

Off Grid Solar Inverter



Introduction

We have a complete range of products, including off-grid inverters, MPPT controllers, solar pump inverters and lithium batteries, which can form 3.5kva and 5.5kva solar off-grid system according to the actual application requirements.



Grid inverter

MPPT controller



Water pump inverter



Grid inverter application

No electricity, power shortage, unstable power areas, no impact load such as motor

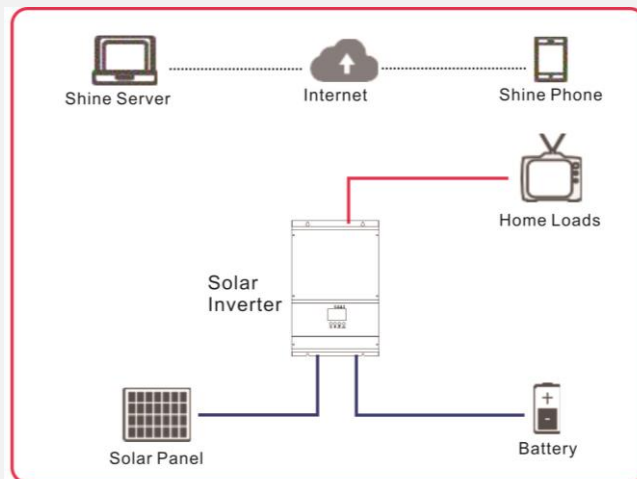
Features

- 1, Integrated MPPT controller;
- 2, The priority of grid and solar power supply can be set;
- 3, Compatible with lead-acid and lithium batteries;
- 4, 3.5kva only supports single machine;
- 5, 5.5kva supports parallel operation, up to 9 sets;

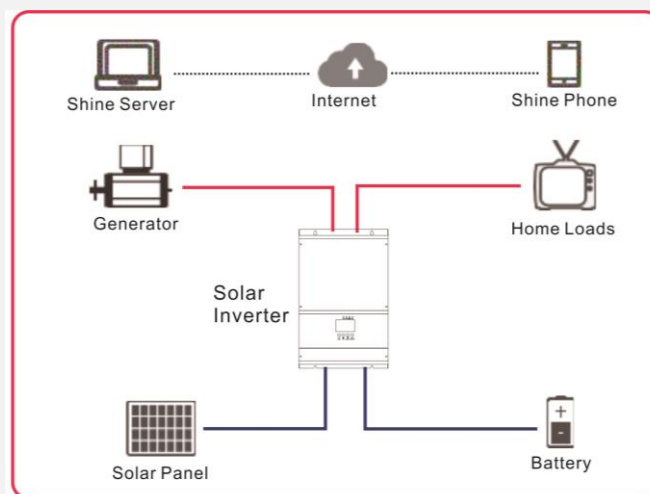
System diagram

A: Single phase application

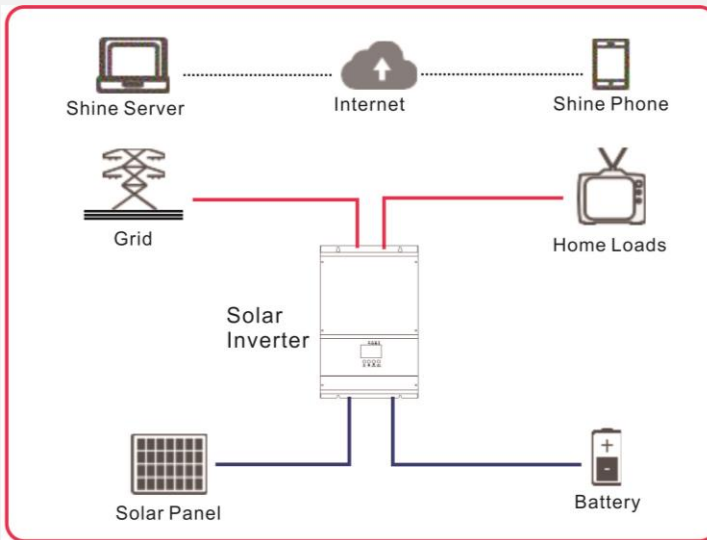
1 Only PV application



2 PV + Generator application

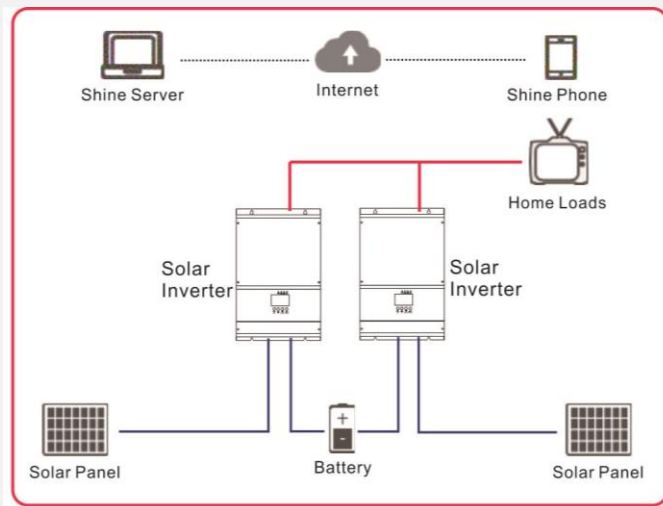


3 PV + Grid application

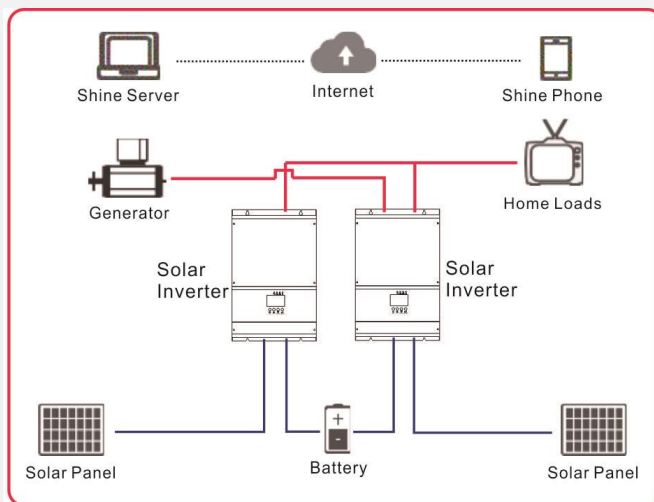


B: Parallel operation in single-phase

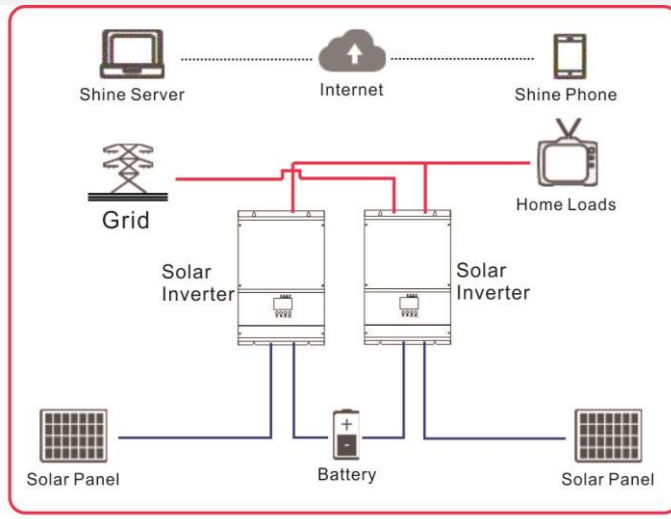
1 Only PV application



2 PV + Grid application

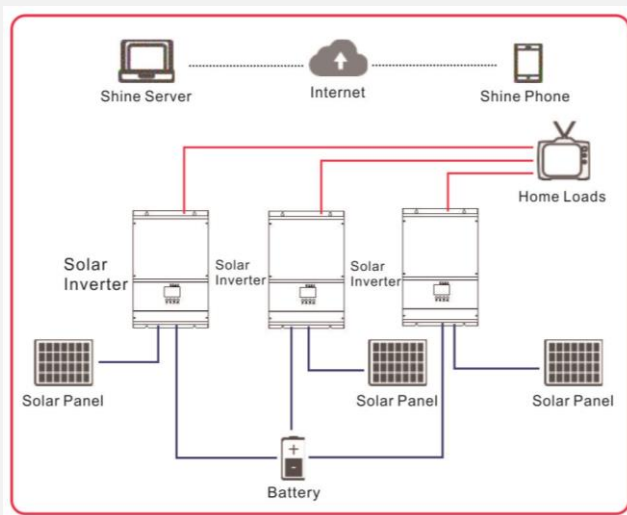


3 PV + Grid application

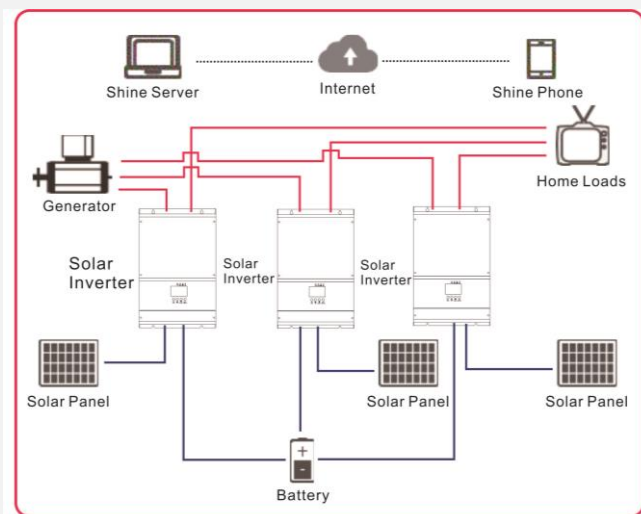


C: Parallel operation in three-phase (only 5kva available)

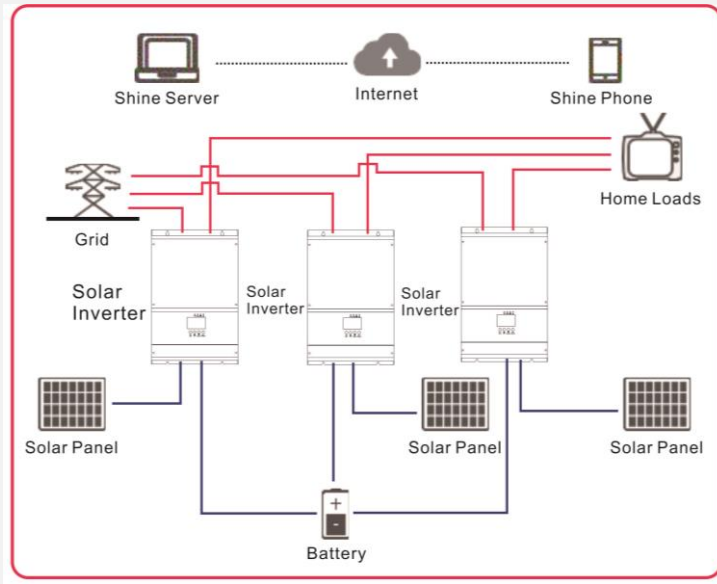
1 Only PV application



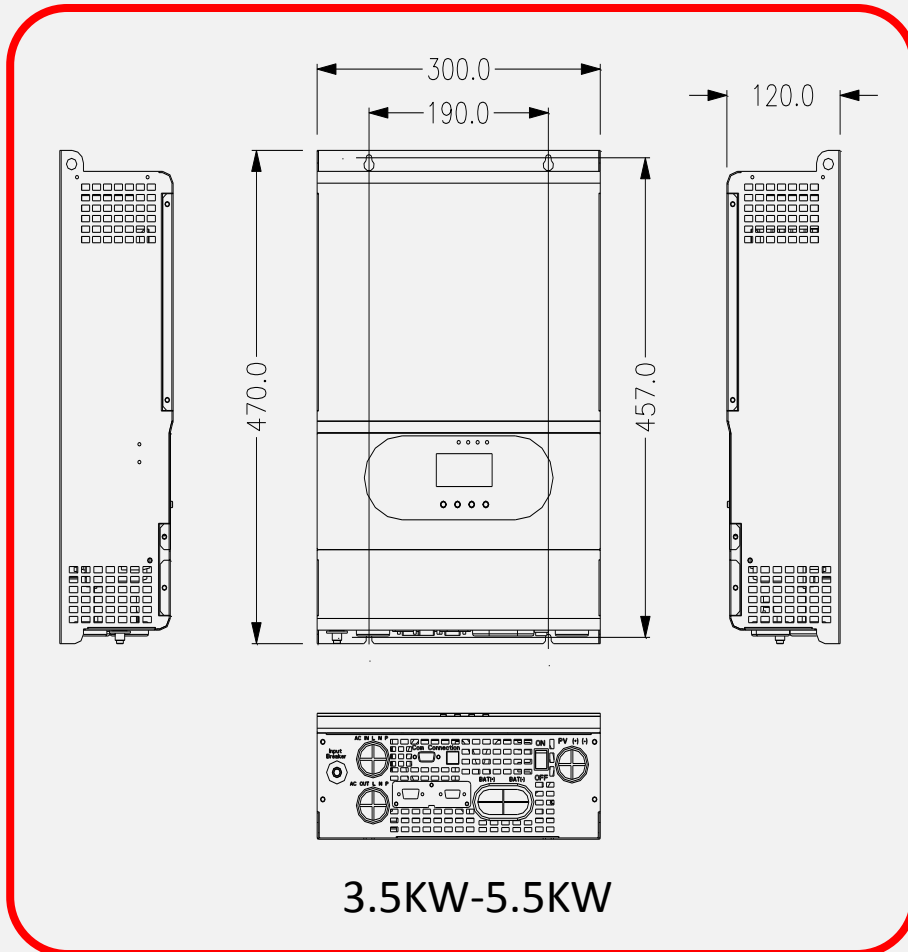
2 PV + Generator application



3 PV + Grid application



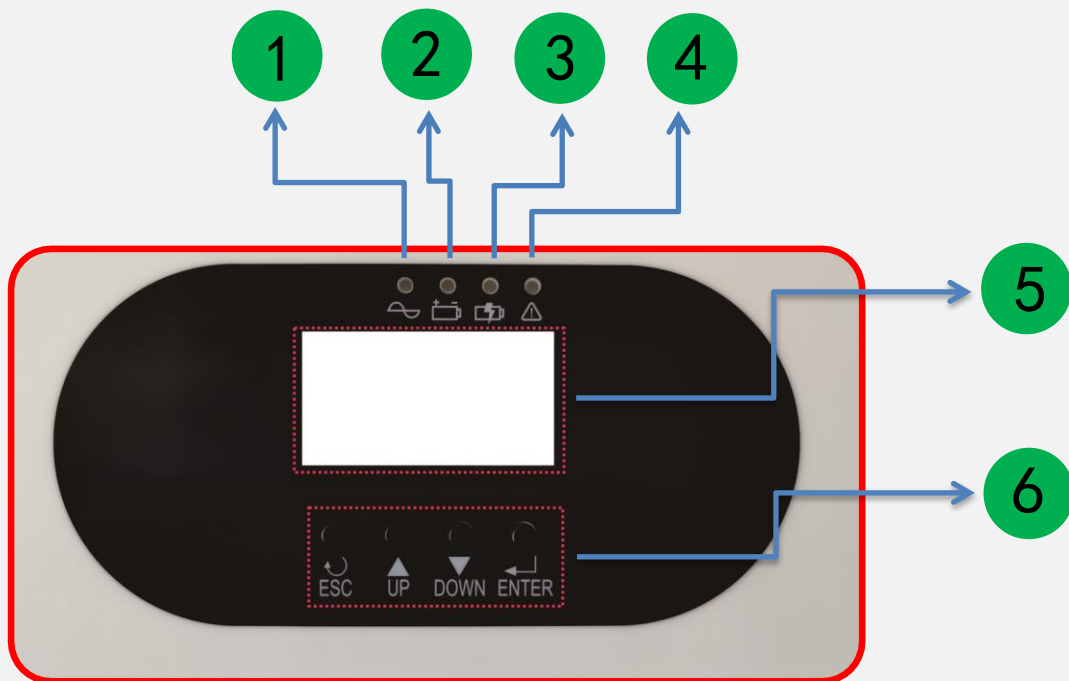
MK1000 Off-grid solar inverter size and installation size



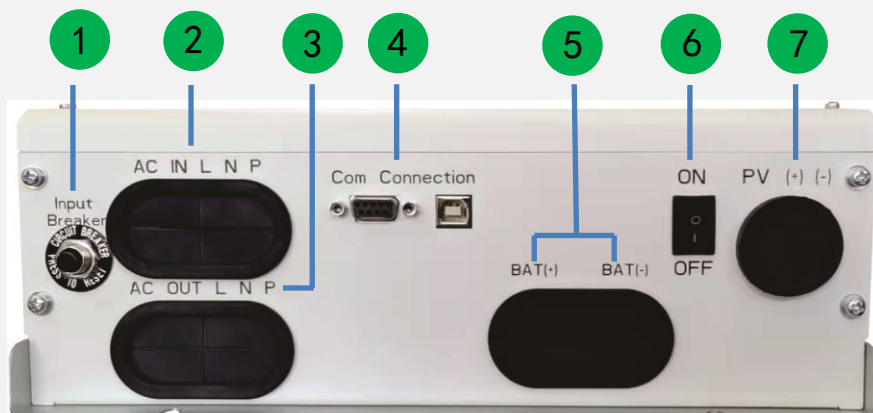
Product introduction

MK1000-SD series is a pure sine wave high-frequency solar inverter control integrated machine with a wide PV input range. When the energy is sufficient, it can be loaded without the battery. It has high energy density, small size, simple operation, and easy operation. It has the advantages of high efficiency and low no-load loss. Widely used in household systems, communication base stations, monitoring systems, pastoral areas, 5G auxiliary power supply, etc.

Panel Description



- 1, Grid Indicator
- 2, Status Indicator
- 3, Charging Indicator
- 4, Fault Indicator
- 5, LCD Display
- 6, Function Buttons



- 1, Circuit Breaker
- 2, AC input
- 3, AC output
- 4, RS-232 Communication port
- 5, Battery input
- 6, Power on/off switch
- 7, PV input

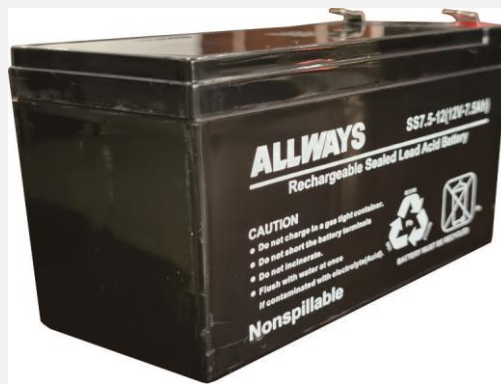
MK1000 3500–5500W

High frequency, 220Vac output

Model	MK1000-3024-SD	MK1000-5048-SD
Battery system voltage	24VDC	48VDC
Float charge voltage	27VDC	54VDC
Overcharge alarm voltage	32VDC	61VDC
Inverter output		
Rated power	3500VA/3500W	5500VA/5500W
Parallel	Not available	Yes, 9 units maximum
Output voltage capability (VAC)	220VAC \pm 5% 50/60Hz	220VAC \pm 5% 50/60Hz
Overload protection	10s (110–130%); 3s (130–150%); 200ms (>150%);	
Cold start voltage(Lead-Acid)	23.0 Vdc	46.0 Vdc
Surge power	6000VA	10000VA
Convert efficiency	94%	94%
Output waveform	Pure sine wave	Pure sine wave
Transfer time	10ms (personal computer), 10ms (household load)	
Solar charger		
Maximum input power	1500W	5500W
MPPT voltage input range	30VDC–115VDC	120VDC–430VDC
Maximum input voltage	145VDC	450VDC
Maximum charge current	60A	80A
Maximum charge efficiency	97%	97%
Energy saving power consumption	<10W	<15W
Standby power consumption	\leq 60W	
AC charger		
Maximum charge current	5–60A	2–60A
AC input voltage	220VDC	220VDC
AC input voltage range	185–240VDC for (personal computers), 90–240VDC (for home application)	
Frequency range	50Hz/60Hz (Auto sensing)	50Hz/60Hz (Auto sensing)

Model	MK1000-3024-SD	MK1000-5048-SD
Work environment		
Relative temperature	5%-95% (Non-condensing)	5%-95% (Non-condensing)
Operating temperature	0° C - 55° C	0° C - 55° C
Storage temperature	-15° C - 60° C	-15° C - 60° C
Mechanical specifications		
Machine dimensions (W*H*Dmm)	300*450*110mm	300*450*110mm
Package dimensions (W*H*Dmm)	360*532*169mm	360*532*169mm
Weight (Kg)	8Kg	8Kg

Energy storage battery



Model (Lead acid)	SS7.5-12	SS60-12	SS100-12
Voltage	12V		
Capacity	7.5Ah	60Ah	100Ah
Storage temperature range	0° C - 35° C		
Battery size (W*H*Dmm)	151*94*65mm		
Weight (Kg)			





