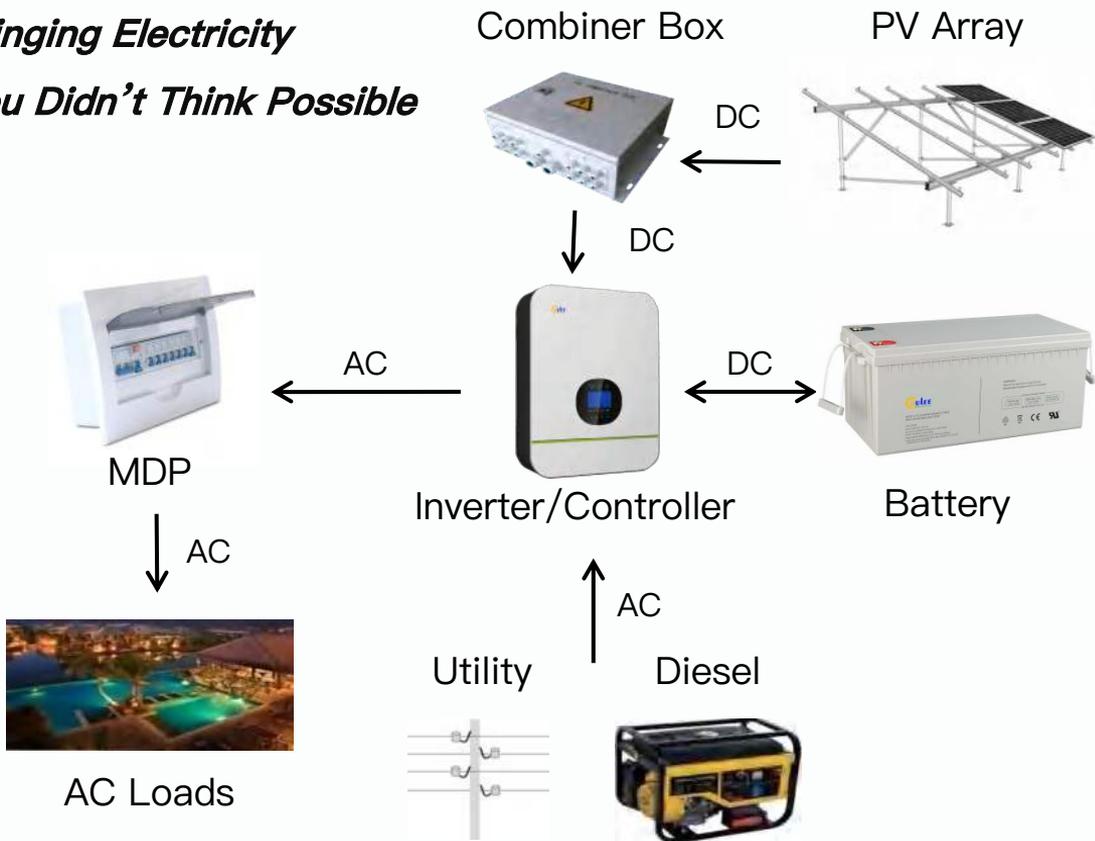




Off-grid PV System 3kWp



*Bringing Electricity
Where You Didn't Think Possible*



Main Components

Item		Specification	Q'ty/Unit		Remark
Power Generation Module	Bracket	3kWp Ground/Rooftop Bracket, Pot Galvanize Steel, All Accessories Included	1	set	Tilt Degree of the Bracket is Determined as per the Geographical Position
	Solar Panel	CL-335M-60, Premium Mono Solar Panel 335Wp	9	pcs	Plywood Crate
	Cable 1	4mm ²	30	M	
	Cable 2	16mm ²	20	M	
	Connector 1	MC4 Connector	9	pair	
	Connector 2	3 to 1 MC4 Waterproof Connector	3	pair	
	Combiner Box	3 to 1 Combiner Box, Open Circuit Voltage 500/1000VDC	1	set	
All-in-one Solar Controller & Inverter	Display module	LED & LCD Display	1	pcs	
	Controller	48V/80A MPPT Controller, Maximum 4.5kWp PV Array	1	set	With Diesel Engine Trigger Function, Reverse Charge Function, RS485 Communication
	Inverter	Pure Sine Wave Output, Maximum Allowable Output Power 5kWp, Single Phase, Surge Power 10000VA	1	pcs	
	System Box	With Total Cut-out Switch, Inverter and Controller Installed	1	pcs	
	Bypass Function	PV & Utility Power Change Function	1	set	
Battery module	Battery -02	12V/150Ah GEL Battery	8	sets	DOD 70%, Autonomy 1 day
	Battery Holder	48V/300Ah Battery Holder	1	set	
	Cable	Battery→Inverter: 5M, 25mm ² Outdoor Cable	5	M	
Packing	Carton	Standard Export Packaging	1	set	
Other	Auxiliary Material				All

Module type	CLM-335M-60
Rated Maximum Power (Pmax/W)	335
Maximum Power Voltage (Vmp/V)	34.0
Open-circuit Voltage (Voc/V)	41.5
Maximum Power Current (Imp/A)	9.87
Short-circuit Current (Isc/A)	10.36
Module Efficiency (%)	19.85

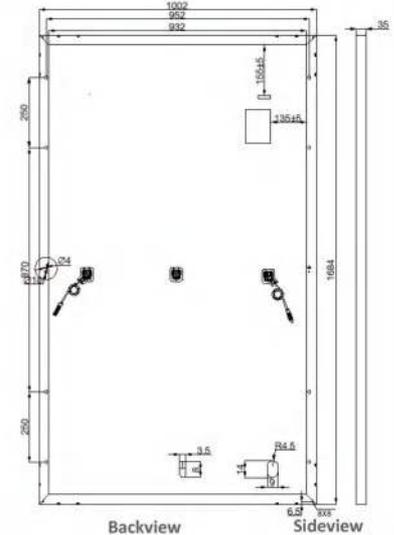
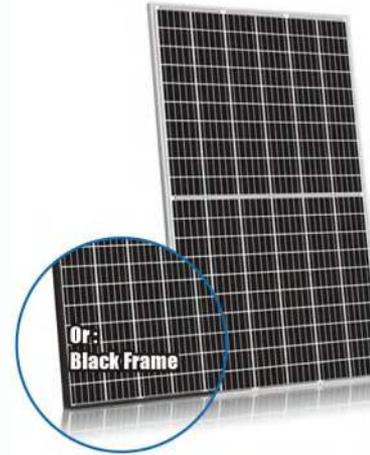
STC: Irradiance 1000W/m, Cell Temperature 25°C, AM = 1.5

Max. System Voltage	1500VDC (IEC)
Max. System Fuse Rating	15A
Operating Temperature	-40 ~ +85°C
Max. Static Load, Front (Snow)	5400Pa
Max. Static Load, Back (Wind)	2400Pa

Power Tolerance	0 ~ +3%
Temperature Coefficient of Pmax	$(-0.36 \pm 0.05)\%/^{\circ}\text{C}$
Temperature Coefficient of Voc	$(-0.28 \pm 0.02)\%/^{\circ}\text{C}$
Temperature Coefficient of Isc	$(0.048 \pm 0.01)\%/^{\circ}\text{C}$
NOTC	$(45 \pm 2)^{\circ}\text{C}$

Half-cut Cell Mono Solar Panel

- Reduced Power Loss
- Increased Shade Tolerance
- Less Hot Spot
- Improved Heat Dissipation
- More Physically Durable



Solar Cells	Mono PERC
Number of Cells	120 Half-cut Cells (6 × 20)
Module Dimensions	1684mm × 1002mm × 35mm
Weight	19kg

5kW Off-grid Solar Inverter

WHY?

Consider future loads that may require power so that the inverter installed today can handle growth in the next few years.

- Built-in MPPT solar charge controller
- Configurable grid or solar input priority
- Optional WIFI/ GPRS remote monitoring
- Smart function and parameter setting via LCD button
- Parallel for scalability
- Can be connected to generator



Datasheet	CLI-SA 5000TL (All-in-one Solar Controller/Inverter/Charger)
Battery voltage	48VDC
INVERTER OUTPUT	
RATED POWER	5000VA/ 5000W
Parallel Capability	Yes, 6 units
AC Voltage Regulation (Battery Mode)	230VAC \pm 5% @ 50/60Hz
Surge Power	10000VA
Efficiency (Peak)	93%
Waveform	Pure sine wave
Transfer Time	10 ms (For Personal Computers); 20 ms (For Home Appliances)
SOLAR CHARGER	
Maximum PV Array Power	4500W
MPPT Range @ Operating Voltage	60VDC ~ 115VDC
Maximum PV Array Open Circuit Voltage	145VDC
Maximum Solar Charge Current	80A
Maximum Efficiency	97%
Standby Power Consumption	2 W
AC CHARGER	
Charge Current	60A
AC Input Voltage	230 VAC
Selectable Voltage Range	170-280 VAC (For Personal Computers) ; 90-280 VAC (For Home Appliances)
Frequency Range	50Hz/60Hz (Auto sensing)
PHYSICAL	
Dimension (D/W/H) in mm	130/350/455
Net Weight (kgs)	14.5
OPERATING ENVIRONMENT	
Humidity	5% to 95% Relative Humidity(Non-condensing)
Operating Temperature	0°C - 55°C
Storage Temperature	-15°C - 60°C

Deep Cycle GEL Battery

- CLPC series is specially designed for frequent cyclic performance.
- With thicker plates, special nano-gelled material and additives as well as updated safety valve regulated technology, the CLPC series has excellent performance for high/lower temperature stability and lower current/power discharge application.
- CLPC series offers excellent recovery after deep discharge under frequent cyclic discharge, and can deliver around 1400 cycles at 80% DOD.



Lead Carbon & LiFePO4 Batteries
Available for Options

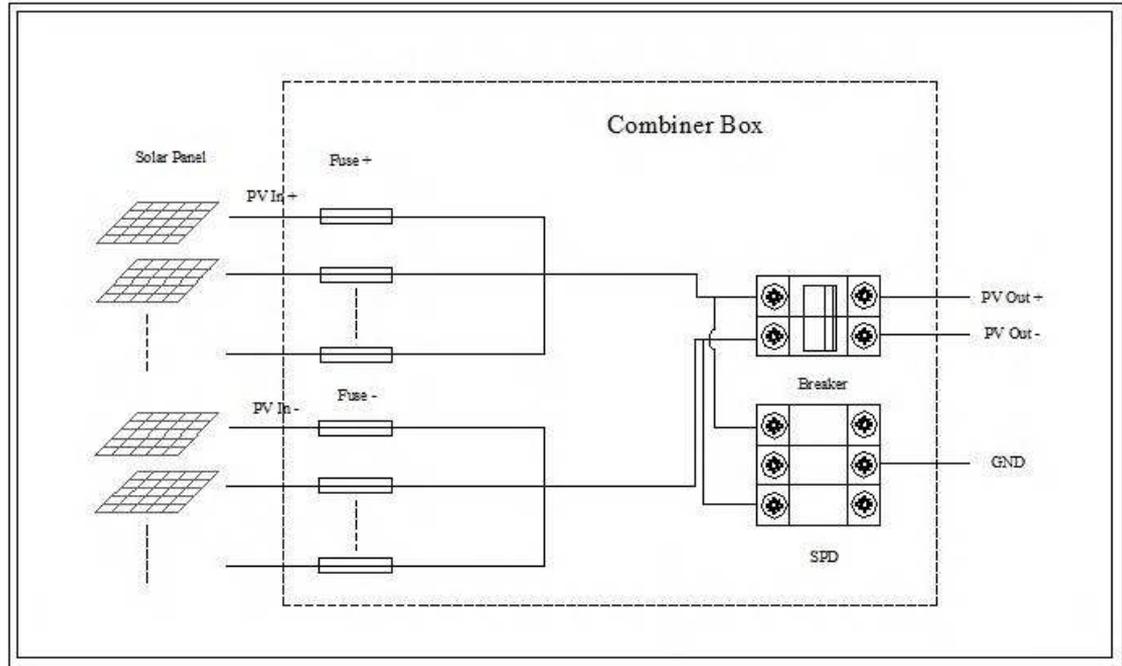
Model	Nominal Voltage (V)	Capacity C10 (Ah)	Weight (kg)	Total Height (mm)	Height (mm)	Length (mm)	Width (mm)	Internal Resistance (mΩ @25°C)
CLPC 200-6	6	200	30.8	275	275	243	187	2.3
CLPC 24-12	12	24	7.4	126	126	165	175	9.3
CLPC 33-12	12	33	11.2	180	171	180	130	8.3
CLPC 38-12	12	38	12.6	180	170	196	165	7.3
CLPC 50-12	12	50	15.7	229	208	227	138	6.8
CLPC 65-12	12	65	21.2	174	174	350	166	6.5
CLPC 70-12	12	70	21.5	227	208	259	169	6.1
CLPC 80-12	12	80	24.4	217	214	331	174	5.8
CLPC 90-12	12	90	29.7	217	214	331	174	5.6
CLPC 100-12	12	100	32.8	238	209	407	174	5.1
CLPC 120-12	12	120	38.5	241	241	483	170	4.6
CLPC 150-12	12	150	48.5	241	214	530	209	4.3
CLPC 200-12	12	200	57.5	245	219	522	240	3.8
CLPC 250-12	12	250	72.8	245	219	522	268	3.4

Combiner Box

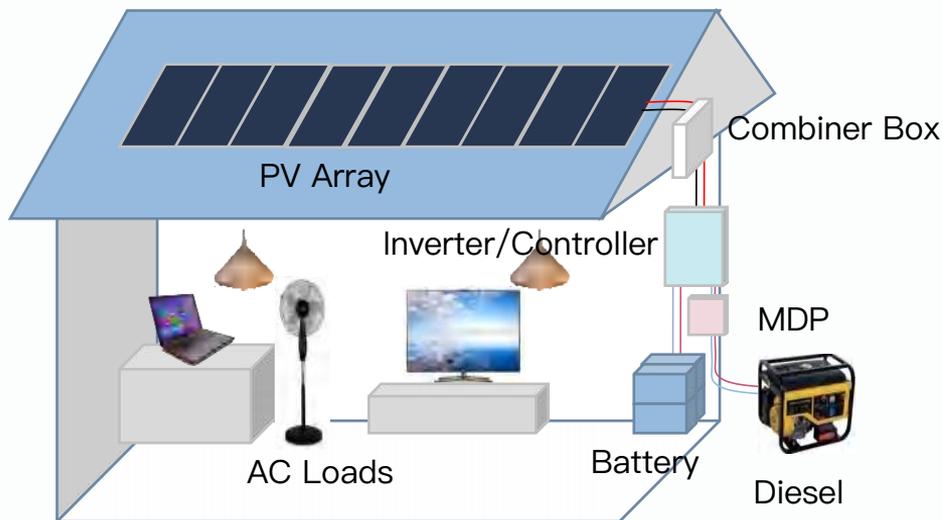


- 3 strings input, 1 string output
- IP65 waterproof
- UV resistance, flame retardant

PV Input:	6mm ²
PV Output:	16mm ²
Ground:	10mm ²
Voltage :	1000V



3D View Roof Installation (Ground Bracket for Option)



Rated Power Production Per Day (PSH: 5.0 Hours)		9.6 kWh
Power Consumption Per Hour	Rating Formula	Duration
1000W	9600Wh/1000W	9.6 Hours
2000W	9600Wh/2000W	4.8 Hours
3000W	9600Wh/3000W	3.2 Hours
4000W	9600Wh/4000W	2.4 Hours
5000W	9600Wh/5000W	1.92 Hours

Appliances	Rated Power(W)	QTY (PCS)	Total W
LED Lamps	7	10	70
Satellite Receiver	25	1	25
LCD TV	70	1	70
Fan	40	3	120
Printer	150	1	150
Computer	250	1	250
Washing Machine	300	1	300
Rice Cooker	1000	1	1000
Hair dryer	500	1	500
Laptop	90	1	90
Refrigerator(120L)	200	1	200
Total			2775

Warranty

- Solar Panels:
 - 12–year for product
 - 25–year for performance
- Battery: 3–year
- All-in-one Controller: 2–year
- Combiner Box: 2–year
- Other accessories: 2–year



Due to consolidated knowledge, experience and our qualified staff you'll get the best possible service through the whole process of consulting, planning and realization of your PV system(s).