

Hybrid Inverter

SUN-3KS/3K6S/4KS/4K6S/5KS/6KS48P1

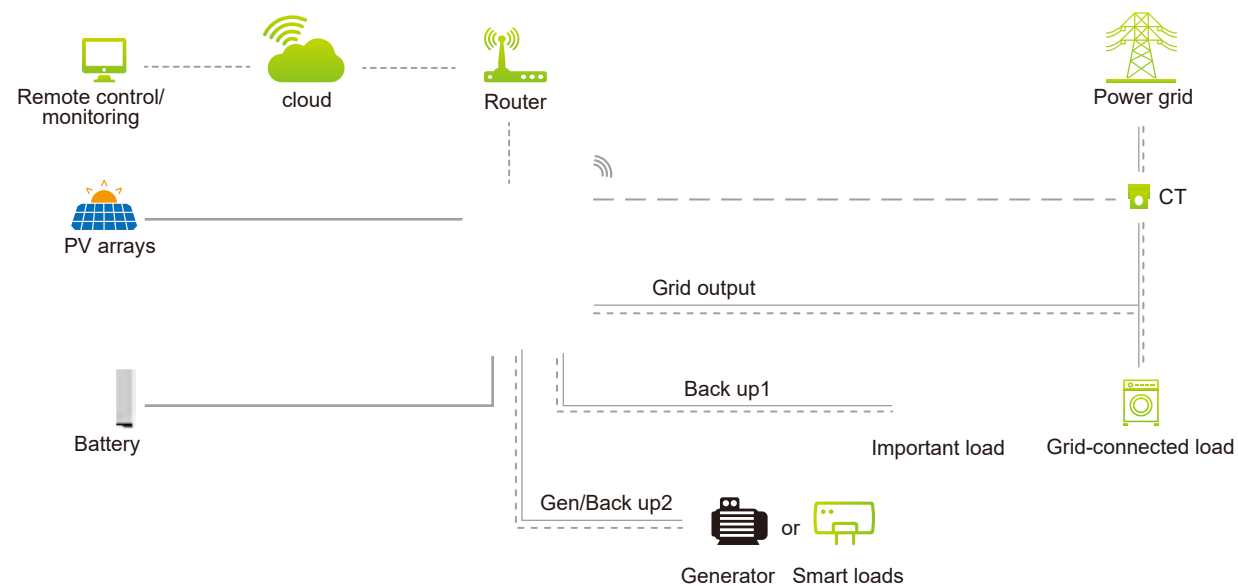


SUN series

Single-phase

- Up-to 120A current of battery charge and discharge
- Off-grid peak power of twice of rated power within 15 seconds
- Switching as uninterruptible power supply within 10ms
- Supporting lead-acid batteries and lithium batteries and matching economical solutions for different markets

Smart Energy Solutions



TECHNICAL DATA

Modle Name	SUN-3KS48P1	SUN-3K6S48P1	SUN-4KS48P1	SUN-4K6S48P1	SUN-5KS48P1	SUN-6KS48P1
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Battery input data

Battery Type	Lithium or lead acid battery					
Rated battery voltage	48V					
Maximum charging voltage	≤60 (Configurable)					
Maximum charge/discharge current	75A	90A	100A	110A	120A	120A

PV input data

Maximum DC input power	6kW	7.2kW	8kW	9.2kW	10kW	12kW
Maximum DC input voltage	500V					
MPPT Operating voltage range	150~450V					
Starting voltage	125V					
Maximum input current	18A	18/18A	18/18A	18/18A	18/18A	18/18A
MPPT number	1	2	2	2	2	2

AC output parameters (On-Grid)

Maximum output apparent power	3300W	3960W	4400W	5000W	5500W	6000W
Rated output voltage	220/230V					
Rated output frequency	50/60Hz					
Max output current	15A	18A	20A	22A	25A	27A
Output power factor	1 (-0.8 leading~+0.8 lagging)					

AC output parameters(Off-Grid)

Rated output apparent power	3000W	3600W	4000W	4600W	5000W	6000W
Maximum output apparent power	>200%,15sec					
Rated output voltage	230V					
Rated output frequency	50/60Hz					
Max output current	14A	16A	18A	21A	23A	27A

Efficiency

Max efficiency	97.6%
Max efficiency	94.5%
Europe efficiency	97%

Protection

PV input reverse polarity protection	Yes
PV insulation resistance detection	Yes
Residual current detection	Yes
Output over current protection	Yes
Output short circuit protection	Yes
Output over voltage protection	Yes

Basic data

Operation temperature	-25°C~60°C (frequency-decreasing above 45°C)
Storage temperature	-30~65°C
Relative humidity	0~95%
Working altitude	≤4000m (frequency-decreasing above 2000m)
Cooling	Natural cooling
Noise	<55db
Weight	20kg
Dimensions (W*H*D)	198*427*554mm
Protection class	IP66
Topology	HF isolation (Battery side)

Standard

Safety standard/EMC standard	NB/T32004-2018, IEC62109, IEC61000, IS16169 & IS16221(BIS)
Grid-connected standard	IEC61727, EN50549-1, VDE-4105, NRS-097-2-1, OVE-Richtlinie R25, UNE217001/2, Ordinance No.140
Other standard	IEC61683, IEC62116, EN50530, IEC60068

