

THREE PHASE HYBRID INVERTER

SUNIN-20K/25KM2-L1P3-EU

MAIN FEATURES

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Extreme Climate Adaptability
Full-load operation,
45°C without derating
- 

High Battery Compatibility
Max. 415A charge/discharge,
supports three battery inputs
- 

Wide Grid Adaptability
154V-286V per phase input,
50/60Hz autoadaptation,
built-in SPD
- 

High Surge&Unbalanced Output
2x load surge for 10s,
150% three-phase
unbalanced output
- 

Flexible System Expansion
Up to 8 units parallel,
supports AC coupling
for retrofit
- 

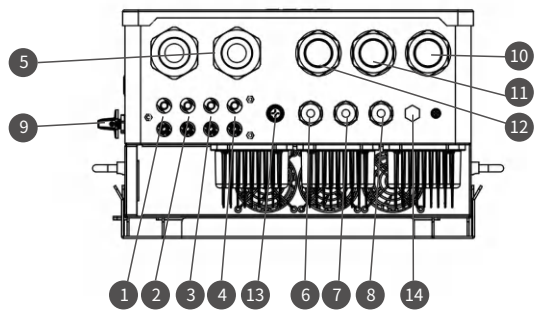
SiC + Full Aluminum + IP66
High efficiency, lightweight,
IP66 protection



CERTIFICATIONS



PRODUCT CHARACTERISTICS



- 1.PV 1

2.PV 2

3.PV 3

4.PV 4

5.Battery
6. Parallel port

7. Function port

8.BMS CAN/485 Port

9. DC Switch
- 10.Gen Port

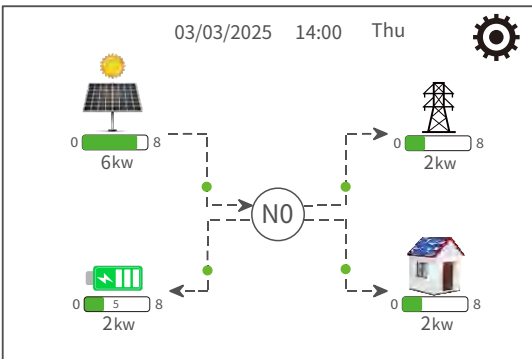
11. Back-Up Port

12.Grid Port

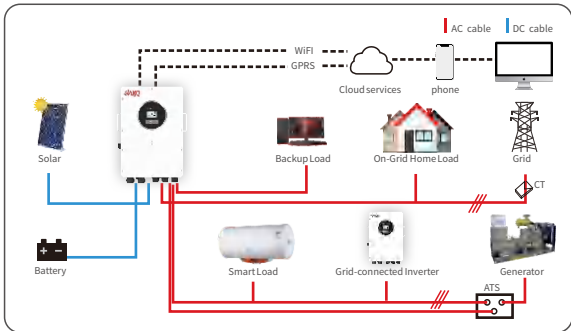
13.Wi-Fi Box

14.Ground

LCD DISPLAY ICONS



BASIC SYSTEM ARCHITECTURE



IP66 Residential Energy Storage Hybrid Inverter



TECHNICAL PARAMETER

Model	SUNIN-20KM2-L1P3-EU	SUNIN-25KM2-L1P3-EU
Inverter Input/Output(grid)		
Rated Power (kw)	20/20	25/25
Rated Voltage	380/400Vac, 3W+N+PE	
Rated Frequency (Hz)	50/60	
Rated Factor Range	0.8 leading~0.8 lagging	
Switch Time (ms)	<20	
Current (Maximum/Continuons) (A a.c.)	58/29	60/35
Max Output Overcurrent Protection	400Vac/100Aac	
Battery		
Battery Type	Lithium/ Lead-acid	
Battery Voltage Range (V d.c.)	40~60	
Rated Battery Voltage (V d.c.)	48	
Max Charge Current (V d.c.)	390	415
Max Discharge Current (V d.c.)	390	415
PV Input		
No. of MPPT Tracker/Strings	2/2+2	
Max. PV Array Power(kW)	40	48
Max DC Voltage (V d.c.)	1000	
MPPT Voltage Range (V d.c.)	150~950Vdc	
Start-up Voltage (V d.c.)	180	
Max. Input Current A d.c.)	4*20	
Isc PV (Absolute Maximum) (A d.c.)	4*30	
AC Output (EPS)		
EPS Rated Output Voltage	380/400Vac, 3W+N+PE	
EPS Rated Output Frequency (Hz)	50/60	
EPS Rated Output Active Power (kW)	20	25
EPS Rated Output Apparent Power (kVA)	20	25
EPS Rated Output Current (A a.c.)	29	35
Overload Capacity (Off Grid)	100% 600s/120% 300s/150% 60s/200% 10s	
Efficiency		
MPPT Efficiency	99.90%	
Euro-Efficiency	97.20%	
Max. Efficiency	98.00%	
Protection &Feature		
Insulation Monitoring	Yes	
Residual Current Monitoring	Yes	
Parallel Function	Yes	
Protection Degree	IP66	
Certifications	IEC62109-1/2, IEC62477-1,IEC 61000-6-1,IEC 61000-6-3,EN 50549-1&-10,NRS 097-2-1,IEC61727,IEC61683,IEC62116	
Other Protection	Output over voltage, Output over current, Short circuit, Surge, Temperature, Anti-Islandmg	
General Parameter		
Storage Temperature	-25℃~-+60℃	
Operating Temperature	-25℃~-+60℃ (Linely derating to 60% when exceed +45℃~-+60℃)	
Humidity	0~95%(Non-condensing)	
Altitude (m)	4000(>2000 Derating)	
Noise (dB)	<75	
Machine Dimensien(W*H*D) (mm)	448*660*265	
Machine Weight/N.W.(kg)	48	
Display& Communication		
Display	LCD+APP	
Interface	RS485/WIFI/CAN/DRM (Optional: Bluetooth/LAN/Meter)	

