

SINGLE PHASE HYBRID INVERTER

SUNIN-6K/8K/10K/12K-L1P1-EU

MAIN FEATURES

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Colorful touch LCD,
IP66 protection degree
- 

Ac coupling to retrofit
existing solar system
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Max. 6 pcs parallel for on-
grid and off-grid operation;
Support multiple batteries
parallel
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Max. charging/
discharging current
of 125/190/220/250A
- 

6 time periods for
battery charging/
discharging
- 

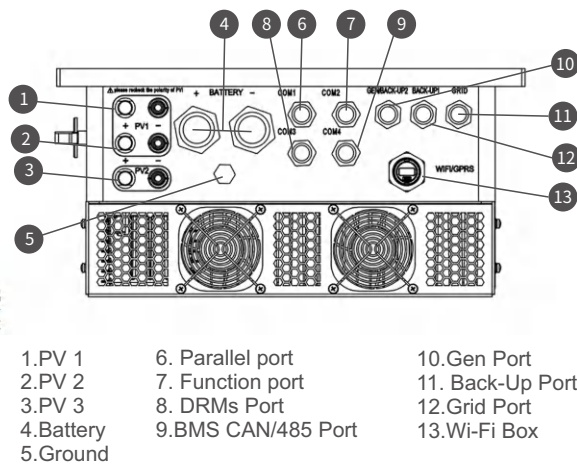
Support storing energy
from diesel generator



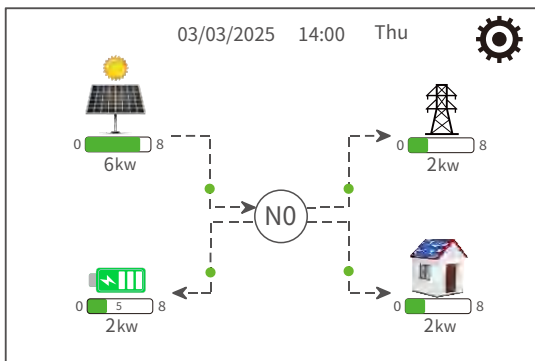
CERTIFICATIONS



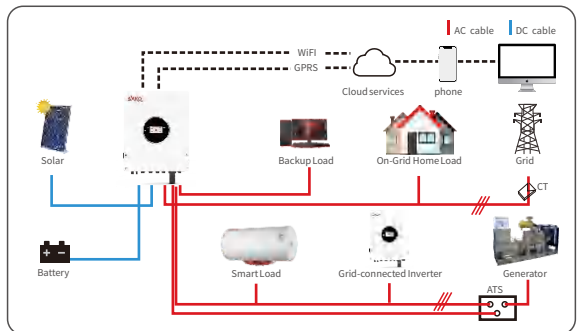
PRODUCT CHARACTERISTICS



LCD DISPLAY ICONS



BASIC SYSTEM ARCHITECTURE



IP66 Residential Energy Storage Hybrid Inverter



TECHNICAL PARAMETER

Product Models	SUNIN-6KM2-L1P1-ATEU	SUNIN-8KM2-L1P1-ATEU	SUNIN-10KM3-L1P1-EU	SUNIN-12KM3-L1P1-EU
Battery Input Parameters				
Battery Type	Lithium or Lead-acid Battery			
Rated Battery Voltage (V)	48V			
Maximum Charging Voltage (V)	≤60(configurable)			
Maximum Charging/Discharging Current (A)	125A	190A	220A	250A
PV Input Parameters				
Maximum DC Input Power (W)	12000W	16000W	18000W	20000W
Maximum DC Input Voltage (V)	500V			
MPPT Voltage Range (V)	150~450V			
Start-up Voltage(V)	125V			
Maximum Input Current(A)	20A/20A	30A/18A	32A/32A/32A	32A/32A/32A
Number of MPPT Trackers	2	2	3	3
AC Output Parameters (Grid-tied)				
Maximum Apparent Output Power (VA)	6600	8800	11000	13200
Rated Output Voltage (V)	220/230V			
Rated Output Frequency (Hz)	50/60Hz			
Maximum Output Current (A)	30A/28.7A	40A/38.2A	50A/47.9A	60A/57.4A
Output Power Factor	1(0.8 leading ~ 0.8 lagging)			
AC Output Parameters (Off-grid)				
Rated Output Power (W)	6000	8000	10000	12000
Peak Output Power (W)	>200%,15sec			
Rated Output Voltage (V)	220/230V			
Rated Output Frequency (Hz)	50/60Hz			
Rated Output Current (A)	26.1A	34.8A	43.5A	52.2A
Efficiency				
Max. Efficiency (PV)	98%			
Max. Efficiency (Battery)	94.5%			
European Efficiency	97.5%			
Protection				
PV Reverse Polarity Protection	Integrated			
PV Insulation Resistance Detection	Integrated			
Residual Current Detection	Integrated			
Output Overcurrent Protection	Integrated			
Output Short-circuit Protection	Integrated			
Output Overvoltage Protection	Integrated			
General Parameters				
Operating Temperature (°C)	-40~60°C(derating above 45°C)			
Storage Temperature (°C)	-30~65°C			
Relative Humidity	0~95%			
Operating Altitude (m)	≤4000(derating above 2000m)			
Cooling Method	Intelligent Forced Air Cooling			
Noise (dB)	<55dB			
Weight (kg)	21.5kg			
Dimensions (W × H × D mm)	198*427*554mm			
IP Rating	IP66			
Topology	High-frequency Isolation (Battery Side)			
Safety / EMC Certification	IEC62109, IEC61000, IS16169 & IS16221(BIS)			
Grid Compliance	IEC61727, EN50549-1, VDE-4105, NRS-097-2-1, OVE-Richtlinie R25, UNE217001/2, Ordinance No.140			
Other Certifications	IEC61683, IEC62116, EN50530, IEC60068			

