

Blue Carbon

Charging, storage and inversion integration

System comprehensive solution

Three-phase

Charging, storage and
Inversion integration



Blue Carbon

BLUE CARBON TECHNOLOGY INC.



+86-0633-2190373

<https://www.bluecarbontech.com.cn/en/>
<https://bluecarbon.solar/>

Office Location

Building A, International Fortune Center, Rizhao City,
Shandong Province, China



Charging, storage and inversion integration

System comprehensive solution



Three-phase Contents

01 System Benefit Value

- System Benefit Value
- System Advantages
- System Details Display

02 220V Single-phase Standard Solution

- 220V/4kW 7kWh
- 220V/54kW Single-phase Standard Solution
 - I. 220V/6kW 15kWh
 - II. 220V/12kW 30kWh

03 380V Three-phase Standard Solution

- 380V/18kW 45kWh
- 380V/36kW 90kWh
- 380V/54kW 135kWh



Charging, storage and inversion integration

System comprehensive solution

Three-phase

Benefit Value

• Low product system cost •



No special high-voltage safety regulations or certifications required.



No need for personnel with high-voltage certifications for installation.



No special transportation and installation tools needed.

Simple installation,
convenient maintenance



Off-grid and on-grid system,
efficient internet access



Demand-side response to
Enhance stability



Dynamic expansion and
Lower the transformer costs
Through scalable capacity



Provides an alternative power
Source during power shortages.



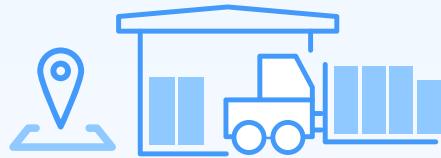


Charging, storage and inversion integration

System comprehensive solution

Three-phase

System Advantages



Blue Carbon

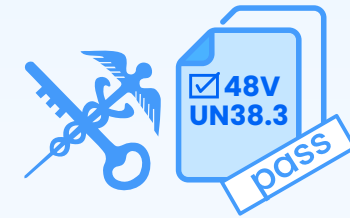
Integrated packaging for shipment

- System cost is reduced to less than 50%
- All wiring has been completed at the factory to reduce error rate



Safe and worry-free transportation

- Directly shipped to the sea port, ensuring safety and efficiency



Unimpeded customs clearance for sea transportation

- The high costs of transportation, safety certification, and construction caused by high-voltage systems have been visibly reduced

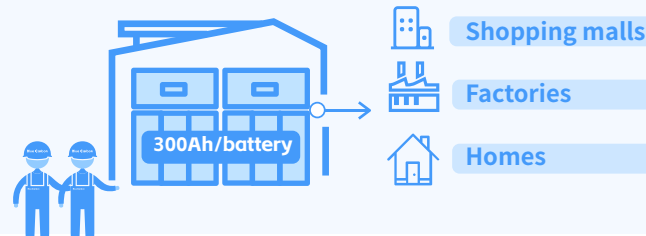
Factories

Total purchasing price of 220V/380V solar system

=

Product Cost + Logistics Cost
(transportation fee + storage fee + load/unloading fee)
+ **Inventory Cost + Team Training Cost**
+ **Installation & Construction Cost**

Output 220/380V



Easy installation, wide usage

- Direct access to users, easy installation, no complicated tools or professional skills required



Delivery upon arrival, efficiency highly improved

- Improve logistics efficiency and shorten delivery time

Businesses

Users

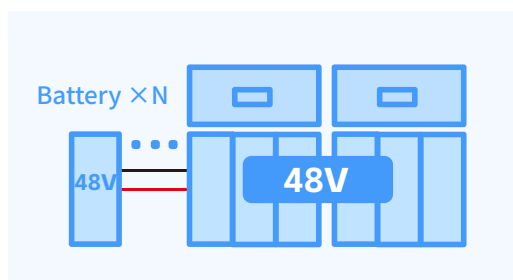
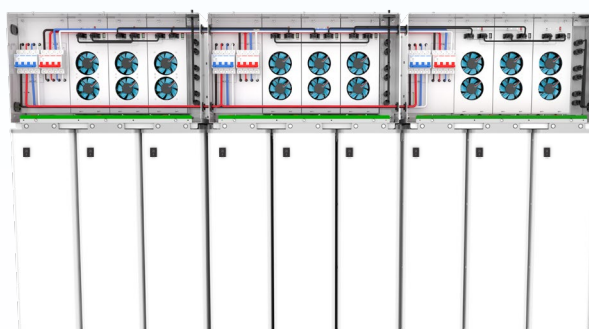


Charging, storage and inversion integration

System comprehensive solution

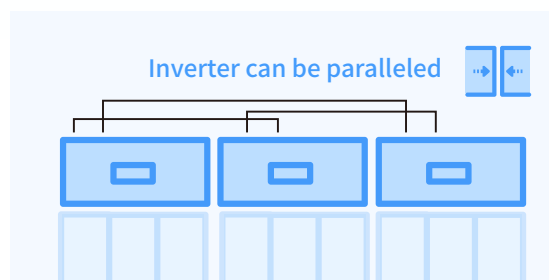
Three-phase

System Advantages



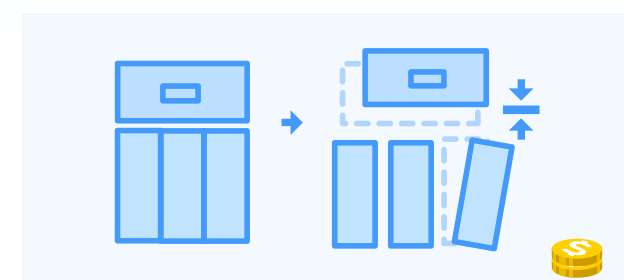
Different battery capacity options

- Modular design, 48V battery can be dynamically expanded according to demand



Maximum output power is 54kw

- Electric energy convergence and distribution to meet different electricity demands.



Integrated design, simple installation, and product can be disassembled separately without any impacts.

- Avoid moving the battery to reduce maintenance difficulty



Charging, storage and inversion integration

System comprehensive solution

Three-phase

Details Display

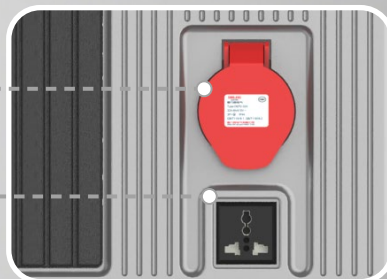
LCD

LCD Smart Display



380V output

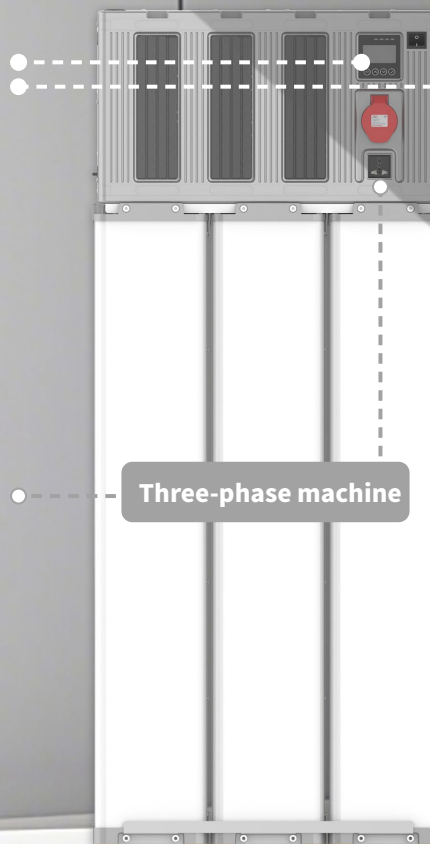
220V output



Compatible with sockets of different voltage specifications

*Cannot be used simultaneously at the same time.

220V output



Three-phase machine



Single-phase machine

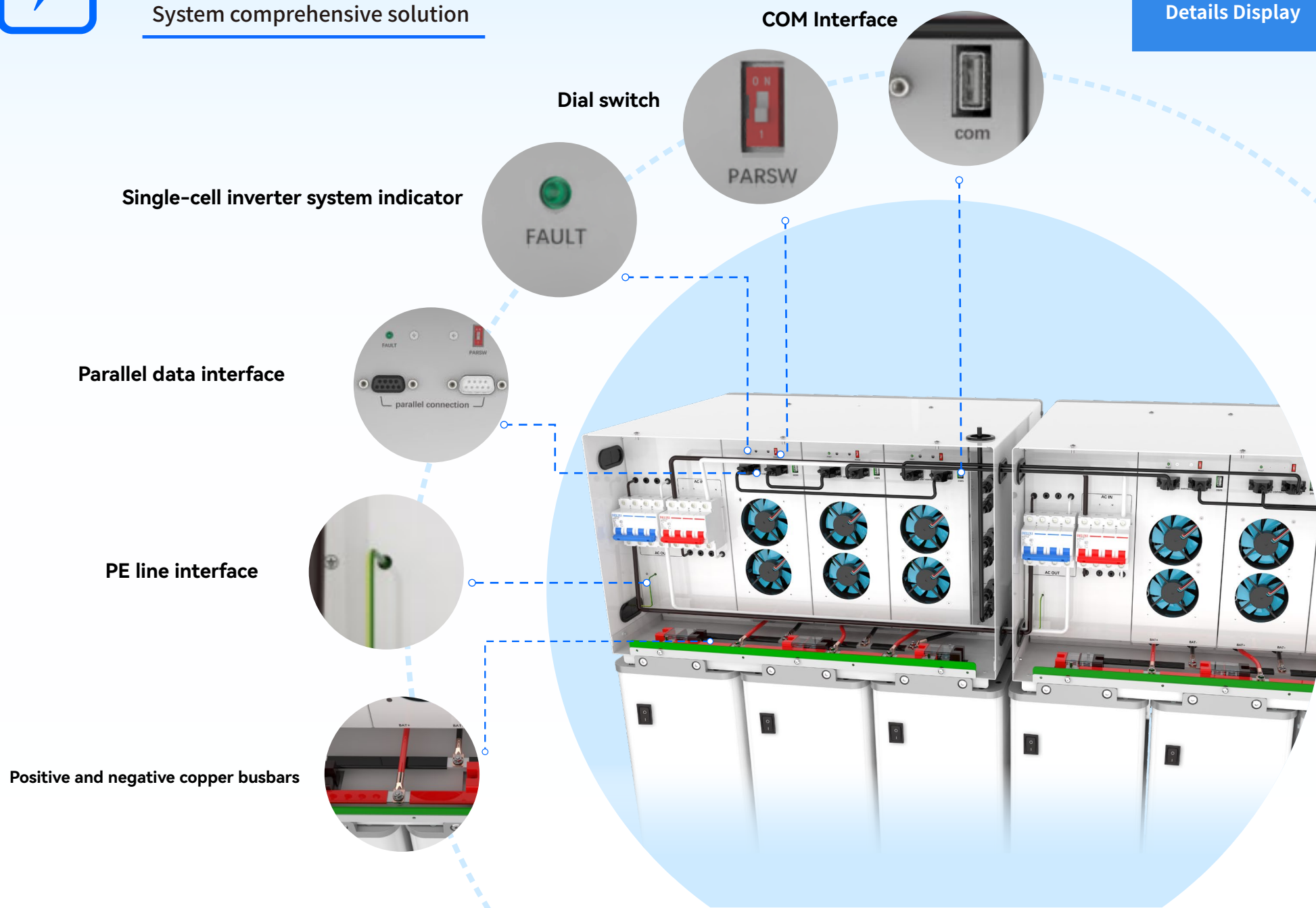


Charging, storage and inversion integration

System comprehensive solution

Three-phase

Details Display



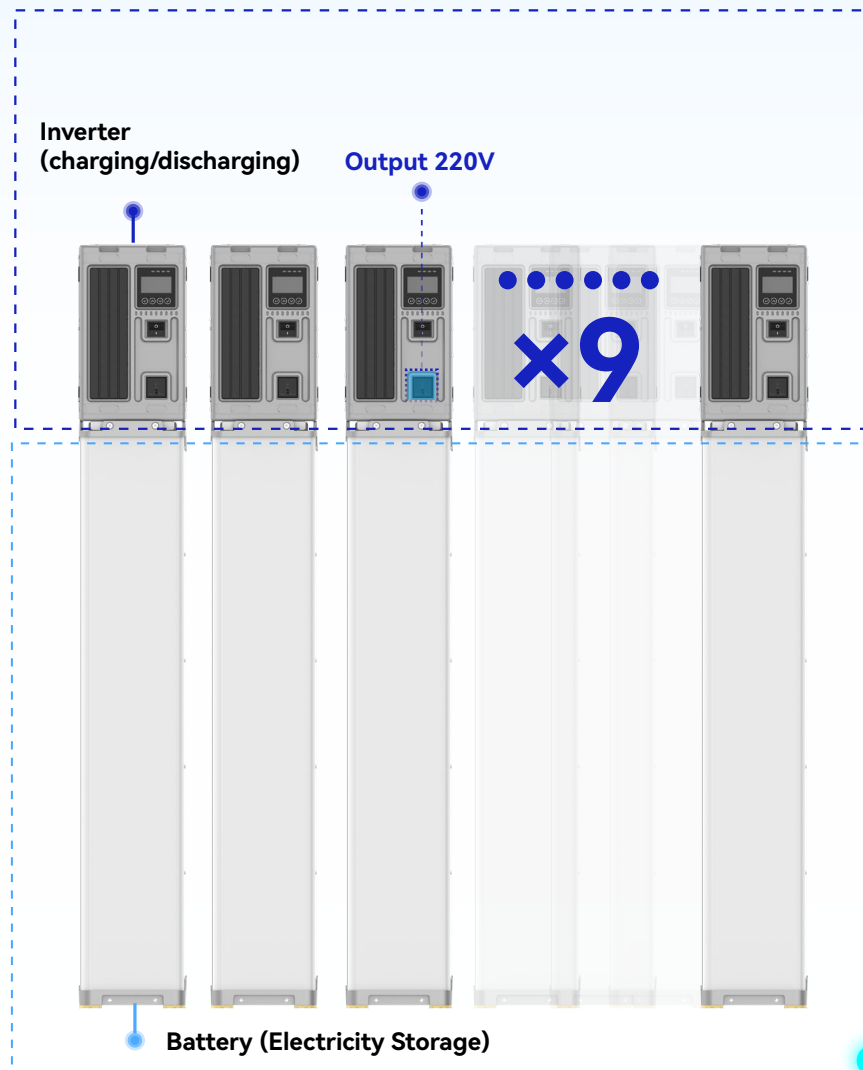


**Charging, storage and
inversion integration**
System comprehensive solution

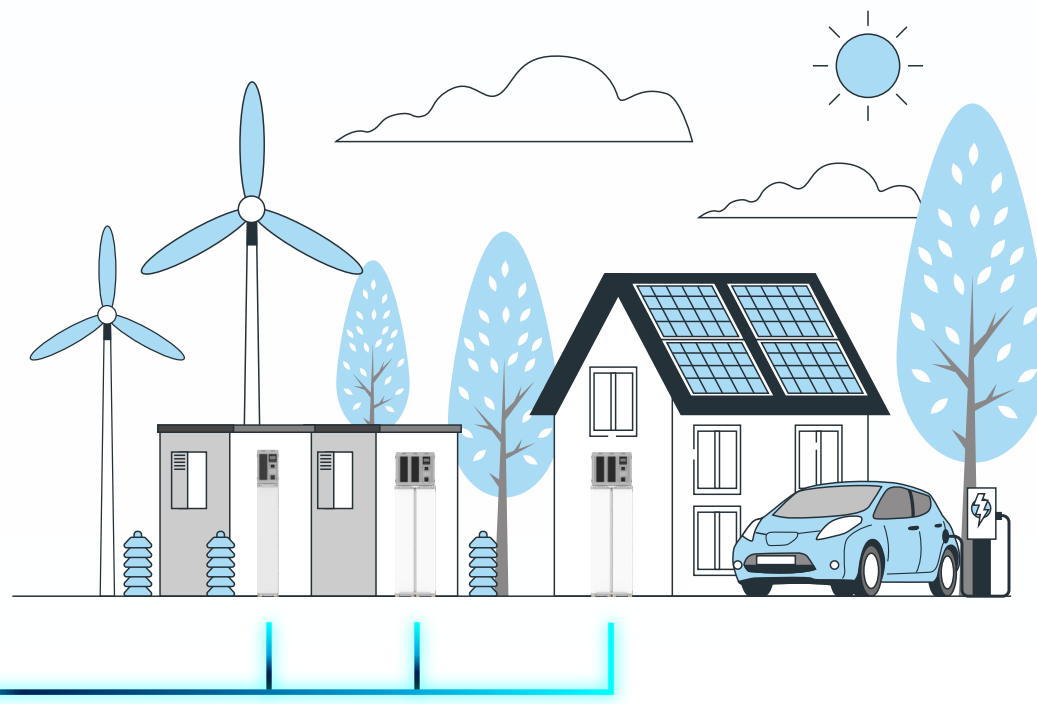
220V single phase

220V

System Configuration



**Nine sets in parallel can output maximum
220V 54kW**





Charging, storage and inversion integration

System comprehensive solution

220V

System Configuration

220V single-phase system solution

It is suitable for household energy storage management and power supply for large electrical appliances. It can be equipped with photovoltaic modules to form a household photovoltaic storage system. It can be used as a power supply source or backup power source in remote areas or areas with unstable power supply, and supports renewable energy charging. It also meets the needs of small business daily operations and peak-valley arbitrage.

Battery nominal capacity

7kWh

Inverter rated power

220V/4kW

Electricity(kWh)

24V/300Ah



□ Nine sets in parallel can
output maximum **220V 54kW**

Battery nominal capacity

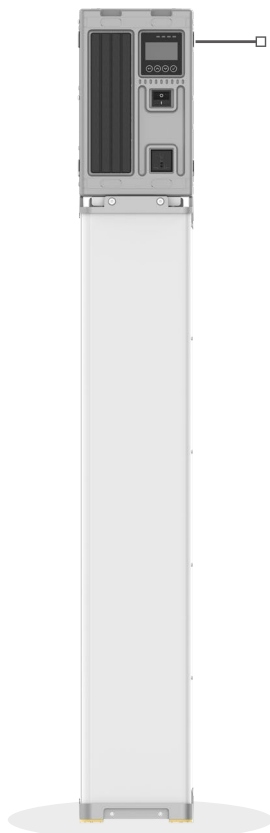
15kWh

Inverter rated power

220V/6kW

Electricity(kWh)

48V/300Ah



□ Four sets in parallel can
output maximum **220V 48kW**

Battery nominal capacity

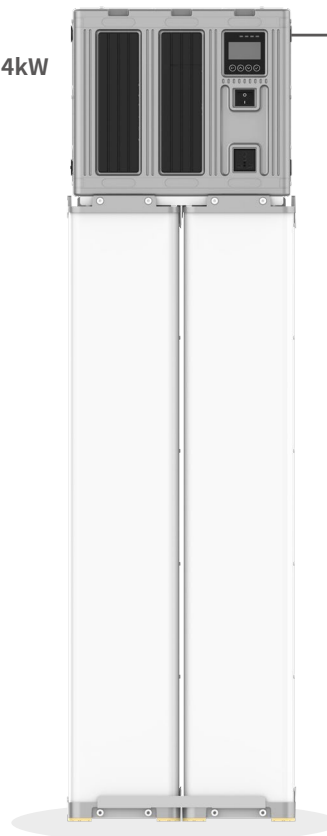
30kWh

Inverter rated power

220V/12kW

Electricity(kWh)

48V/600Ah





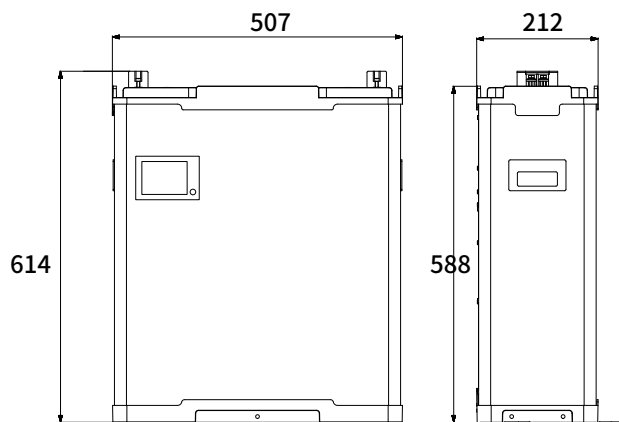
Charging, storage and inversion integration

System comprehensive solution

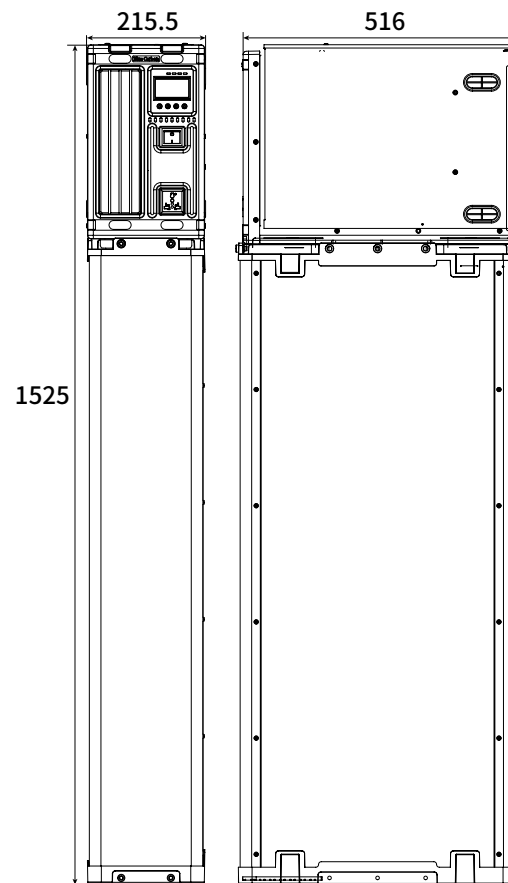
220V

System Configuration

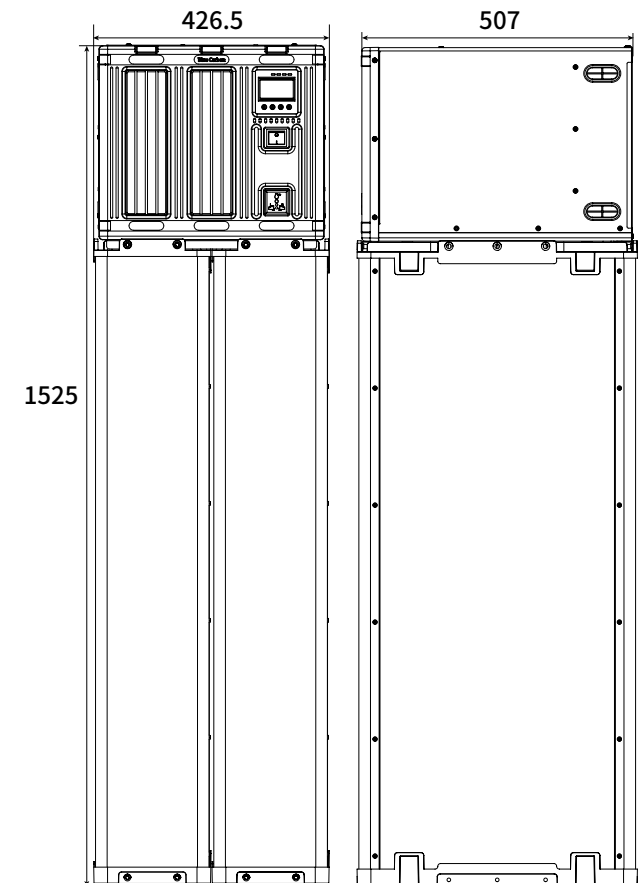
220V single-phase | Product size



220V/4kW 7kWh



220V/6kW 15kWh



220V/12kW 30kWh



**Charging, storage and
inversion integration**
System comprehensive solution

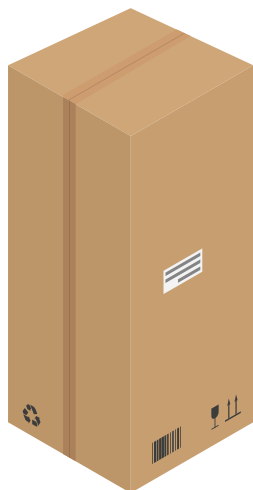
220V

System standard
configuration

Standard Components

Optional Components

①



• 220V/6kW 15kWh Packing carton × 1 set

• 220V/12kW 30kWh Packing carton × 2 set

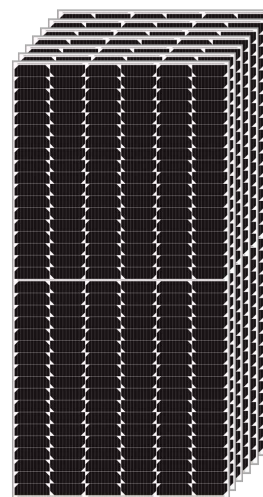
①



MC4 plug × 2 sets

MC4 plug × 4 sets

②



585W photovoltaic modules × 7
*The system supports up to 9 photovoltaic modules

585W photovoltaic modules × 14
*The system supports up to 18 photovoltaic modules

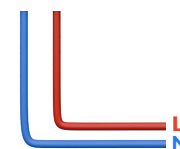
③



Photovoltaic wire × 1 roll

Photovoltaic wire × 1 roll

④



Internal wiring × 1 roll

Internal wiring × 1 roll

220V 4kW

Standard solution

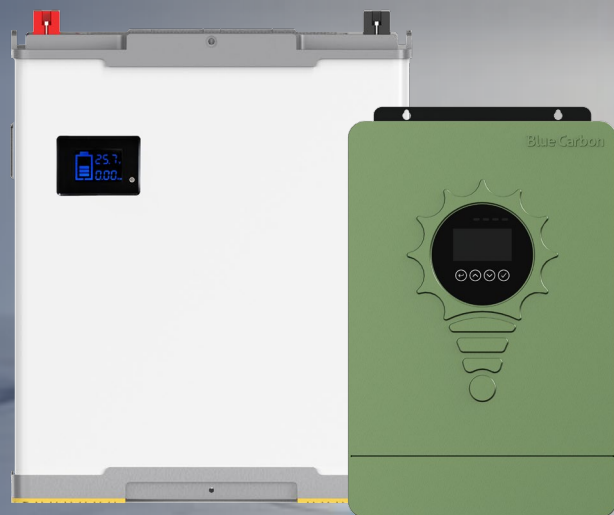
220V/4kW 7kWh

System Solution

In regions without electricity, solar panels can charge during the day, and stored energy can be used at night for lighting or other power needs.

In areas with high electricity prices, the system can be used for peak and valley energy storage: charge during off-peak times when electricity is cheaper, and use the stored energy during peak times when electricity is more expensive.

It can meet the needs of small office routers running all day, computers working for several hours, small fans running, home air conditioners cooling and heating, and lighting fixtures turned on all day.



Front view



Side view

220V 4kW

Standard solution

220V/4kW 7kWh

System Solution

24V
Energy Storage Batteries



4kW
Inverter
▼



Battery Parameter

Nominal capacity	300Ah
Nominal voltage	24V
Electricity(kWh)	7kWh

Inverter AC Output

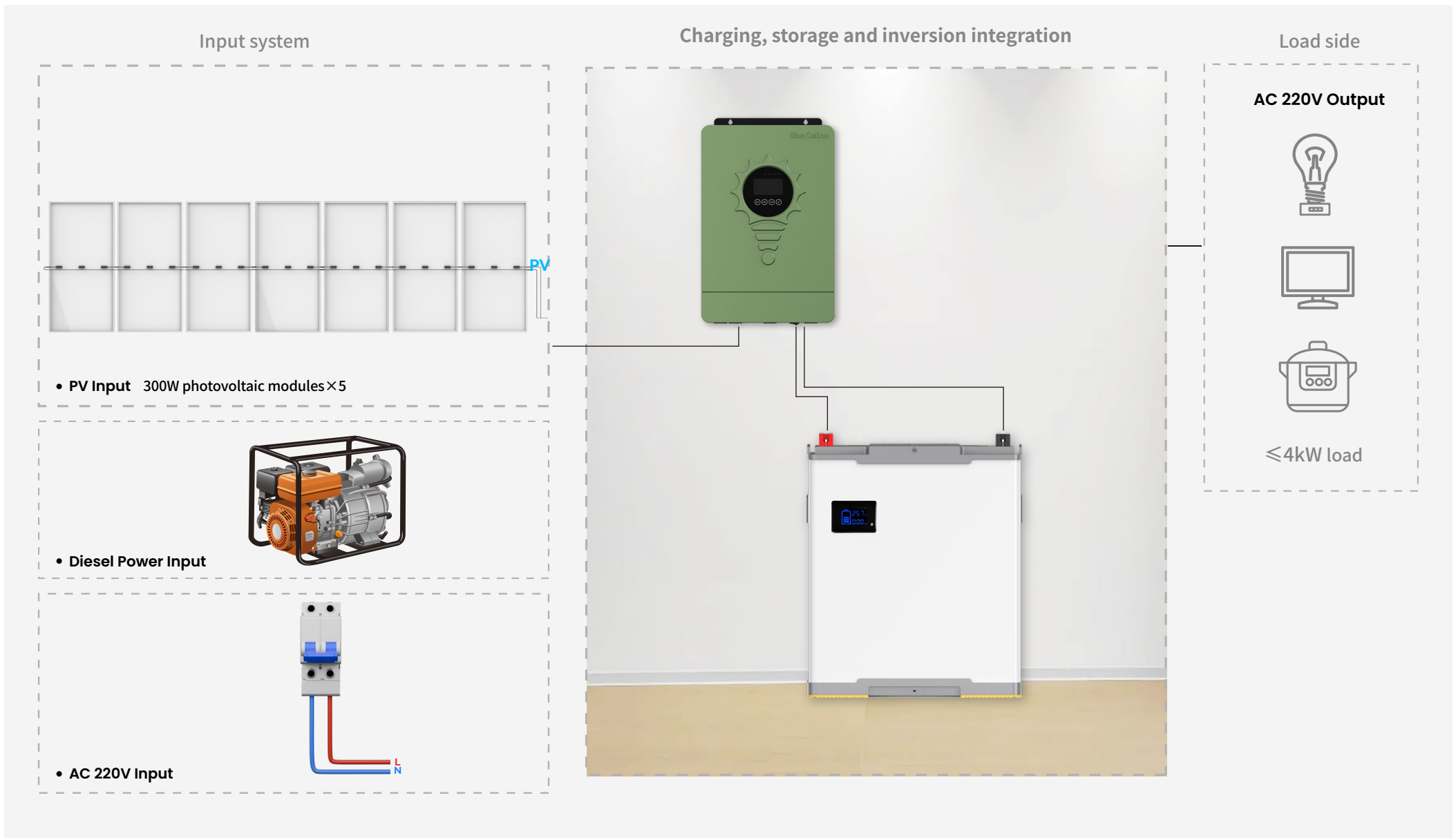
Max power (kw)	4kW
Peak power (kVA)	5.7kW
Voltage (VAC)	208/220/230/240
Power factor (PF)	1
Frequency	50/60Hz±0.1%
Switch time (ms)	10(normal mode)/ 10(UPS mode)
Wave form	Pure sine wave
Overload capacity (battery mode)	60s@102%~110% load;10s@110%~130% load; 3s@130%~150% load; 0.2s@>150% load
Max. Efficiency (battery mode)	92.7%@24VDC

Photovoltaic/AC input

Rated input voltage (VAC)	208/220/230/240;L+N+PE
Phase voltage range (VAC)	90~280±3(normal mode);170~280±3(UPS mode)
Frequency (Hz)	50/60(auto adaptive)
Solar charger type	MPPT
Max PV input current / input power	18A/5000W
MPPT range@operating voltage (VDC)	40~450
Max PV open circuit voltage (VDC)	500
Max PV charge current (A)	100
Max AC charge current (A)	100
Max. charge current (PV + AC)(A)	100

220V/4kW 7kWh

System Connection Display



220V 54kW System

Standard solution

220V/6kW 15kWh

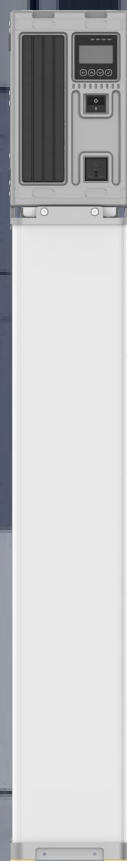
Single system solution

I

In regions without electricity, solar panels can charge during the day, and stored energy can be used at night for lighting or other power needs.

In areas with high electricity prices, the system can be used for peak and valley energy storage: charge during off-peak times when electricity is cheaper, and use the stored energy during peak times when electricity is more expensive.

It can meet the needs of small office routers running all day, computers working for several hours, small fans running, home air conditioners cooling and heating, and lighting fixtures turned on all day.



Front view



Side view



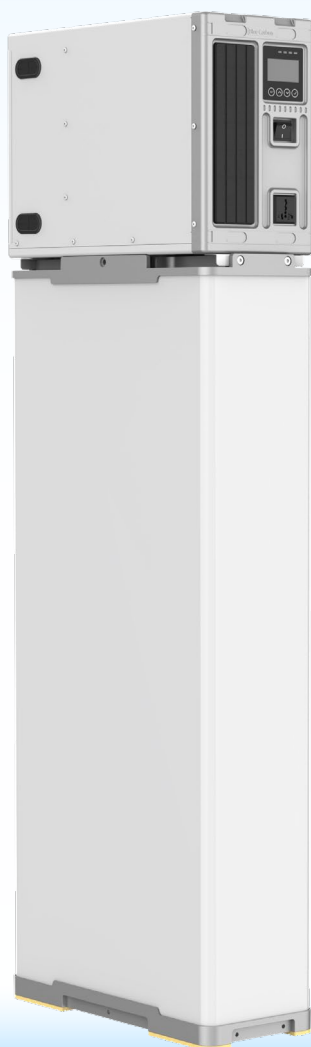
Back view

220V 54kW System

Standard solution

220V/6kW 15kWh

Single system solution



Battery Parameter

Nominal capacity	300Ah
Nominal voltage	48V
Electricity(kWh)	15kWh

Inverter AC Output

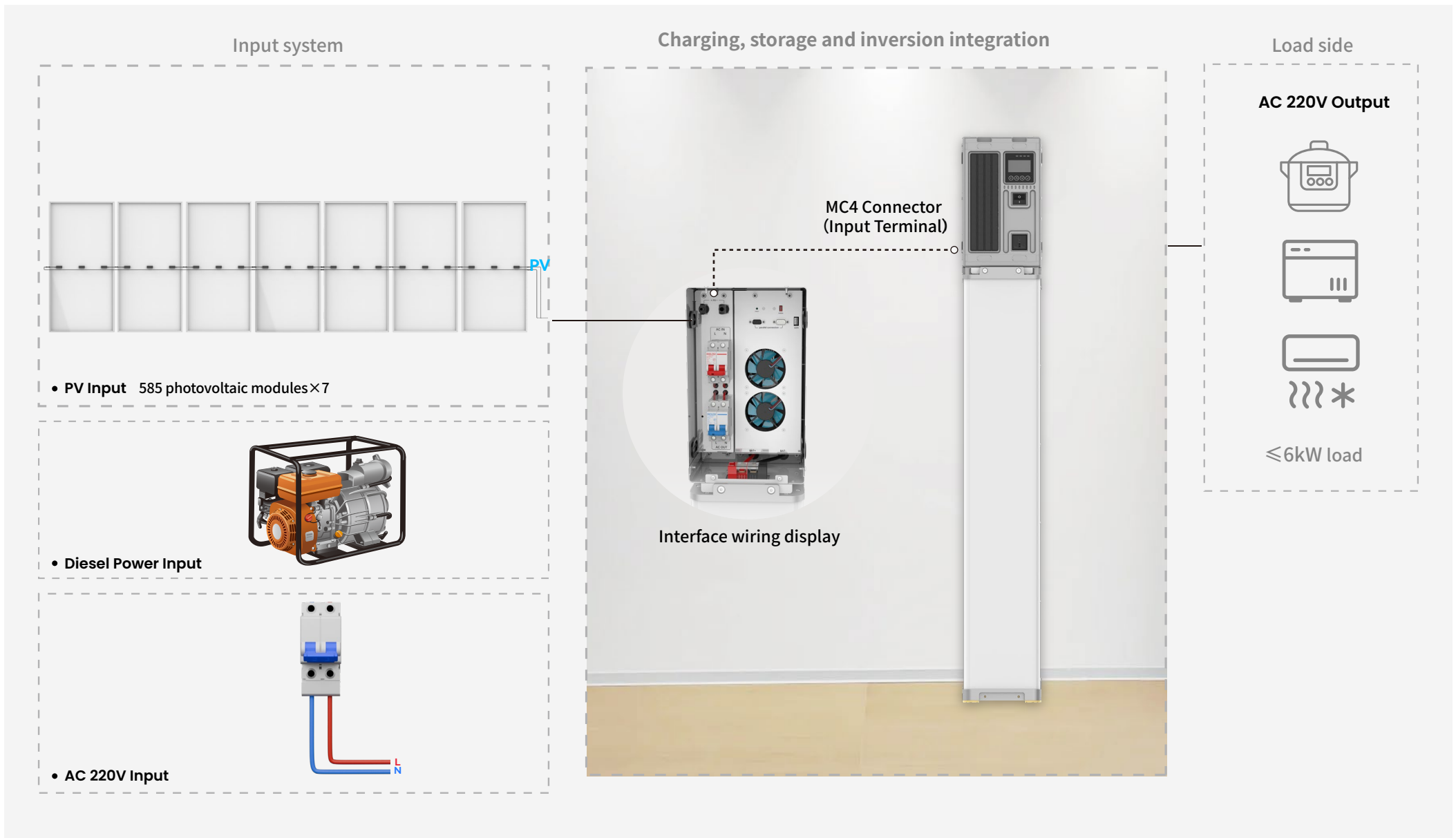
Max power (kw)	6kW
Voltage (VAC)	208/220/230/240
Power factor (PF)	1
Frequency	50/60Hz±0.1%
Switch time (ms)	10(normal mode)/ 10(UPS mode)
Wave form	Pure sine wave
Overload capacity (battery mode)	60s@102%~110% load;10s@110%~130% load; 3s@130%~150% load; 0.2s@>150% load
Max. Efficiency (battery mode)	93%@48VDC

Photovoltaic/AC input

Rated input voltage (VAC)	208/220/230/240;L+N+PE
Phase voltage range (VAC)	90~280±3(normal mode);170~280±3(UPS mode)
Frequency (Hz)	50/60(auto adaptive)
Solar charger type	MPPT
Max PV input current / input power	18A/6000W
MPPT range@operating voltage (VDC)	120~450
Max PV open circuit voltage (VDC)	500
Max PV charge current (A)	80
Max AC charge current (A)	80
Max. charge current (PV + AC)(A)	80

220V/6kW 15kWh

System Connection Display



220V 54kW System

Standard solution

220V/12kW 30kWh

Single system solution



In regions without electricity, solar panels can charge during the day, and stored energy can be used at night for lighting or other power needs.

In areas with high electricity prices, the system can be used for peak and valley energy storage: charge during off-peak times when electricity is cheaper, and use the stored energy during peak times when electricity is more expensive.

It can meet the needs of small office routers running all day, computers working for several hours, small fans running, home air conditioners cooling and heating, and lighting fixtures turned on all day.



Front view



Side view



Back view

220V 54kW System

Standard solution

220V/12kW 30kWh

Single system solution



Battery Parameter

Nominal capacity	600Ah
Nominal voltage	48V
Electricity(kWh)	30kWh

Inverter AC Output

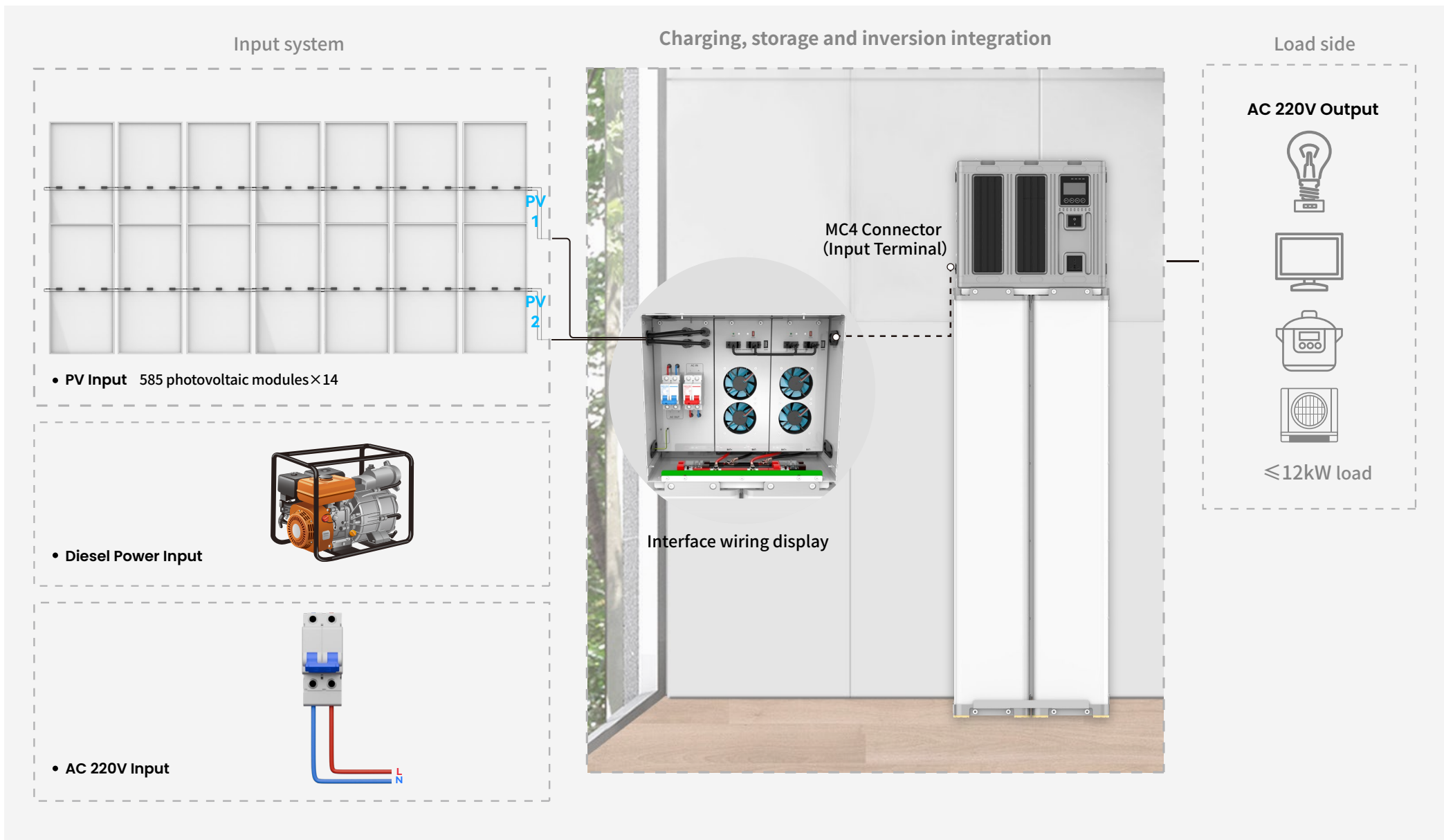
Max power (kw)	12kW
Voltage (VAC)	208/220/230/240
Power factor (PF)	1
Frequency	50/60Hz±0.1%
Switch time (ms)	10(normal mode)/ 10(UPS mode)
Wave form	Pure sine wave
Overload capacity (battery mode)	60s@102%~110% load;10s@110%~130% load; 3s@130%~150% load; 0.2s@>150% load
Max. Efficiency (battery mode)	93%@48VDC

Photovoltaic/AC input

Rated input voltage (VAC)	208/220/230/240;L+N+PE
Phase voltage range (VAC)	90~280±3(normal mode);170~280±3(UPS mode)
Frequency (Hz)	50/60(auto adaptive)
Solar charger type	MPPT
Max PV input current / input power	18A/6000W ×2
MPPT range@operating voltage per unit(VDC)	120~450
Max PV open circuit voltage per unit(VDC)	500
Max PV charge current per unit (A)	80
Max AC charge current per unit (A)	80
Max. charge current per unit (PV + AC)(A)	80

220V/12kW 30kWh

System Connection Display



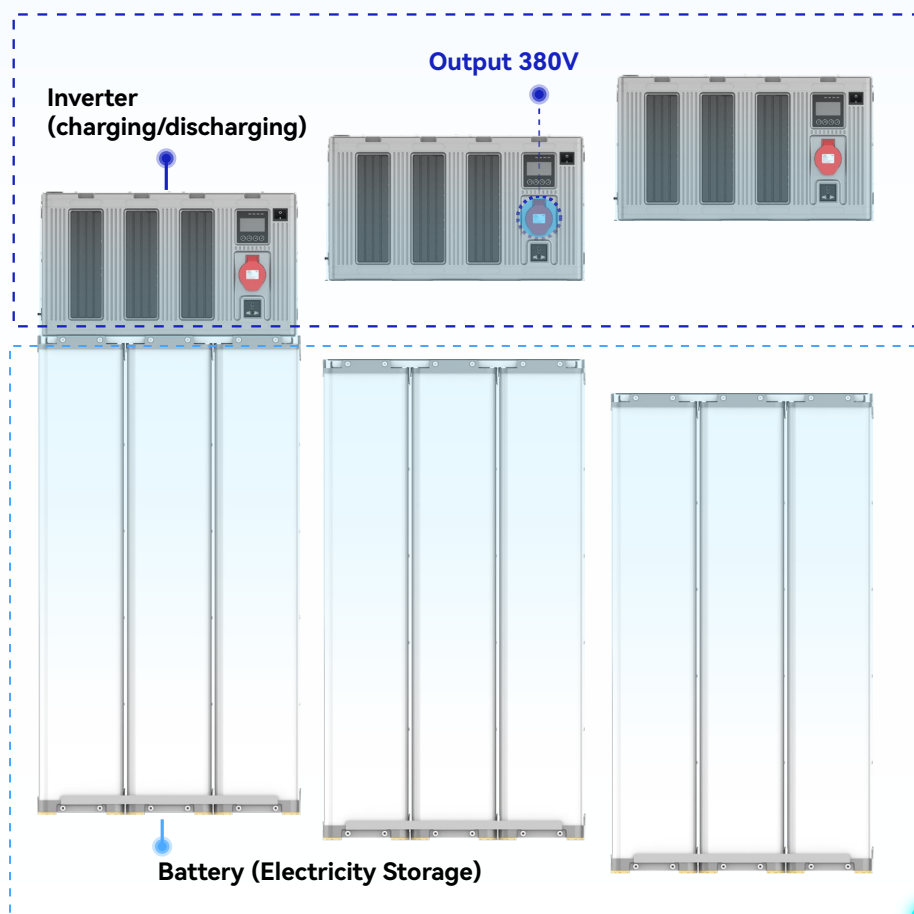


**Charging, storage and
inversion integration**
System comprehensive solution

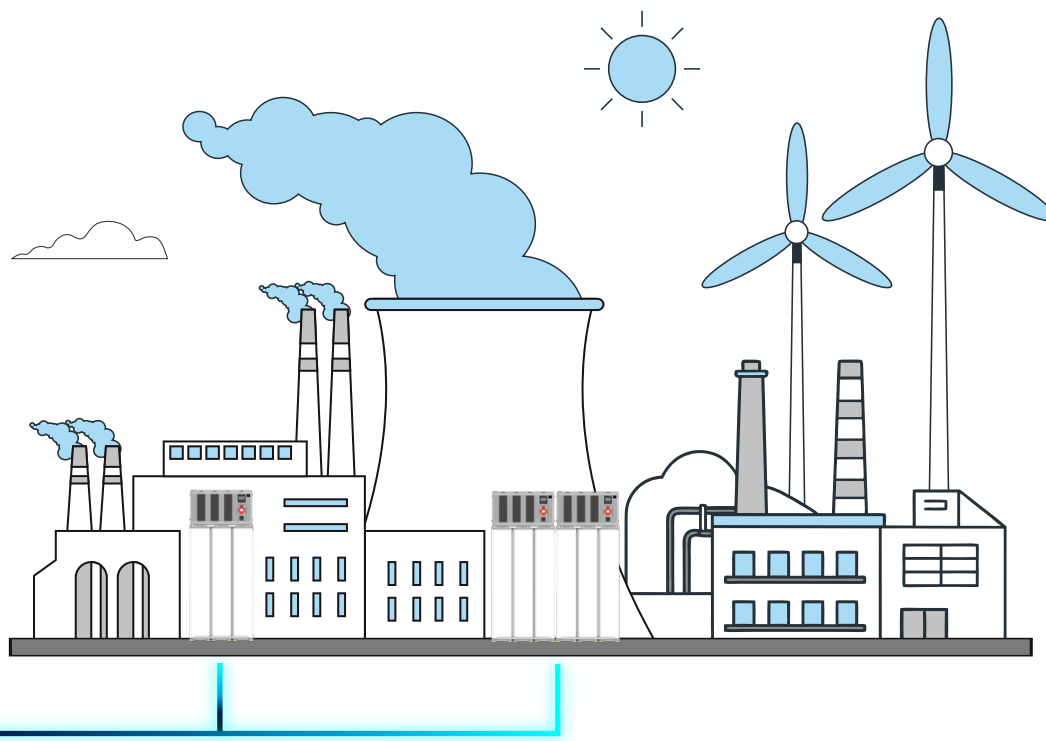
380V Three-Phase

380V

System Configuration



**Three sets in parallel can output maximum
380V 54kW**





Charging, storage and inversion integration

System comprehensive solution

380V

System Configuration

380V three-phase system solution

Applicable to equipment and systems covering water conservancy facilities, hotels and homestays, commercial electrical appliance transportation, mining machinery, industrial equipment operation, farmland irrigation, sewage treatment, concrete maintenance and various production-related fields.

Battery nominal capacity

45kWh

Inverter rated power

380V/18kW

Electricity(kWh)

48V/900Ah



Battery nominal capacity

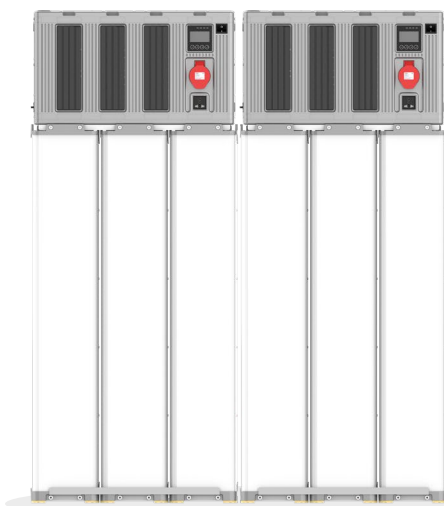
90kWh

Inverter rated power

380V/36kW

Electricity(kWh)

48V/1800Ah



Battery nominal capacity

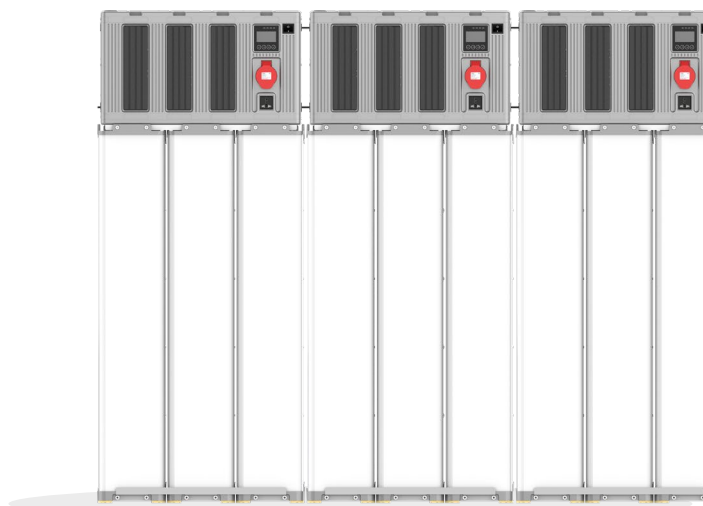
135kWh

Inverter rated power

380V/54kW

Electricity(kWh)

48V/2700Ah





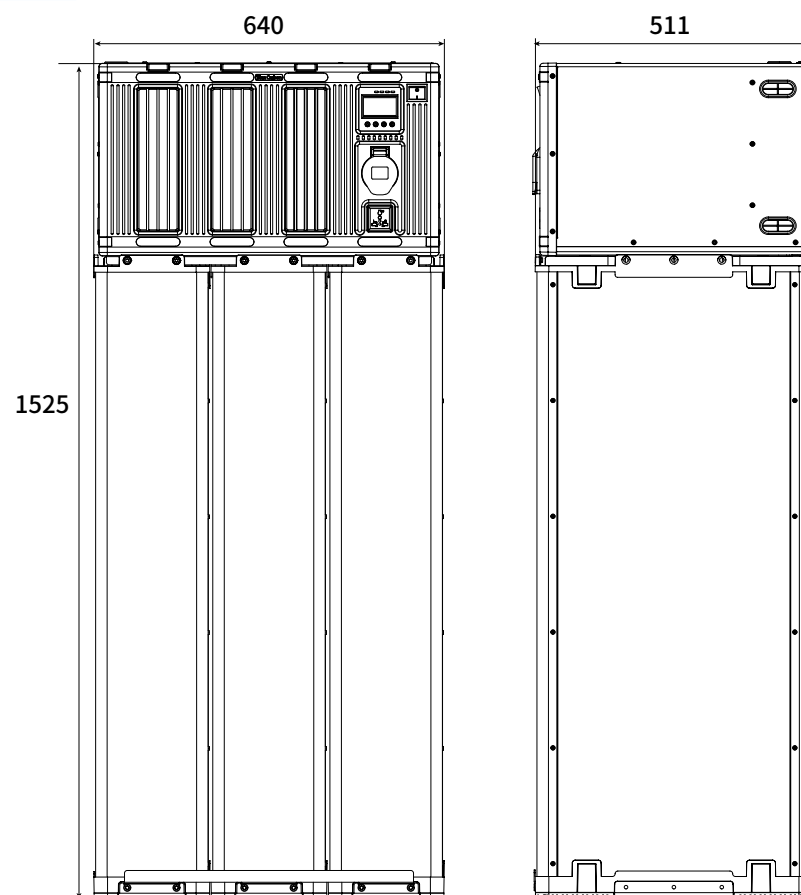
Charging, storage and inversion integration

System comprehensive solution

380V

System Configuration

380V three-phase | Product size



380V/18kW 45kWh



**Charging, storage and
inversion integration**
System comprehensive solution

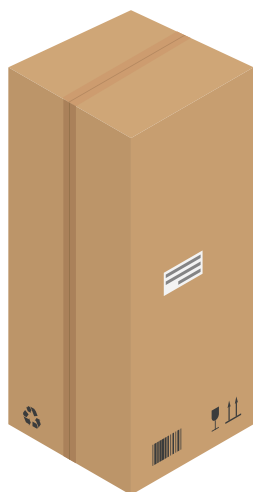
380V

System standard
configuration

Standard Components

Optional Components

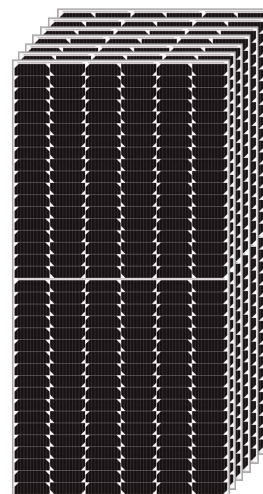
①



①



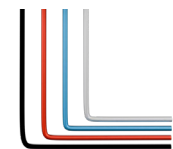
②



③



④



· 380V/18kW 45kWh Packing carton × 3set

MC4 plug × 6 sets

585W photovoltaic modules × 21
*The system supports up to 27 photovoltaic modules

Photovoltaic wire × 1 roll

Internal wiring × 1 roll

· 380V/36kW 90kWh Packing carton × 6 set

MC4 plug × 12 sets

585W photovoltaic modules × 42
*The system supports up to 54 photovoltaic modules

Photovoltaic wire × 1 roll

Internal wiring × 1 roll

· 380V/54kW 135kWh Packing carton × 9 set

MC4 plug × 18 sets

585W photovoltaic modules × 63
*The system supports up to 81 photovoltaic modules

Photovoltaic wire × 1 roll

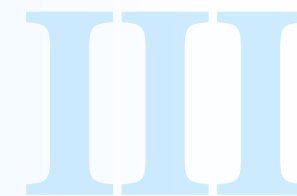
Internal wiring × 1 roll

380V 54kW System

Standard solution

380V/18kW 45kWh

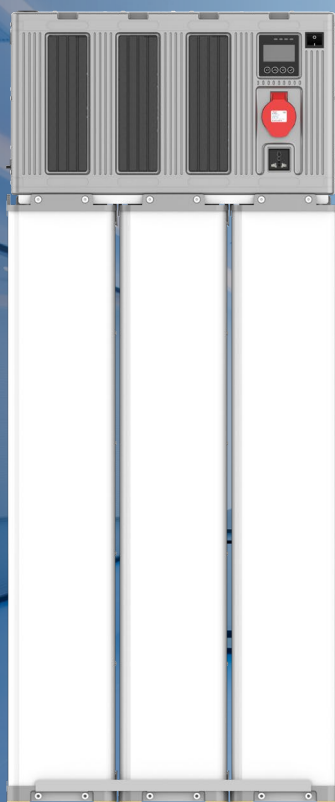
Single system solution



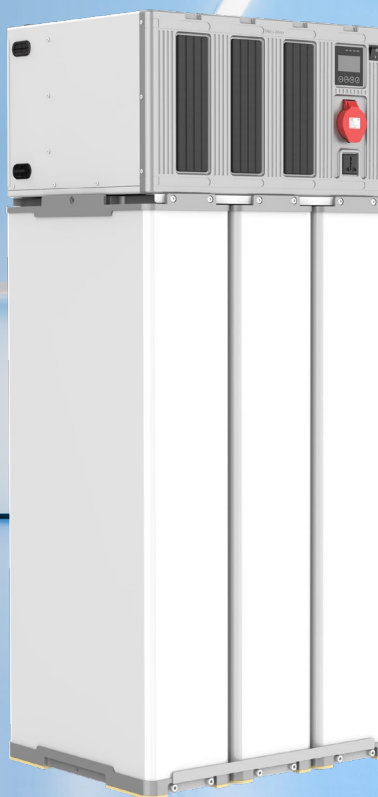
In regions without electricity, solar panels can charge during the day, and stored energy can be used at night for lighting or other power needs.

In areas with high electricity prices, the system can be used for peak and valley energy storage: charge during off-peak times when electricity is cheaper, and use the stored energy during peak times when electricity is more expensive.

Suitable for charging piles larger than 7kW, industrial and commercial heating heat pumps, booster pumps, circulation pumps, irrigation pumps, electric lights and other projects.



Front view



Side view



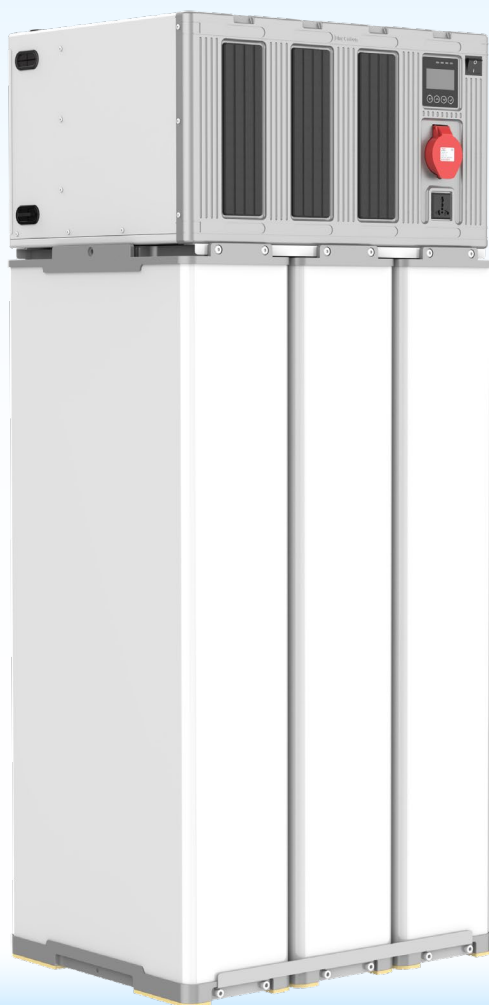
Back view

380V 54kW System

Standard solution

380V/18kW 45kWh

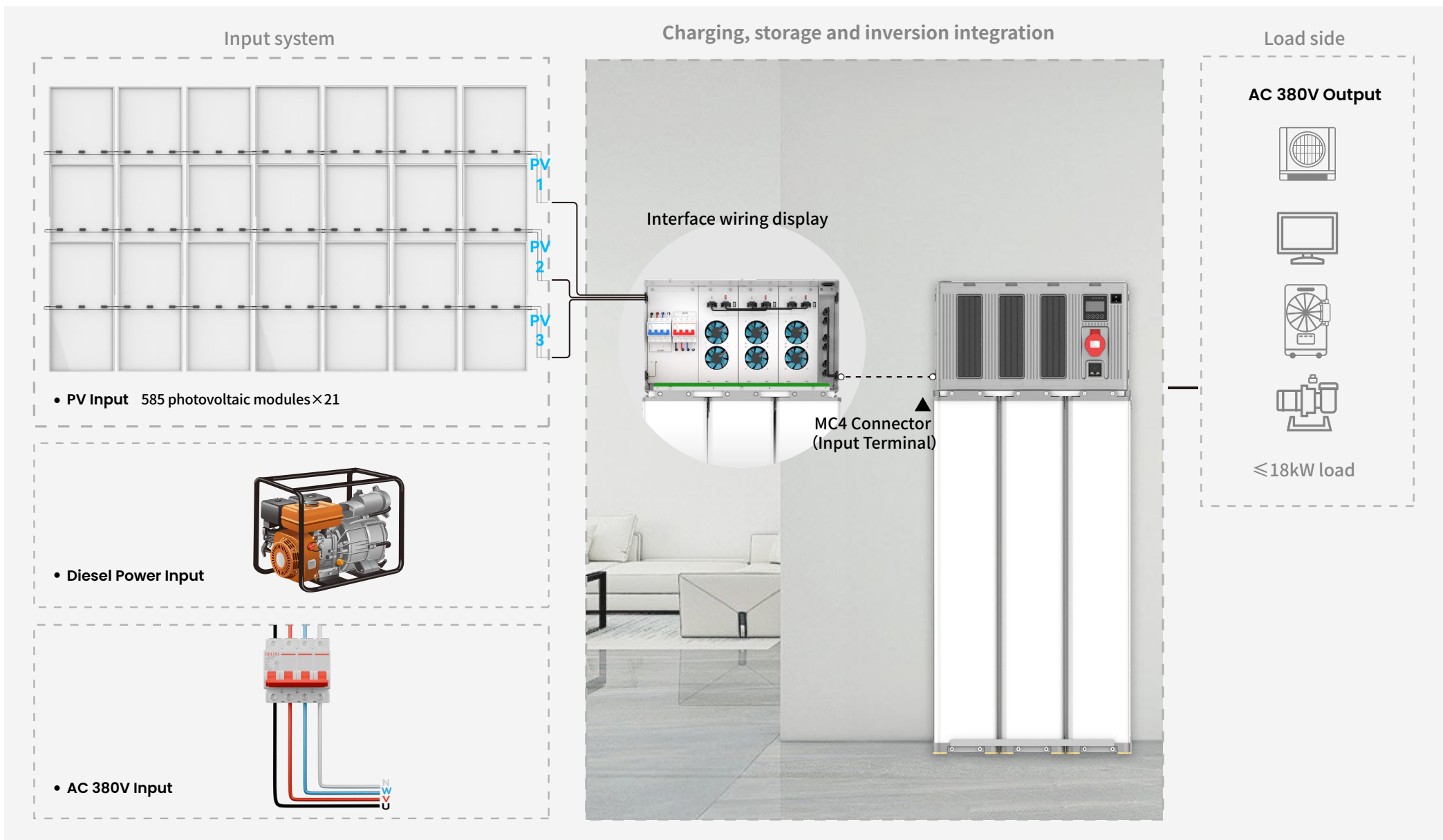
Single system solution



Battery Parameter	Nominal capacity	900Ah
	Nominal voltage	48V
	Electricity(kWh)	45kWh
Inverter AC Output	Max power (kw)	18kW
	Voltage (VAC)	360/380/397/415
	Power factor (PF)	1
	Frequency	50/60Hz±0.1%
	Switch time (ms)	10(normal mode)/ 10(UPS mode)
	Wave form	Pure sine wave
	Overload capacity (battery mode)	60s@102%~110% load;10s@110%~130% load; 3s@130%~150% load; 0.2s@>150% load
	Max. Efficiency (battery mode)	93%@48VDC
Photovoltaic/AC input	Rated input voltage (VAC)	360/380/397/415;U+V+W+N+PE
	Phase voltage range (VAC)	
	Frequency (Hz)	50/60(auto adaptive)
	Solar charger type	MPPT
	Max PV input current / input power	18A/6000W ×3
	MPPT range@operating voltage per unit(VDC)	120~450
	Max PV open circuit voltage per unit (VDC)	500
	Max PV charge current per unit (A)	80
	Max AC charge current per unit(A)	80
	Max. charge current per unit(PV + AC)(A)	80

380V/18kW 45kWh

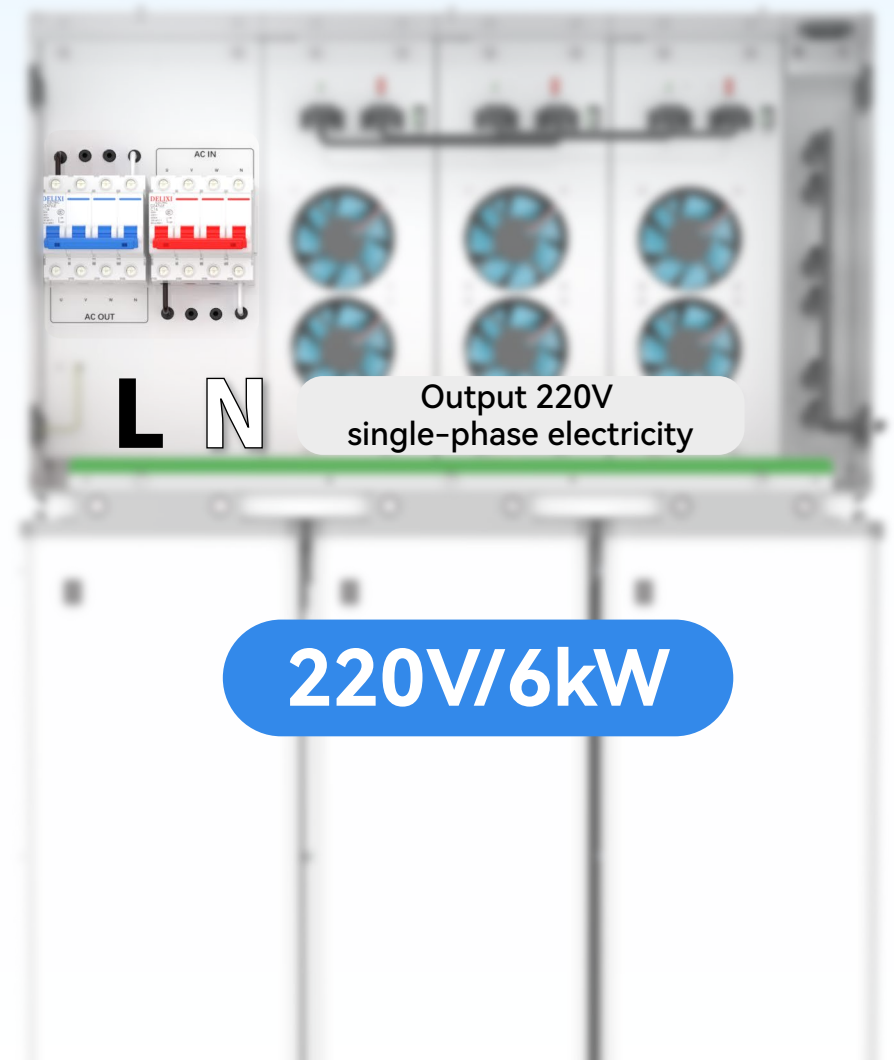
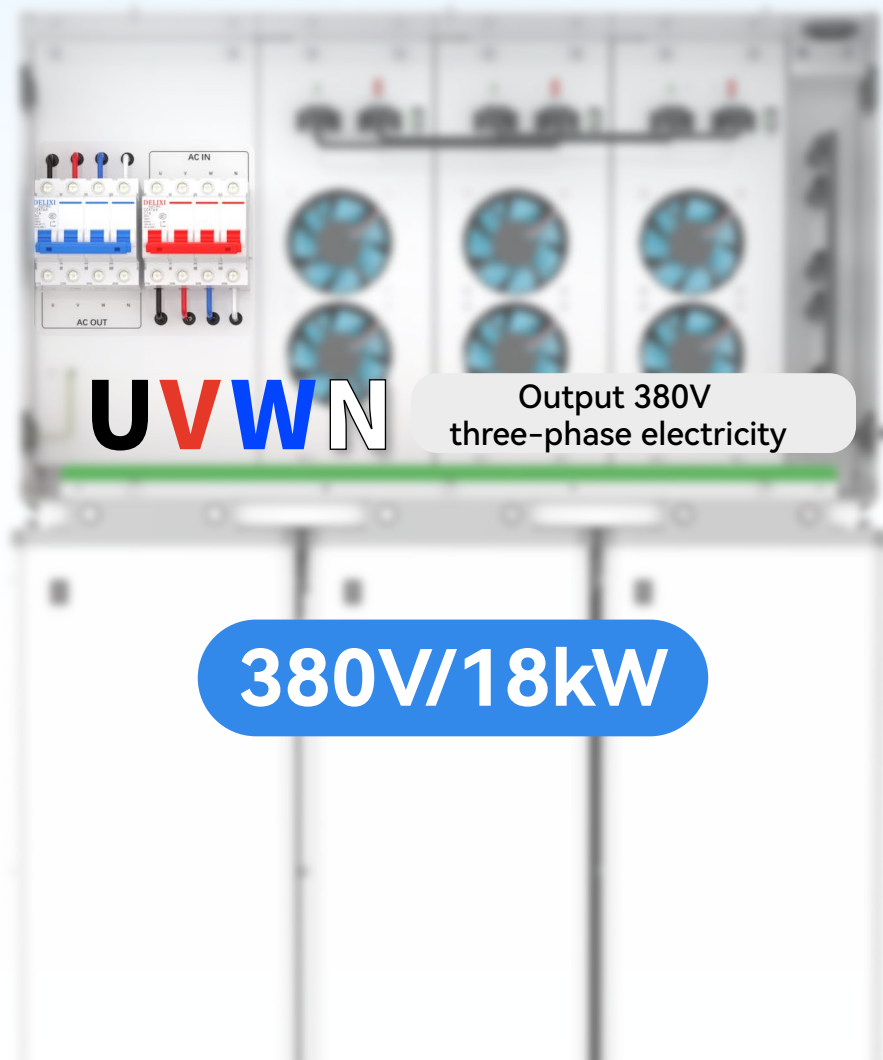
System Connection Display



Three-phase System

Standard solution

Output solution display for different voltage specifications



380V 54kW System

Standard solution

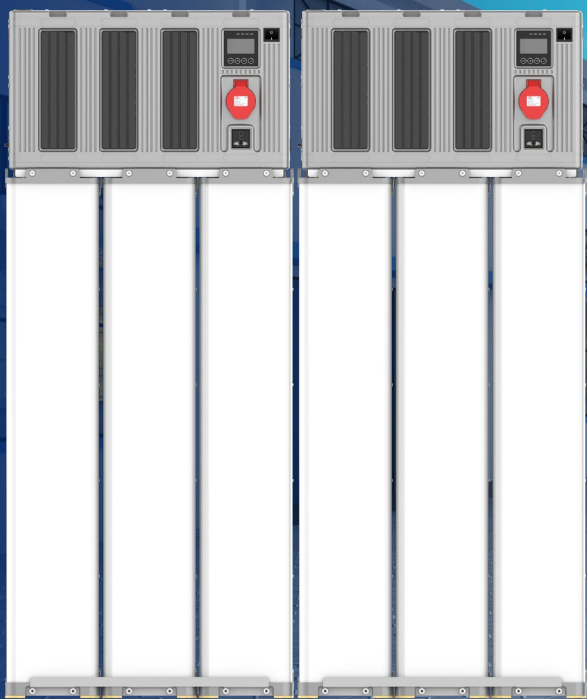
380V/36kW 90kWh

System solutions for two sets

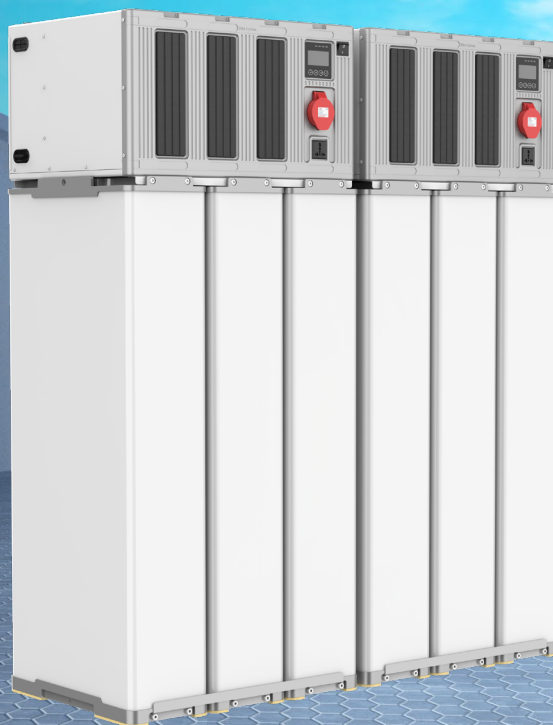
In regions without electricity, solar panels can charge during the day, and stored energy can be used at night for lighting or other power needs.

In areas with high electricity prices, the system can be used for peak and valley energy storage: charge during off-peak times when electricity is cheaper, and use the stored energy during peak times when electricity is more expensive.

Households, Commercial Appliances: Mid-temperature solar drying systems, motors, heating devices, compressors, concrete curing, etc.



Front view



Side view



Back view

380V 54kW System

Standard solution

380V/36kW 90kWh

System solutions for two sets



Battery Parameter

Nominal capacity	1800Ah
Nominal voltage	48V
Electricity(kWh)	90kWh

Inverter AC Output

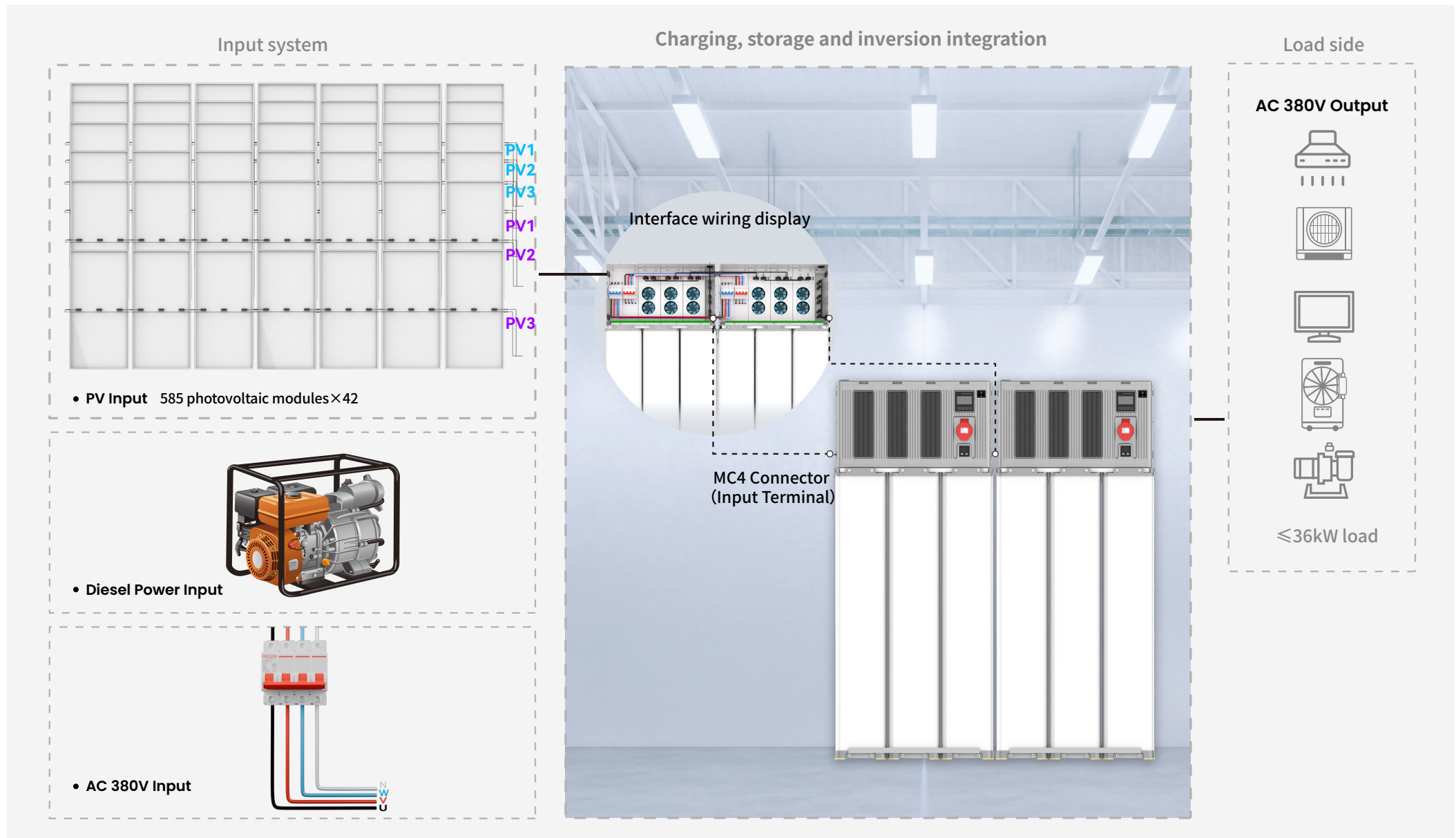
Max power (kw)	36kW
Voltage (VAC)	360/380/397/415
Power factor (PF)	1
Frequency	50/60Hz±0.1%
Switch time (ms)	10(normal mode)/ 10(UPS mode)
Wave form	Pure sine wave
Overload capacity (battery mode)	60s@102%~110% load;10s@110%~130% load; 3s@130%~150% load; 0.2s@>150% load
Max. Efficiency (battery mode)	93%@48VDC

Photovoltaic/AC input

Rated input voltage (VAC)	360/380/397/415;U+V+W+N+PE
Phase voltage range (VAC)	90~280±3(normal mode);170~280±3(UPS mode)
Frequency (Hz)	50/60(auto adaptive)
Solar charger type	MPPT
Max PV input current / input power	18A/6000W ×6
MPPT range@operating voltage per unit(VDC)	120~450
Max PV open circuit voltage per unit (VDC)	500
Max PV charge current per unit (A)	80
Max AC charge current per unit(A)	80
Max. charge current per unit(PV + AC)(A)	80

380V/36kW 90kWh

System Connection Display

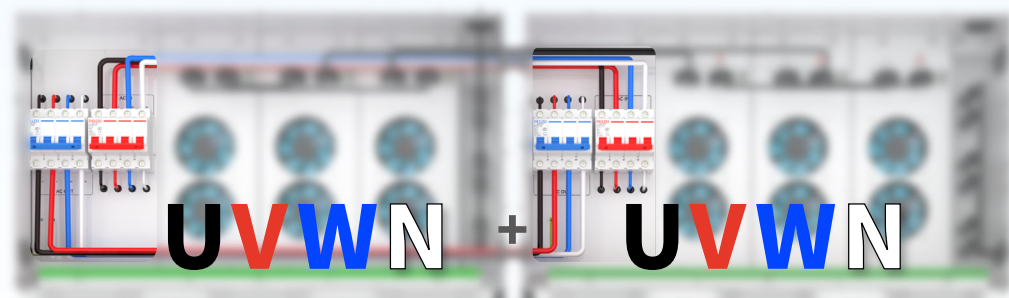


Three-phase System

Standard solution

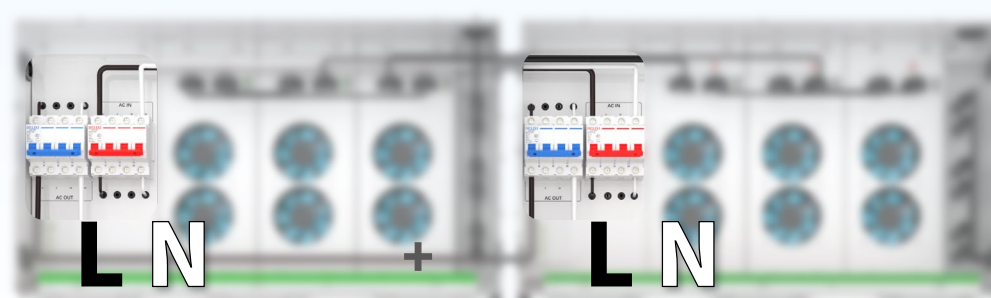
Output solution display for different voltage specifications

380V/36kW



Output 380V
three-phase electricity

220V/12kW



Output 220V
single-phase electricity

380V 54kW System

Standard solution

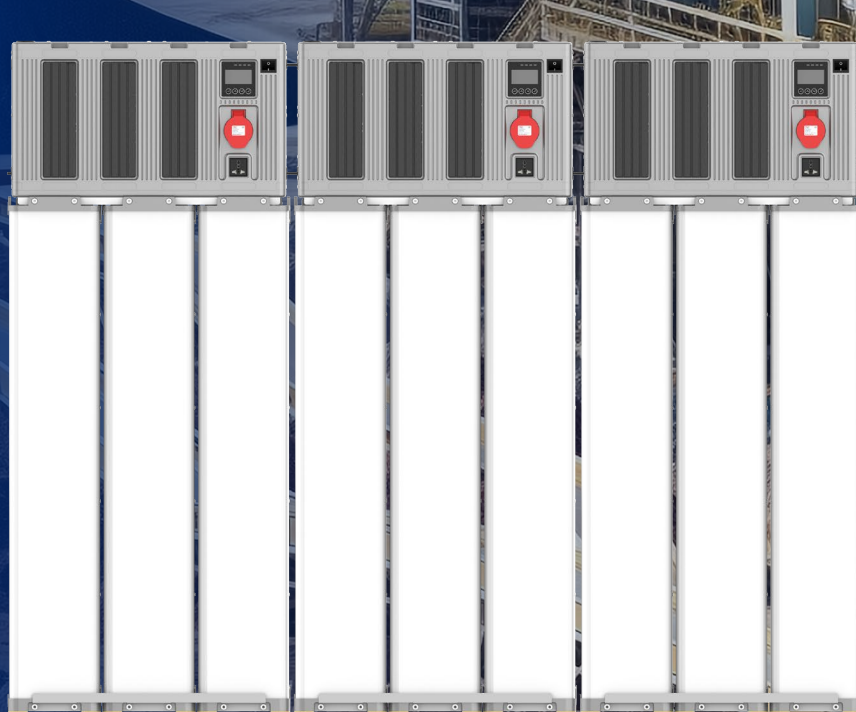
380V/54kW 135kWh

System solutions for three sets

In regions without electricity, solar panels can charge during the day, and stored energy can be used at night for lighting or other power needs.

In areas with high electricity prices, the system can be used for peak and valley energy storage: charge during off-peak times when electricity is cheaper, and use the stored energy during peak times when electricity is more expensive.

Water treatment equipment, high-flow and high-lift submersible pumps, field irrigation, sewage treatment, electric boilers, and air-source heat pump systems.



Front view



Back view

380V 54kW System

Standard solution

380V/54kW 135kWh

System solutions for three sets



Battery Parameter

Nominal capacity	2700Ah
Nominal voltage	48V
Electricity(kWh)	135kWh

Inverter AC Output

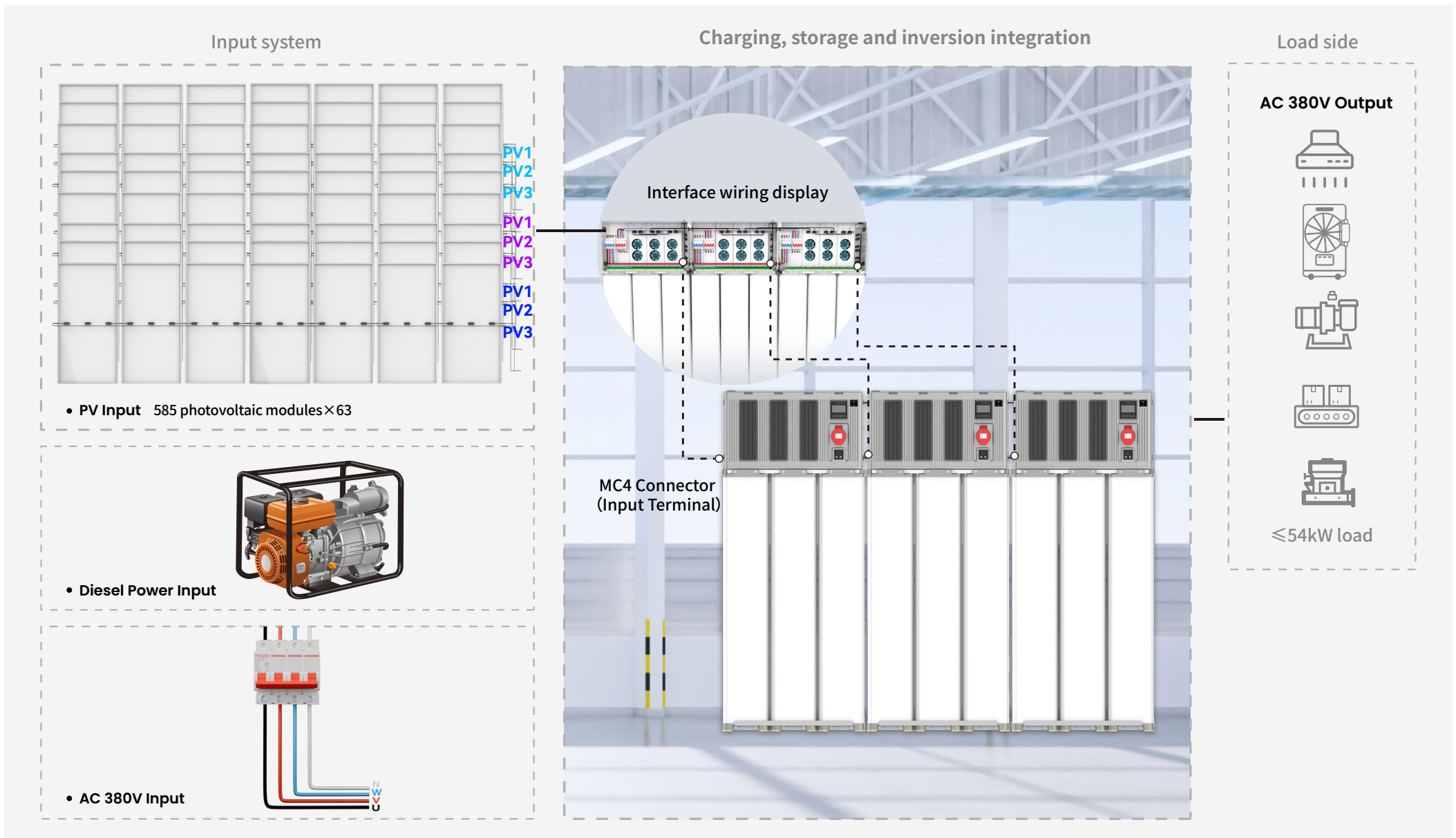
Max power (kw)	54kW
Voltage (VAC)	360/380/397/415
Power factor (PF)	1
Frequency	50/60Hz±0.1%
Switch time (ms)	10(normal mode)/ 10(UPS mode)
Wave form	Pure sine wave
Overload capacity (battery mode)	60s@102%~110% load;10s@110%~130% load; 3s@130%~150% load; 0.2s@>150% load
Max. Efficiency (battery mode)	93%@48VDC

Photovoltaic/AC input

Rated input voltage (VAC)	360/380/397/415;U+V+W+N+PE
Phase voltage range (VAC)	90~280±3(normal mode);170~280±3(UPS mode)
Frequency (Hz)	50/60(auto adaptive)
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MPPT range@operating voltage per unit(VDC)	120~450
Max PV open circuit voltage per unit (VDC)	500
Max PV charge current per unit (A)	80
Max AC charge current per unit(A)	80
Max. charge current per unit(PV + AC)(A)	80

380V/54kW 135kWh

System Connection Display

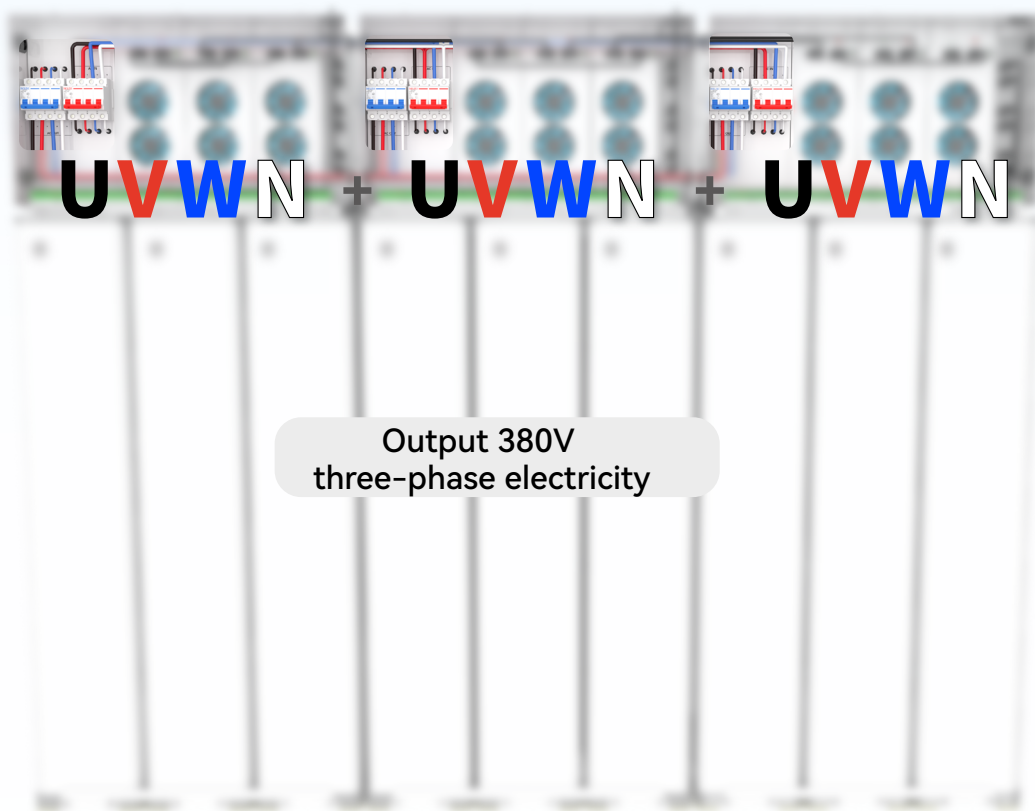


Three-phase System

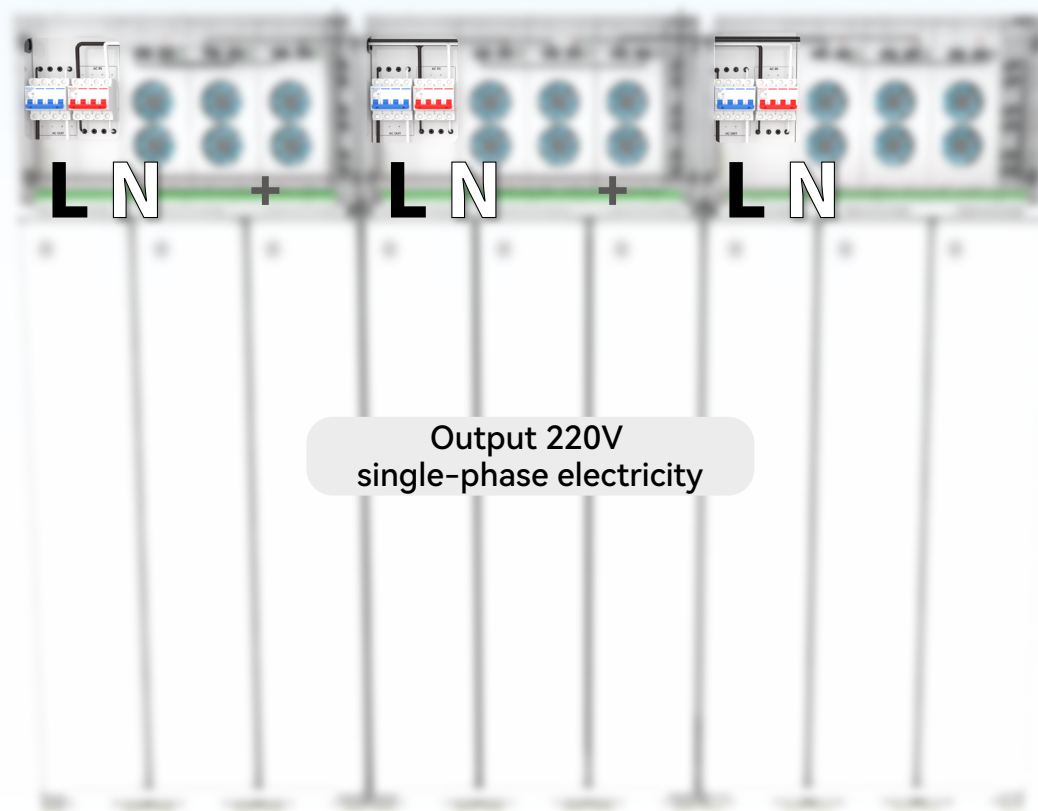
Standard solution

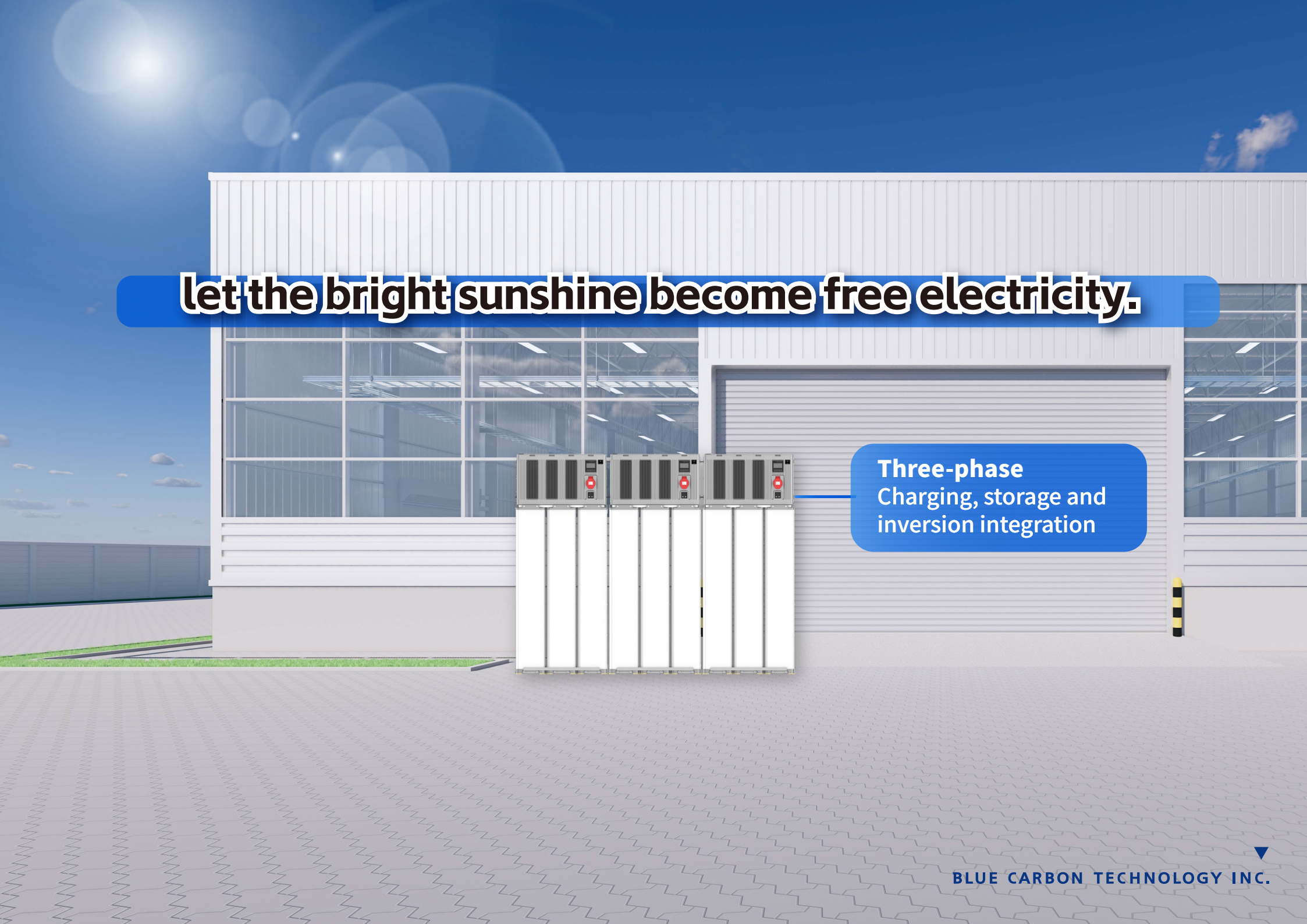
Output solution display for different voltage specifications

380V/54kW



220V/18kW





let the bright sunshine become free electricity.

Three-phase
Charging, storage and
inversion integration