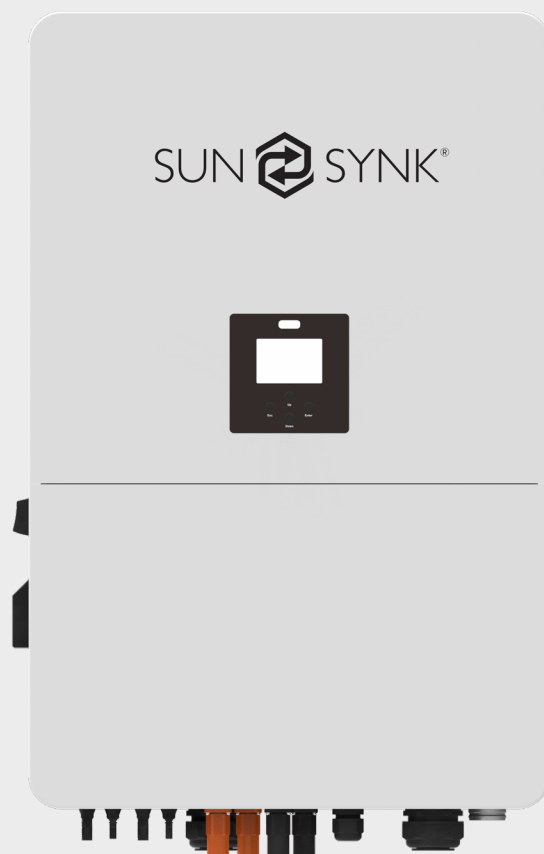




THREE-PHASE HYBRID INVERTER



DATASHEET

SUNSYNK-80K-SG02HP3-EU-EM6

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Model	SUNSYNK-80K-SG02HP3-EU-EM6
Battery Input Data	
Battery Type	Li-Ion
Battery Voltage Range	160 Vd.c ~ 1000 Vd.c
Max. Charging Current	80+80 Ad.c
Max. Discharging Current	80+80 Ad.c
Charging Strategy for Li-Ion Battery	Self-adaption to BMS
Number of Battery Input	2
PV String Input Data	
Max. PV Access Power	160000 W
Max. PV Input Power	128000 W
Max. PV Input Voltage	1000 V
Start-up Voltage	180 V
PV Input Voltage Range	180 ~ 1000 V
MPPT Voltage Range	150 ~ 850 V
Full Load MPPT Voltage Range	485 ~ 850V
Rated PV Input Voltage	650 V
Max. Operating PV Input Current	36 + 36 + 36 + 36 + 36 + 36 Ad.c
Max. Input Short-Circuit Current	54 + 54 + 54 + 54 + 54 + 54 Ad.c
No. of MPPT/No. of Strings per MPPT	6/2+2+2+2+2+2
Max. Inverter Backfeed Current to the Array	0
AC Input/Output Data	
Rated AC Input/Output Active Power	80000 W
Max. AC Input/Output Apparent Power	88000 VA
Peak Power (Off-Grid)	1.5 times of rated power, 10 s
Rated AC Input/Output Current	121.3/116 Aa.c
Max. AC Input/Output Current	133.4/127.6 Aa.c
Max. Continuous AC Passthrough (grid to load)	200 A
Max. Output Fault Current	256 A
Max. Output Overcurrent Protection	334 A
Rated Input/Output Voltage/Range	220/380 V, 230/400 V 0.85Un-1.1Un
Grid Connection Form	3L+N+PE
Rated Input/Output Grid Frequency/Range	50 Hz/45-55 Hz, 60 Hz/55-65 Hz
Power Factor Adjustment Range	0.8 leading to 0.8 lagging
Total Current Harmonic Distortion THDi	<3% (of nominal power)
DC Injection Current	<0.5% In
Efficiency	
Max. Efficiency	98.70%
Euro Efficiency	98.10%
MPPT Efficiency	>99%

Protection	
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, Thermal Protection, DC Terminal Insulation Impedance Monitoring, DC Component Monitoring, Ground Fault Current Monitoring, Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, Overvoltage Load Drop Protection, Residual Current (RCD) Detection, Surge Protection Level
Integrated (Optional)	Arc Fault Circuit Interrupter (AFCI)
Surge Protection Level	TYPE III (DC), TYPE III (AC)
Certifications and Standards	
Grid Connection Standard	NRS 097-2-1; Additional connections available upon request
EMC/Safety Standards	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2
Interface	
Display	LCD+LED
Communication Interface	RS232/RS485/CAN
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN (optional)
General Data	
Operating Temperature Range	-40~60°C, >45°C Derating
Permissible Ambient Humidity	0~100%
Permissible Altitude	3000 m
Noise	≤ 65 dB
Ingress Protection (IP) Rating	IP65
Inverter Topology	Non-Isolated
Over Voltage Category	OVC II (DC), OVC III (AC)
Weight	105 kg
Cabinet Size (WxHxD)	606×927×314 mm (Excluding connectors and brackets)
Warranty	5 years (10 when installed with a Sunsynk battery)
Type of Cooling	Intelligent Cooling
Pollution Degree	PD2 (Inside) PD3 (Outside)
Manufacturer Country	China



NOTICE

Safe Transport and Handling of the Inverter

When transporting the equipment, always use its original packaging and keep it intact as a complete unit. Store the product in a dry environment, avoiding direct sunlight, and maintain a temperature range between -40°C and 60°C. As the equipment can be quite heavy, always consider its total weight when moving, transporting, or installing it, ensuring that the installation site has adequate load-bearing capacity. Transporting and installing the inverter should only be carried out by qualified personnel.



Contact Us

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