200~700V		
Max. DC Input Current	40A + 40A + 40A + 40A		
Number of MPPT / Strings per MPPT	4 / 4		
Output			
Rated Output Power	40kW	45kW	50kW
Max. Active Power	44kW	49.5kW	55kW
Rated AC Grid Voltage	127/220V		
AC Grid Voltage Range	176~242V		
Rated Grid Frequency	60Hz		
Operating Phase	Three-Phase		
Rated AC Grid Output Current	104.9A	118.1A	131.2A
Max. AC Output Current	115.5A	129.9A	144.4A
Output Power Factor	0.8 leading to 0.8 lagging		
Grid Current THD	<2%		
DC Injection	<0.5%		
Grid Frequency Range	57~62		
Efficiency			
Max. Efficiency	98.70%		
Euro Efficiency	98.30%		
MPPT Efficiency	>99%		
Protection			
DC Reverse-Polarity Protection	Yes		
AC Short Circuit Protection	Yes		
AC Output Overcurrent Protection	Yes		
Output Overvoltage Protection	Yes		
Insulation Resistance Protection	Yes		
Ground Fault Monitoring	Yes		
Islanding Protection	Yes		
Temperature Protection	Yes		
Intergrated DC Switch	Yes		
Remote Software Upload	Yes		
Remote Change of Operating Parameters	Yes		
Surge Protection	DC Type II / AC Type II		
General Data			
Size (W x H x D)	700 x 575 x 297mm		
Weight	60kg		
Topology	Transformerless		
Internal Consumption	<1W (Night)		
Running Temperature	-25°C~65°C		
Ingress Protection	IP65		
Noise Emission (Typical)	<55dB		
Cooling Concept	Smart cooling		
Designed Lifetime	> 20 years		
Grid Connection Standard	EN50549, IEC61727, VDE 0126-1-1, IEC62109-1-2		
Operating Surroundings Humidity	0-100%		
Safety EMC / Standard	IEC62109-1/-2, EN61000-6-1, EN61000-6-3		
Features			
DC Connection	MC-4 mateable		
AC Connection	IP65 rated plug		
Display	LCD 240 x 160		
Interface	RS485/RS232/Wi-Fi/LAN		

500W / 600W MICRO-INVERTERS

Micro-Inverters

These solar micro-inverters fit behind individual solar panels where they function the same as string inverters, converting DC to AC power.

Sunsynk® micro-inverters are built-in with Wi-Fi, PLC, and Zigbee communication for remote monitoring and control. Simply assemble and mount your panel with its own micro-inverter and connect it to the mains grid. In addition, micro inverters can be used in conjunction with the Sunsynk Storage Inverter.



These models are ideal for low power applications. They have 2 MPPT trackers, remote monitoring, rapid shutdown function, and low power consumption at night.

Features:

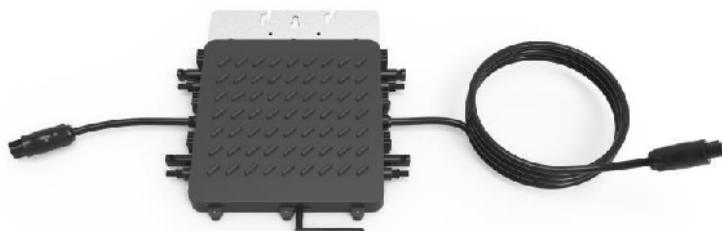
- 2 MPPT trackers, module level monitoring.
- Rapid shutdown function.
- IP67 protection degree, 10 years warranty.
- PLC, Zigbee or Wi-Fi communication.

Model Input Data (DC)	SUN500G-230-EU	SUN600G2-US-208/240	SUN600G2-US-220	SUN600G2-US-127
Recommened Input Power (STC)	210 ~ 400W (2 pieces)	210 ~ 400W (2 pieces)	210 ~ 400W (2 pieces)	210 ~ 350W
Maximum Input DC Voltage	60V			
MPPT Voltage Range	25 ~ 55V			
Operating DC Voltage Range	20 ~ 60V			
Max. DC Short-Circuit Current	13A			
Max. Input Current	10.4A x 2			
Output Data (DC)				
Output Power Peak	600W	600W	600W	500W
Max. Output Power	600W	600W	600W	500W
Max. Output Current	2.17A	2.884A/2.5A	2.7A	4A
Nominal Voltage / Range	184 ~ 265V	208V / 183 ~ 229V 240 / 211 ~ 264V	176 ~ 242V	a.c.95 ~ 155V @127Vac
Nominal Frequency / Range	50 / 47.5 ~ 51.5Hz	60 / 59.3 ~ 60.5Hz	60 / 59.3 ~ 60.5Hz	60 / 59.3 ~ 60.5Hz
Extended Frequency / Range	50 / 45 ~ 55Hz	60 / 55 ~ 65Hz	60 / 55 ~ 65Hz	60 / 55 ~ 65Hz
Power Factor	> 0.99			
Max. Units per Branch	11	8 / 10	9	6
Efficiency				
CEC Weighted Efficiency	95%			
Inverter Efficiency Peak	96.5%			
Static MPPT Efficiency	99%			
Night Time Power Consumption	50mW			
Mechanical Data				
Ambient Temperature Range	-40°C~65°C			
Size (W/H/D)	185 x 161 x 29mm (without mounting bracket and cable)			
Weight	2.4kg			
Cooling	Natural Cooling			
Enclosure Environmental Rating	IP67			
Features				
Compatibility	Compatible with 60~72 cell PV modules			
Communication	Power line / Wi-Fi / Zigbee			
Compliance	EN50549 / VDE0126 / VDE4105 / IEC62109 / CE / INMETRO			
Warranty	10 years			

1300W MICRO-INVERTERS

These higher power micro-inverters are ideal for applications with more panels

These higher power micro inverters are ideal for applications with more panels. Besides rapid shutdown, high efficiency, and low power consumption at night, they also have 4 MPPT inputs, which allows the connection of more modules. Also, they come with PLC, Zigbee, and Wi-Fi communication, requiring no external communication device.



features:

- 4 MPPT trackers, module level monitoring.
- IP67 protection degree, 10 years warranty.
- Rapid shutdown function.
- PLC, Zigbee or Wi-Fi communication.

Model Input Data (DC)	SUN1200G-230-EU	SUN1300G2-US-208/240	SUN1300G
Recommened Input Power (STC)	210 ~ 400W (4 pieces)		
Maximum Input DC Voltage	60V		
MPPT Voltage Range	25 ~ 55V		
Operating DC Voltage Range	20 ~ 60V		
Max. DC Short-Circuit Current	13A	13A	14A
Max. Input Current	10.4A x 4		
Output Data (DC)			
Output Power Peak	1300W		
Max. Output Power	1300W		
Max. Output Current	4.34A	6.25A / 5.416A	5.91A
Nominal Voltage / Range	184 ~ 265V	208V / 183 ~ 229V 240 / 211 ~ 264V	176 ~ 242V
Nominal Frequency / Range	50 / 47.5 ~ 51.5Hz	60 / 59.3 ~ 60.5Hz	60 / 59.3 ~ 60.5Hz
Extended Frequency / Range	50 / 45 ~ 55Hz	60 / 55 ~ 65Hz	60 / 55 ~ 65Hz
Power Factor	> 0.99		
Max. Units per Branch	5	4	4
Efficiency			
CEC Weighted Efficiency	95%		
Inverter Efficiency Peak	96.5%		
Static MPPT Efficiency	99%		
Night Time Power Consumption	50mW		
Mechanical Data			
Ambient Temperature Range	-40°C~65°C		
Size (W/H/D)	298 x 287 x 36mm (without mounting bracket and cable)		
Weight	6.3kg		
Cooling	Natural Cooling		
Enclosure Environmental Rating	IP67		
Features			
Compatibility	Compatible with 60~72 cell PV modules		
Communication	Power line / Wi-Fi / Zigbee		
Compliance	EN50549 / VDE0126 / VDE4105 / IEC62109 / CE / INMETRO		
Warranty	10 years		

300W / 500W MICRO-INVERTERS

Micro-inverters for low power applications

Featuring only 1 MPPT tracker. This high-efficiency device has rapid shutdown function, monitoring, and low power consumption at night. In addition, it comes with PLC, Zigbee, and Wi-Fi communication.



Features:

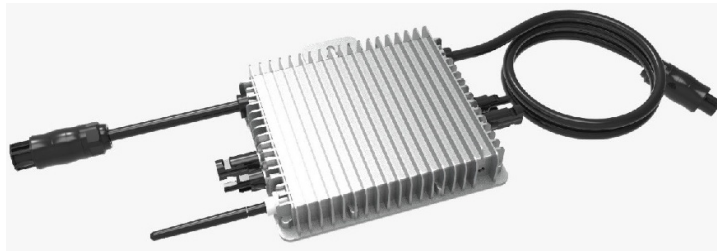
- 1 MPPT tracker, module level monitoring.
- Rapid shutdown function.
- IP67 protection degree, 10 years warranty.
- PLC, Zigbee or Wi-Fi communication.

Model Input Data (DC)	SUN300G3-EU-230	SUN500G3-EU-230
Recommended Input Power (STC)	210 ~ 400W (1 piece)	210 ~ 600W (1 piece)
Maximum Input DC Voltage	60V	
MPPT Voltage Range	25 ~ 55V	
Operating DC Voltage Range	20 ~ 60V	
Max. DC Short-Circuit Current	16A	
Max. Input Current	10.5A x 1	12.5A x 1
Output Data (DC)		
Output Power Peak	300W	500W
Max. Output Power	330W	550W
Max. Output Current	1.4A	2.4A
Nominal Voltage / Range	230V / 184 ~ 265V	
Nominal Frequency / Range	50/60Hz	
Extended Frequency / Range	45 ~ 55Hz / 55 ~ 65Hz	
Power Factor	> 0.99	
Max. Units per Branch	17	10
Efficiency		
CEC Weighted Efficiency	95%	
Inverter Efficiency Peak	96.5%	
Static MPPT Efficiency	99%	
Night Time Power Consumption	50mW	
Mechanical Data		
Ambient Temperature Range	-40°C~65°C	
Size (W/H/D)	212 x 229 x 40mm (without mounting bracket and cable)	
Weight	3.5kg	
Cooling	Natural Cooling	
Enclosure Environmental Rating	IP67	
Features		
Compatibility	Compatible with 60~72 cell PV modules	
Communication	Power line / Wi-Fi / Zigbee	
Compliance	EN50549 / VDE0126 / VDE4105 / IEC62109 / CE / INMETRO	
Warranty	10 years	

600W / 800W / 1000W MICRO-INVERTERS

Providing a lot of flexibility for your application

Besides rapid shutdown, high efficiency, and low power consumption at night, they also have 2 MPPT inputs. They come with PLC, Zigbee, and Wi-Fi communication, requiring no external communication device.



Features:

- 2 MPPT trackers, module level monitoring.
- Rapid shutdown function.
- IP67 protection degree, 10 years warranty.
- PLC, Zigbee or Wi-Fi communication.

Model Input Data (DC)	SUN600G3-EU-230	SUN800G3-EU-230	SUN1000G3-EU-230
Recommened Input Power (STC)	210 ~ 400W (2 pieces)	210 ~ 600W (2 pieces)	210 ~ 600W (2 pieces)
Maximum Input DC Voltage	60V		
MPPT Voltage Range	25 ~ 55V		
Operating DC Voltage Range	20 ~ 60V		
Max. DC Short-Circuit Current	16A		
Max. Input Current	10.5A x 2	12.5A x 2	12.5A x 2
Output Data (DC)			
Output Power Peak	600W	800W	1000W
Max. Output Power	660W	880W	1100W
Max. Output Current	2.9A	3.8A	4.8A
Nominal Voltage / Range	230V / 184 ~ 265V		
Nominal Frequency / Range	50/60Hz		
Extended Frequency / Range	45 ~ 55Hz / 55 ~ 65Hz		
Power Factor	> 0.99		
Max. Units per Branch	8	6	5
Efficiency			
CEC Weighted Efficiency	95%		
Inverter Efficiency Peak	96.5%		
Static MPPT Efficiency	99%		
Night Time Power Consumption	50mW		
Mechanical Data			
Ambient Temperature Range	-40°C~65°C		
Size (W/H/D)	212 x 229 x 40mm (without mounting bracket and cable)		
Weight	3.5kg		
Cooling	Natural Cooling		
Enclosure Environmental Rating	IP67		
Features			
Compatibility	Compatible with 60~72 cell PV modules		
Communication	Power line / Wi-Fi / Zigbee		
Compliance	EN50549 / VDE0126 / VDE4105 / IEC62109 / CE / INMETRO		
Warranty	10 years		

1300W / 1600W / 1800W / 2000W MICRO-INVERTERS

Micro-inverters perfect for applications with more panels

Here we have higher power micro inverters, perfect for applications with more panels. They feature rapid shutdown, high efficiency, great power factor, and low power consumption at night. In addition, they have 4 MPPT trackers, which allows the connection of more modules. All this without any external communication device.



Features:

- 4 MPPT trackers, module level monitoring.
- Rapid shutdown function.
- IP67 protection degree, 10 years warranty.
- PLC, Zigbee or Wi-Fi communication.
- Max. DC input current of 12.5A, adapt to 600W PV module.

Model Input Data (DC)	SUN1300G3-EU-230	SUN1600G3-EU-230	SUN1800G3-EU-230	SUN2000G3-EU-230
Recommened Input Power (STC)	210 ~ 400W (4 pieces)	210 ~ 600W (4 pieces)	210 ~ 600W (4 pieces)	210 ~ 600W (4 pieces)
Maximum Input DC Voltage	60V			
MPPT Voltage Range	25 ~ 55V			
Operating DC Voltage Range	20 ~ 60V			
Max. DC Short-Circuit Current	16A			
Max. Input Current	10.5A x 4	12.5A x 4	12.5A x 4	12.5A x 4
Output Data (DC)				
Output Power Peak	1300W	1600W	1800W	2000W
Max. Output Power	1430W	1760W	1980W	2200W
Max. Output Current	6.2A	7.7A	8.6A	9.6A
Nominal Voltage / Range	230 / 180 ~ 265V			
Nominal Frequency / Range	50 / 60Hz			
Extended Frequency / Range	45 ~ 55Hz / 55 ~ 65Hz			
Power Factor	> 0.99			
Max. Units per Branch	4	4	3	3
Efficiency				
CEC Weighted Efficiency	95%			
Inverter Efficiency Peak	96.5%			
Static MPPT Efficiency	99%			
Night Time Power Consumption	50mW			
Mechanical Data				
Ambient Temperature Range	-40°C~65°C			
Size (W/H/D)	267 x 300 x 42.5mm (without mounting bracket and cable)			
Weight	5.2kg			
Cooling	Natural Cooling			
Enclosure Environmental Rating	IP67			
Features				
Compatibility	Compatible with 60~72 cell PV modules			
Communication	Power line / Wi-Fi / Zigbee			
Compliance	EN50549 / VDE0126 / VDE4105 / IEC62109 / CE / INMETRO			
Warranty	10 years			

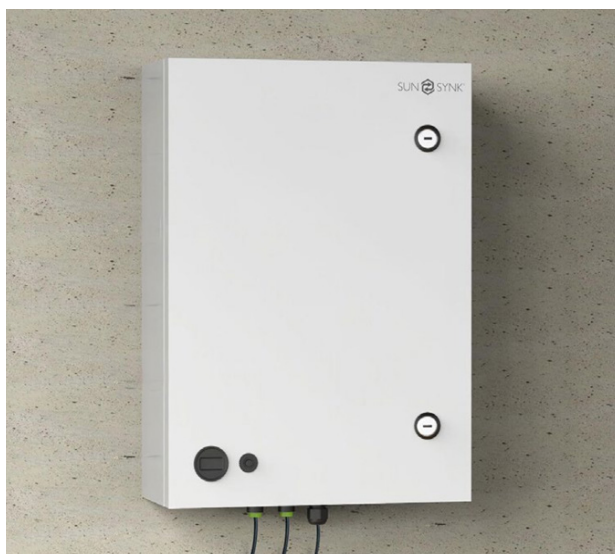


POWER BANKS

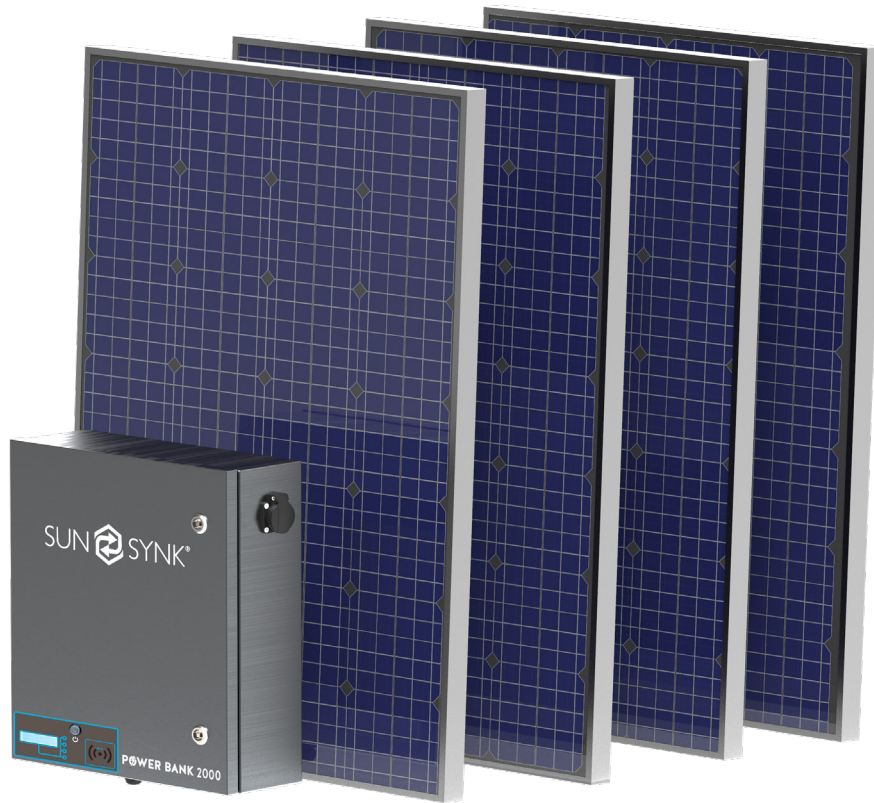
PB 300 XL

PB 1000

Everything you need in a single box. This is a unique storage device that is completely off-grid and contains all the constituent parts of a solar power system within a waterproof housing. The design is such that anyone using it would quickly understand its design and be capable of setting up a simple power system to provide AC power to utilities that fall within the parameters of 300W to 1000W.



The PB 300 XL and the PB 1000 can operate at any time of the day or be set to 'automatic mode' where it operates only at night or when power is required (UPS Mode).



Power Bank 300 XL

- 2 x 100W solar panels (pre-wired)
- Power Bank 300 main unit
- 300W inverter with 230V output
- 300W MPPT charge controller
- Power Bank fixing kit
- Solar panel fixing kit
- 2 x 500Wh lithium battery packs
- Cables / MC4 connector
- Digital voltage meter
- User-reset overload fuse

Power Bank 1000

- 4 x 125W Sunsynk® XH solar panels
- Power bank 1000 main unit
- 1KW inverter with 230V output
- 500W MPPT charge controller
- Digital voltmeter
- Auto reset and thermal fuse
- Super quiet variable speed fan
- 2000Wh lithium phosphate battery
- 25metres of solar cables / MC4 connectors
- Solar panel fixing kit
- Power bank fixing kit
- AC charger (optional)

Model	PB 300 XL	PB1000
Max PV Power	300W	500W
Inverter Size	300W	500W
Charger Type	MPPT	MPPT / AC
Max Surge Power	400W	650W
Battery Size	1000Wh	2000Wh
Battery Type	Life Po4	Life PO4
BMS	Yes	Yes
Max PV Input	60V	75V
Power Bank Size	46 x 33 x 13cm	46 x 33 x 13cm
IP Rating	45	45
Complete Kit Weight	37kg	48kg

THE CUBE

500Wh: SSCUBE500

1000Wh: SSCUBE1000

The Cube Nova Power Station is a lightweight all in one power station with the latest technology, including a lithium-ion phosphate (LiFePo4) battery, built into a portable compact design. It is capable of powering devices such as laptops, monitors, Wi-Fi routers, Fibre router/modem, desk lamps and charging mobile devices.



It has a built-in solar charge controller with a solar panel input which can be charged with a 100W solar panel. A 50W device load returns an expected 8.5 hours runtime on a full charge.

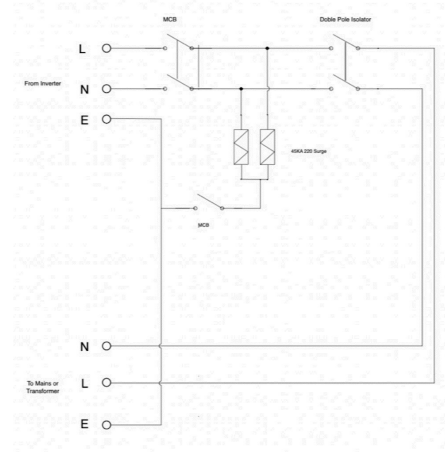
Features:

- Two x USB port, A USB "Type - C" connector for apple and samsung.
- Switch-operated Two x 12V & 9V ports.
- LED power-level & battery-level indicator.
- C230V AC mains socket (Max 300 Watt).
- AC charger & solar charging ports.
- Comes complete with a full set of accessories.
- X2 1-M of connector cables.
- X5 jack adapters and an LED light connector.
- Mains plug (mains power rechargeable).
- Water resistant.



SS-SURGE-AC1

Mains Surge Protector

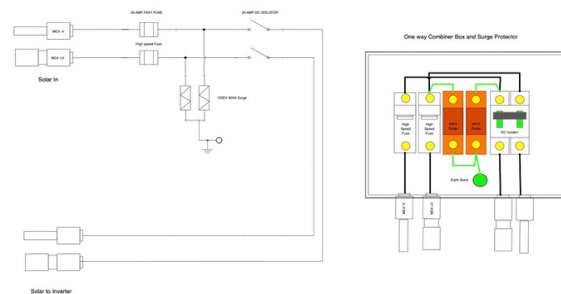
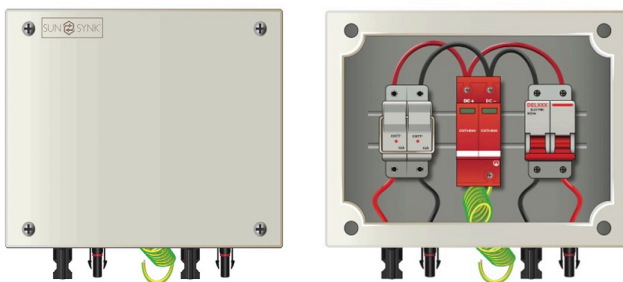


Components

- 2 x NXB-63 Miniature circuit breaker Modular DIN Rail — Miniature Circuit Breaker
- 1 x CHINT MCB 1P / PHASE 10 AMPERE / 10A / 10 A 6KA SNI NXB-63 C10
- 1 x LW30 40 Amp Series Rotary Isolator
- 1 x Earth Bond
- 1 x IP65 Metal Box

SS-SURGE-DC-Comb1

One-Way Combiner Box with Lightning and Surge Protector

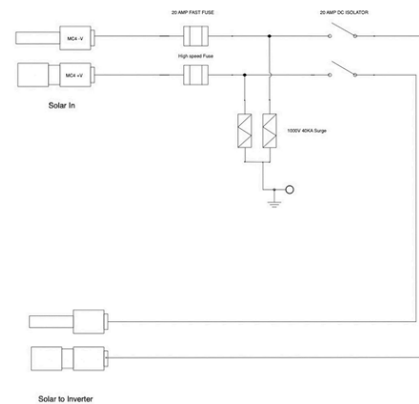
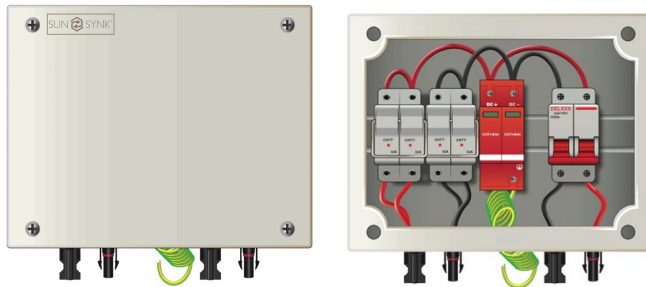


Components

- 2 x CHT1-B40 kA 1000v Max 2kV Surge Protective Device (SPD)
- 2 x RT28N-32X Solar panel fuse
- 2 x 6. DZ47sZ 20 Amp Isolator Switch with MCB
- 1 x Earth Bond
- 1 x IP65 Metal Box
- 4 x MC4 Connectors

SS-SURGE-DC-COMB2

Two-Way Combiner Box with Lightning and Surge Protector

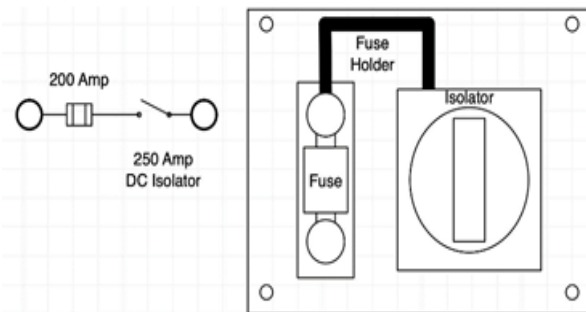
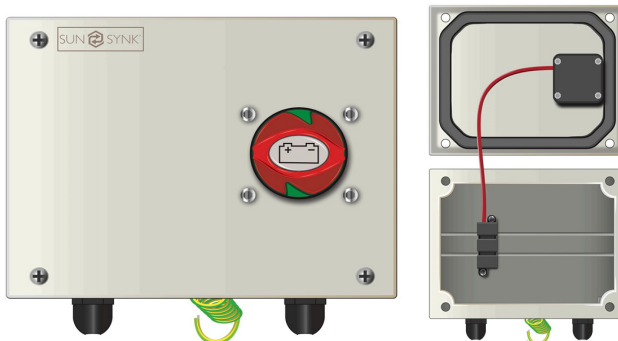


Components

- 4 x CHT1-B40 kA 1000v Max 2kV Surge Protective Device (SPD)
- 4 x RT28N-32X Solar Panel Fuse
- 4 x 6. DZ47sZ 20Amp Isolator Switch with MCB
- 1 x Earth Bond
- 1 x IP 65 Metal Box
- 6 x MC4 Connectors

SS-BAT-ISO

Battery Isolator



Components

- 1 x 300A 60VDC Battery Isolator Switch
- 1 x 200 Amp Marine Grade DC Fuse and Holder
- 1 x IP65 Metal Box

SOLAR PUMP

Water Pump Driver with MPPT

The Sunsynk® Water Pump Driver (with MPPT) is designed for swimming pools, wells and other water supplies requiring the movement of water.



Features:

- The LED display shows power, voltage, current, speed and working condition.
- Automatic stop/start function.
- Soft start - no impulse current to protect the pump motor.
- Frequency conversion function - the driver automatically runs with frequency conversion according to solar power, and users can also change the pump's speed manually.

MECD COMMUNICATIONS GATEWAY

MECD

The MECD communications gateway collects and delivers modular performance data in real time to allow the user to get comprehensive updates and manage the solar system effectively. With a built-in shutdown application, the MECD can immediately control a micro-inverter shutdown when the dry contact is activated.



Features:

- Built-in Zigbee, PLC, and Wi-Fi module.
- Suitable for single-phase and three-phase applications.
- Enables remote monitoring and management.
- OLED display and buttons, allowing easy operation.
- Compact design and lightweight.
- Supports quick shutdown remotely.
- Robust design with 3 year warranty.



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