

SUN SYNK

SUNSYNK MAX DATASHEET



PRODUCT INTRODUCTION

We have taken the Sunsynk Hybrid Inverter to the highest level. Our new Sunsynk MAX is the most powerful low-voltage inverter in the world, achieving a maximum output power of 16kW and battery charge current of 300A.

This power management tool allows the user to hit those 'parity' targets by managing power-flow from multiple sources such as solar, mains power (grid) and generators, and then effectively storing and releasing power as and when utilities require.

INTERACTIVE

- Supporting Wi-Fi or GSM monitoring
- Visual power flow screen
- Parallel / multi invert function grid-tied and off-grid

COMPATIBLE

- Compatible with main electrical grid voltages or power generators
- Self-consumption and feed-in to the grid
- Auto restart while AC is recovering
- Auto earth bond feature (Via a relay)

CONFIGURABLE

- Fully programmable controller
- Programmable supply priority for battery or grid
- Programmable multiple operation modes: on-grid/off-grid & UPS
- Configurable battery charging - current/voltage based on the application
- Configurable AC / solar / generator charger priority by LCD setting

SECURE

- Overload/over-temperature/short-circuit protection
- Smart battery charger design for optimized battery protection
- Limiting function installed to prevent excess power overflow to grid



Colorful touch LCD, IP65 protection degree



DC couple and AC couple to retrofit existing solar system



Max. 16 inverters in parallel; Support multiple batteries parallel



Max. charging/discharging current of 300A



16kW super hybrid inverter



Support storing energy from diesel generator

TECHNICAL DATA

Model	SUNSYNK MAX
Battery Input Data	
Battery Type	Lead-acid or Lithium-ion
Battery Voltage Range	43~60V
Max. Charge Current	300A
Max. Discharge Current	300A
Charging Curve	3 Stages/Equalisation
External Temperature Sensor	Yes
Charging Strategy for Li-Ion Battery	Self-Adaptation to BMS
PV String Input Data	
Max. DC Input Power	18000W
Max PV Input Voltage	450V
MPPT Range	250V~450V
Start-up Voltage	150V
PV Input Current	22A + 22A
Max. PV Isc	26A + 26A
No. of MPPT / Strings Per MPPT	3 / 2
AC Output Data	
Max. On-Grid AC Power	16000W
Max. Off-Grid AC Power	13000W
Peak Power (off-grid)	2 times of rated power, 10 S
AC Output Rated Current	65A
Max AC Current	70A
Max Continuous AC Passthrough	150A
Bypass Current	150A
Frequency Range	45Hz ~55Hz
Voltage Range	211V ~ 264V
Grid Type	Single-Phase
Current Harmonic Distortion	THD<3%(Linear load<1.5%)
Efficiency	
Max. Efficiency	97.60%
Euro Efficiency	97.00%
MPPT Efficiency	99.90%
Protection	
Integrated	PV Input Lightning Protection, Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Surge protection, DC Battery Current Protection
Certifications and Standards	
Grid Regulation	VDE 0126, AS4777, NRS2017, G98, G99, IEC61683, IEC62116, IEC61727, RD1699:2011, XP C15-712-3:2019-05
Safety EMC / Standard	IEC62109-1, IEC62109-2, EN61000-6-1, EN61000-6-3
General Data	
Operating Temperature Range	-25~55°C
Cooling	Fan
Noise	<30dB
Communication with BMS	RS485; CAN
Weight	34.5kg
Size	422W×702H×281D mm
Protection Degree	IP65
Installation Style	Wall-mounted
Warranty	5 years