

# Sustainable Energy, Anytime, Anywhere



LITHIUM ION BATTERIES CELL MANUFACTURERS

**SinoPoly**

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**Energy When You Need It, Where You Need It**

**Power Reliability: Your Energy, Always On**

## Product Features

- Single-phase Hybrid inverter
- Safe and reliable
- Support multi-parallel connections
- Support flexible access and diesel generator
- Compatible with lithium-ion and lead-acid battery
- Intelligent EMS management function
- On/off-grid automatic switching function, to ensure uninterrupted power when high loads are off-grid

Model	CJ-3KSL1	CJ-3K6SL1	CJ-4KSL1	CJ-4K6SL1	CJ-5KSL1	CJ-6KSL1
<b>DC input</b>						
Max. recommended DC power [W]	4600	4600	6000	6000	7000	7000
Max. DC voltage[V]				550		
Nominal DC operating voltage[V]				360		
MPPT voltage range [V]	125-500	125-500	125-500	125-500	125-500	125-500
MPPT voltage range@full load [V]	150-500	150-500	170-500	170-500	220-500	220-500
Max. input current [A]				14/14		
Max. short circuit current [A]				17.5/17.5		
Start input voltage [V]				125		
No. of MPP trackers				2		
Strings per MPP tracker				1		
DC disconnection switch				/		
<b>AC output</b>						
Nominal AC power[VA]	3000	3680	4000	4600	5000	6000
Max. apparent AC power[VA]	3000	3680	4000	4600	5000	6000
Rated grid voltage(range)[V]				230(176 to 270)		
Rated grid frequency[Hz]				50/60		
Nominal AC current[A]	13	16	17.4	20	21.7	26
Max.AC current[A]	13	16	17.4	20	21.7	26
Displacement power factor				0.9 leading~0.9 lagging		
Total harmonic distortion(THDI)				< 3%		
Load control				optional		
<b>AC input</b>						
Nominal AC power[VA]	3000	3680	4000	4600	5000	6000
Rated grid voltage(range)[V]				230(176 to 270)		
Rated grid frequency[Hz]				50/60		
Nominal AC current[A]	13	16	17.4	20	21.7	26
Max.AC current[A]	13	16	17.4	20	21.7	26
Displacement power factor				0.9 leading~0.9 lagging		
AC inrush current				35		
<b>EPS output</b>						
EPS rated power[VA]	3000	3680	4000	4600	5000	6000
Max. EPS power[VA]	3000	3680	4000	4600	5000	6000
EPS rated voltage, Frequency				230VAC, 50/60Hz		
EPS rated current[A]	13	16	17.4	20	21.7	26
Max. EPS current[A]	13	16	17.4	20	21.7	26
Switch time[s]				<10ms		
Total harmonic distortion(THDv)				<2%		
Parallel operation				Yes		
Compatible with the generator				Yes(signal provided only)		
<b>Battery parameter</b>						
Battery type				Lithium battery/Lead-ACID		
Battery voltage range[V]				40-58		
Recommended battery voltage[V]				48		
Cut Off Voltage[V]				40		
Max. charging Voltage[V]				58		
Max. Protective Voltage[V]				59		
Max. charge/discharge current[A]	95/62.5	95/76.6	95/83.3	95/95.8	95/104.2	95/110
Peak charge/discharge current[A]	95/62.5	95/76.6	95/83.3	95/95.8	95/104.2	95/110
Communication interfaces				CAN/RS485/Wifi/LAN/DRM		
Reverse connect protection				Yes		
<b>Efficiency</b>						
MPPT efficiency				99.9%		
Euro efficiency				97%		
Max. efficiency				97.6%		
Max. Battery charge efficiency				95%		
Max. Battery discharge efficiency				95%		



## Work modes: Self-use



### 1. When PV, Grid, Battery is available:

A. Solar energy provides power to the loads as first priority, if solar energy is sufficient to power all connected loads, solar energy excess power will provide to charge battery, and then redundant power will feed to grid.

B. Solar energy provides power to the loads as first priority, if solar energy is not sufficient to power all connected loads, battery energy will supply power to the loads at the same time.

C. Solar energy provides power to the loads as first priority, if solar energy and battery are not sufficient to power all connected loads, utility energy (Main Grid) will supply power to the loads at the same time.

### 2. When PV, Grid is available (without battery):

A. Solar energy provides power to the loads as first priority, if solar energy is sufficient, the excess power will feed to grid.

B. Solar energy provides power to the loads as first priority, if solar energy is not sufficient to power all connected loads, Grid energy will supply power to the loads at the same time.

### 3. When PV, Battery is available (Grid is disconnected):

A. Solar energy provides power to the loads as first priority, if solar energy is sufficient to power all connected loads, solar energy will provide to charge battery.

B. Solar energy provides power to the loads as first priority, if solar energy is not sufficient to power all connected loads, battery energy and solar energy will supply power to the loads at the same time.

## Work modes: Peak shift

### 1. When PV, Grid, Battery is available:



A. During charging, solar energy will charge the battery as a priority. The excess energy will supply power to the loads. If solar energy is sufficient to supply loads and charge battery, and if there's still some extra energy, then the excess power will feed the power to grid.

B. On charge time, solar energy will charge battery as first priority. Then the excess solar energy will supply power to loads. If solar energy is not sufficient to charge battery and supply loads, grid will supply all the connected loads with solar energy together.

C. On discharge time, solar energy provides power to the loads as first priority, if solar energy is sufficient to supply loads, and if there's still some extra energy from solar energy, then the excess power and battery will deliver the power to the grid at the same time.

D. In the period of no charge or discharge, the solar power supply loads at first priority, excess energy to the grid.

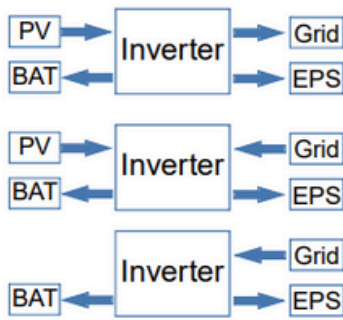
### 2. When Grid, Battery is available (PV is disconnected):

A. On charge time, grid will charge battery and supply power to the connected loads at the same time.

B. On discharge time, if load power is less than battery power, battery will supply power to loads as first priority, the excess power will be feed to grid.

C. On discharge time, if load power is more than battery power, battery and grid will supply power to the loads at the same time.

## Work modes: Bat priority



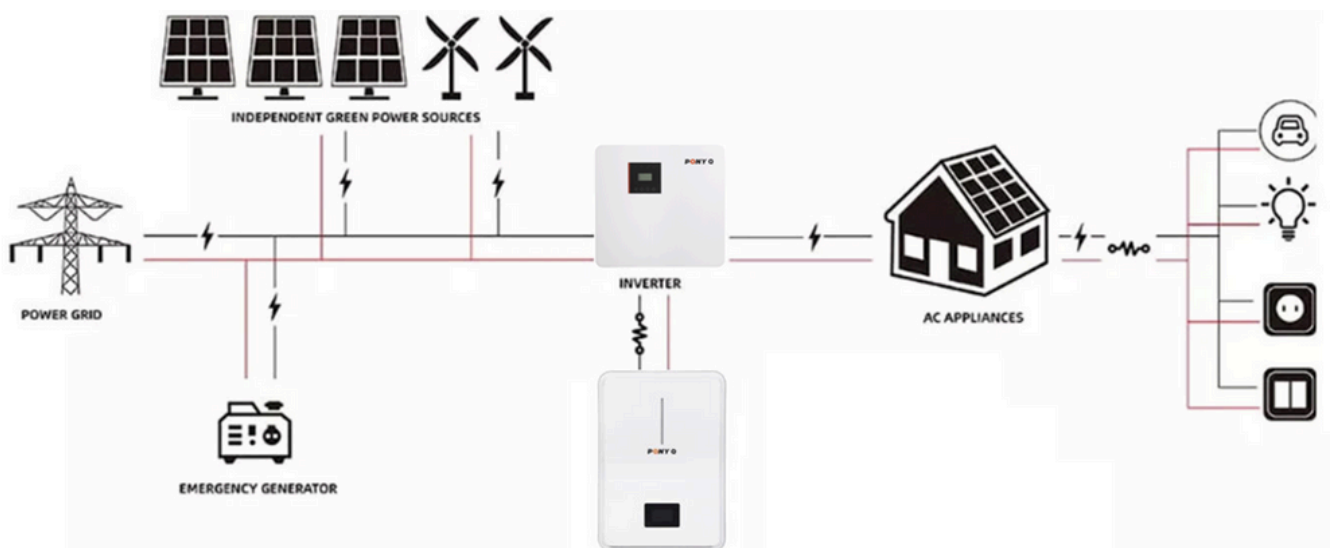
1. When PV, Grid, Battery is available:

A. Solar energy will charge battery as first priority, if solar energy is excess, the excess power will supply load. If there's still some extra energy, then the excess power will feed the power to grid .

B. Solar energy will charge battery as first priority, if solar energy is excess, the excess power will supply load. If solar energy is not sufficient to charge battery and supply loads, grid will supply power to loads.

2. When Grid, Battery is available (PV is disconnected) :

Grid will supply power to load and charge battery at the same time.



**EASY TO  
INSTALL**

**10 YEARS  
WARRANTY**

