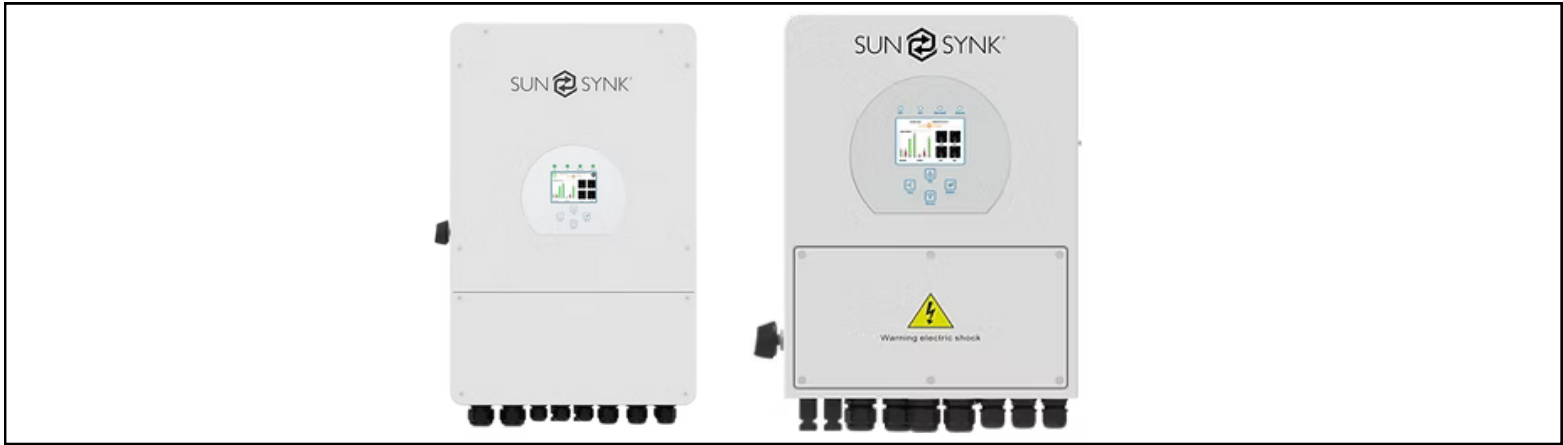


SUNSYNK HYBRID INVERTER Inverter



The Sunsynk Hybrid Inverter combines advanced features of a solar inverter, battery charger, and grid connection technology into one efficient system. Designed for single-phase systems, this multifunctional inverter supports both on-grid and off-grid operations, ensuring uninterrupted power supply. With high efficiency (up to 97.6%) and robust protection mechanisms against overvoltage and short circuits.

Typical Applications

- Residential Power Backup: Provides uninterrupted power during outages, supporting home appliances like refrigerators, lighting, and air conditioners.
- Commercial Applications: Powers office and factory equipment while optimizing energy use between solar, battery, and grid.
- Remote Locations: Ideal for areas with limited access to electricity, pairing with solar and wind systems.

Key Features

- High Efficiency: Maximum efficiency of 97.6% and MPPT efficiency greater than 99%. Protection Degree **IP65**
- Battery Compatibility: Supports both lead-acid and lithium-ion batteries. Customizable battery voltage range (48Vd.c, 40V-60Vd.c).
- Multi-MPP Trackers: Equipped with dual MPPTs for optimal solar power harvesting.
- Flexible Power Management: Can operate in on-grid, off-grid, or hybrid modes. Programmable priority for solar, battery, or grid usage.
- Robust Protection: Features overvoltage, short-circuit, and lightning protection. IP65-rated enclosure for outdoor installations.

Compatible Inverters :



Technical Data

Specification	Battery Type	Battery Voltage Range	Max. Charging/Discharging Current	Max. DC Input Power	PV Input Voltage	No. of MPPT Trackers	Rated AC Output Power	Max. AC Output Power	AC Output Rated Current	Output Voltage	Max. Efficiency	MPPT Efficiency	Operating Temperature Range
SUNSYNK-3.6K-SG03LP1	Lead-acid or Li-Ion	48Vd.c (40V-60Vd.c)	90Ad.c	4680W	370V (125V~500V)	2	3600W	3960W	16.4/15.7Aa.c	220/230Vac (single phase)	97.60%	>99%	-40~60°C (>45°C derating)
SUNSYNK-5K-SG03LP1	Lead-acid or Li-Ion	48Vd.c (40V-60Vd.c)	120Ad.c	6500W	370V (125V~500V)	2	5000W	5500W	22.7/21.7Aa.c	220/230Vac (single phase)	97.60%	>99%	-40~60°C (>45°C derating)
SUNSYNK-8K-SG03LP1	Lead-acid or Li-Ion	48Vd.c (40V-60Vd.c)	160Ad.c	10400W	370V (125V~500V)	2	8000W	8800W	35.4/33.9Aa.c	220/230Vac (single phase)	97.60%	>99%	-40~60°C (>45°C derating)
SUNSYNK-10K-SG03LP1	Lead-acid or Li-Ion	48Vd.c (40V-60Vd.c)	180Ad.c	13000W	370V (125V~500V)	2	10000W	11000W	44.4/42.5Aa.c	220/230Vac (single phase)	97.60%	>99%	-40~60°C (>45°C derating)
SUNSYNK-12K-SG03LP1	Lead-acid or Li-Ion	48Vd.c (40V-60Vd.c)	200Ad.c	15600W	370V (125V~500V)	2	12000W	13200W	53.3/50.9Aa.c	220/230Vac (single phase)	97.60%	>99%	-40~60°C (>45°C derating)
SUNSYNK-16K-SG03LP1	Lead-acid or Li-Ion	48Vd.c (40V-60Vd.c)	240Ad.c	20800W	370V (125V~500V)	2	16000W	17600W	71.1/67.8Aa.c	220/230Vac (single phase)	97.60%	>99%	-40~60°C (>45°C derating)