

Shenzhen Sungreat Energy Technology Co.,Ltd

Leading global designer and manufacturer of photovoltaic cold chains



主

Content



Company Profile



Product Series



Product Features& Competitor Comparison



CKD/SKD/RefrigerationAccessories





PART TWO

Company Profile

Manufacturer with the largest number of specifications and series in the Chinese market



02 Product Series





Refrigerator Classification

- According to the different material of the door of the freezer, the
- Freezers are divided into: foam door freezers and glass door freezers
- Foam door freezers are divided into: single door top opening freezers, double door top opening freezers
- Glass door freezers are divided into: curved door freezers and flat glass door freezers





Foam door cooler

- Volume bands covered: 100L, 150L, 200L, 250L, 300L;
- Both DC and AC products can be produced;
- Complete machine, SKD, CKD can be produced;
- Insulation thicknesses of 65mm and 110mm are available;
- The company's full-process production allows for better and faster flexibility in meeting customers' individual and small-volume needs, such as product color, handle style, panel style, mechanical or electronic control, external or internal condenser, etc.





Curved Class (Flat Class)

- Volume bands covered: 150L、250L、300L、350L、400L、450L、500L;
- DC products are available up to 350L, and AC products are available for the whole series;
- CBU、SKD、CKD all are available;
- Product insulation thickness is 85mm, can meet the ST/T various working conditions;
- The product is characterized by the need to achieve fast cooling speed and low depth of cooling;
- The company's full-process production allows for better and faster flexibility in meeting customers' individual and small-volume needs, such as product appearance color, panel style, mechanical or electronic control, condenser external or internal, with LED lights, with light boxes, etc.





Refrigerator Classification

- Refrigerator according to the different doors are divided into: single-door refrigerator, double-door refrigerator and door-to-door refrigerator
- Single door refrigerators are divided into: with a small freezer cabinet refrigerator
- Full refrigeration refrigerator
- Full freezer refrigerator
- Double-door refrigerators are divided into: Top freezer bottom refrigerator / Top refrigerator bottom freezer





Three-wheel series



multi-style



Small batch

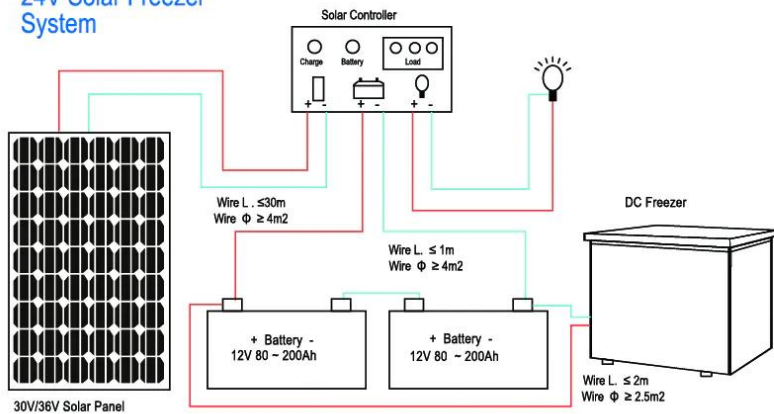
Customization



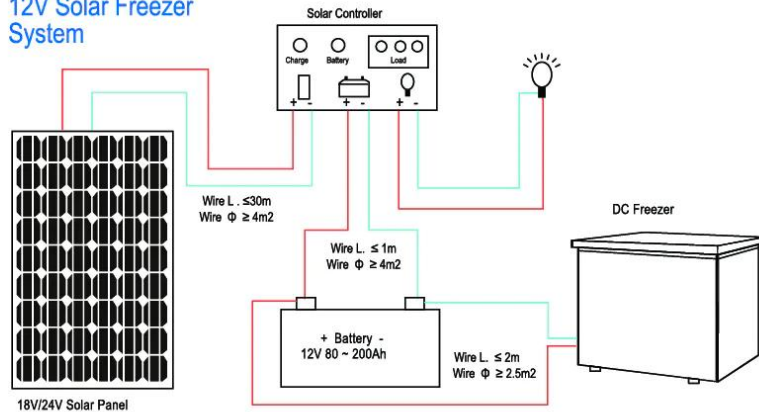
Introduction to daily use scenarios

According to the voltage of the product, the product can be used for 12V/24V, customers can adjust according to their own voltage and use of the scene.

24V Solar Freezer System



12V Solar Freezer System





Solar-direct drive series



Changing the old way of needing batteries to make the product run, the new technology directly allows the photovoltaic panels to power the product, reducing battery loss, lowering the cost of use, and making it cheaper to switch to electricity.







Solar Direct Drive Series Usage Scenarios

Scenario 1. only need to work during the day, not at night (such as display cabinet products), suitable for a good sun, no utility, or utility is very expensive the scene, we can give customers to develop the following program .

Refrigerator (display cabinets) + photovoltaic panels to meet the daytime work scene

Scenario 2 Work with solar panels during the day and utility power at night, suitable for those who have utility power but don't want to buy batteries; or utility power is very expensive and want to reduce the cost of the scenario, we can develop the following program for our customers.

Refrigerator (display case) + photovoltaic panels + external AC/DC adapter, and at night the adapter connects to the utility power supply and switches automatically.

Scenario 3 solar panel work during the day, while charging the battery, the battery work at night; suitable for the scene without utility power, we can give the customer the following program .

Refrigerator (display cabinets) built-in lithium batteries + photovoltaic panels, photovoltaic panels during the day in the supply of refrigerated cabinets to run the work at the same time, while charging the battery, the battery at night to provide power to ensure that the product operation, automatic switching.

Scenario 4 three power supply work: the use of solar panels during the day to work, while charging a small battery, the night to prioritize the use of utility power, there is no utility power, automatic switching to battery work; utility power, but often blackouts, power outages more than a dozen times a day; the scenario, we can give customers to develop the following program.

display showcases with built-in lithium batteries, hybrid power design + photovoltaic panels, photovoltaic panel during the day in the supply of freezer to operate work during the daytime, the photovoltaic panel is supplying the refrigerator operation work, and at the same time charging the battery, at night, the utility power is prioritized, there is no utility power, then the battery to provide power, automatically switch



Solar Direct Drive Series Usage Scenarios

Scenario 5. solar panel direct drive the freezer in the day with cold accumulate ,at night the ice battery work and keep the freezer in frozen temperature to -10°C,

this way no need solar battery ,no need city power,the ice battery life is endless ,can save the running cost of freezer ;

when several days no sun ,can use generator or use battery to supply the power .

Scenario 6. solar panel direct drive the freezer with battery built in ,can be rent and pay as you go .

Rental Market: Ideal for solar freezer rental businesses, reducing users' initial investment costs.

* Rural Areas: Provides pay-as-you-go refrigeration solutions for off-grid areas.

* Commercial Use: Suitable for shops, restaurants, and other venues requiring refrigeration equipment



Solar Direct Drive Series Usage Scenarios

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Refrigerator (display cabinets) + photovoltaic panels to meet the daytime work scene

Connection1.Solar Panel + Battery + Controller + DC Freezer





Solar Direct Drive Series Usage Scenarios

Scenario 2 Work with solar panels during the day and utility power at night, suitable for those who have utility power but don't want to buy batteries; or utility power is very expensive and want to reduce the cost of the scenario, we can develop the following program for our customers.

Refrigerator (display case) + photovoltaic panels + external AC/DC adapter, and at night the adapter connects to the utility power supply and switches automatically.

Connection1.Solar Freezer + Solar Panel 10v~50vdc

Connection2.Solar Freezer + AC Power 110v~240v





Solar Direct Drive Series Usage Scenarios

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Connection1. Solar Freezer + Solar Panel 10v~50vdc

Connection2. Solar Freezer + AC Power 110v~240v

Connection3. Solar Freezer + Battery (lithium battery or lead acid battery)

Three Power sources priority: 1 → 2 → 3



Connection2. DC Freezer + AC Power



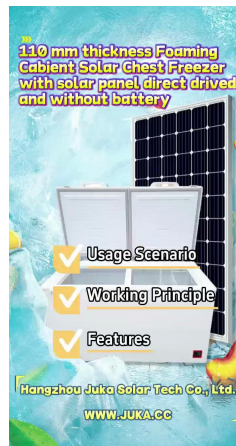
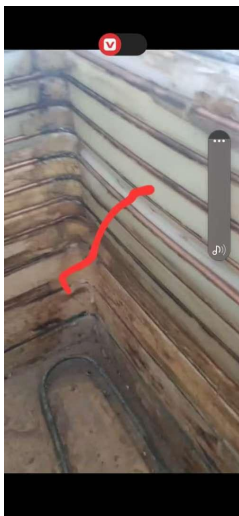


Solar Direct Drive Series Usage Scenarios

Scenario 5.

no city power ,no generator ,can use ice battery ,in the day ,solar panel direct drive the freezer with ice battery to -30'c ,at night ,ice battery can keep the freezer in frozen temperature for-5'c ~-10'c

Connection1.Solar Panel + Battery + Controller + DC Freezer





Solar Direct Drive Series Usage Scenarios

Scenario 6.paygo

Working Principle of PayGo Solar Freezer (English)

3. Anti-Theft & Anti-Tampering:

- * When malicious customers attempt to tamper with the system to avoid payment, even if they understand how the system works, it is difficult to bypass at a low cost.
- * Protective measures are integrated into the PayGo payment device, MPPT charge controller, and compressor controller:
 - * External wiring or disconnection cannot enable the MPPT and compressor controllers to receive the "Allow Operation" command.
 - * Even if the user disconnects the PayGo network or the freezer's communication cable, the freezer will not stop immediately but will shut down after a short period due to an internal countdown.

Core Advantages

- * Pay-As-You-Go: Users only pay for actual usage, reducing initial investment costs.
- * Remote Control: Enables remote management and control via the PayGo server.
- * Anti-Theft & Anti-Tampering: Multiple protective measures ensure system security and reliability.
- * Intelligent Management: Real-time monitoring of freezer status optimizes user experience.



Solar Direct Drive Series Usage Scenarios

Scenario 6.paygo

Application Scenarios (English)

- * Rental Market: Ideal for solar freezer rental businesses, reducing users' initial investment costs.
- * Rural Areas: Provides pay-as-you-go refrigeration solutions for off-grid areas.
- * Commercial Use: Suitable for shops, restaurants, and other venues requiring refrigeration equipment.

Connection1.Solar Panel + Battery + Controller + DC Freezer





Solar Direct Drive Series Usage Scenarios

Connection1.Solar Panel + Battery + Controller + DC Freezer

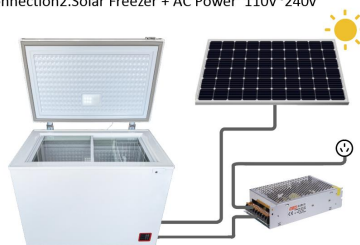


Connection1.Solar Panel + Battery + Controller + DC Freezer



Connection1.Solar Freezer + Solar Panel 10v~50vdc

Connection2.Solar Freezer + AC Power 110v~240v



Connection1.Solar Freezer + Solar Panel 10v~50vdc

Connection2.Solar Freezer + AC Power 110v~240v

Connection3.Solar Freezer + Battery (lithium battery or lead acid battery)

Three Power sources priority: 1 → 2 → 3



Connection2.DC Freezer + AC Power



Connection2.DC Freezer + AC Power



Connection1.Solar Ice Maker + Solar Panel 10v~50vdc

Connection2.Solar Ice Maker + AC Power 110v~240v

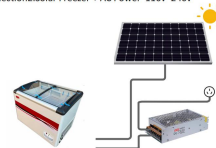
Connection3.Solar Ice Maker + Battery (lithium battery or lead acid battery)

Three Power sources priority: 1 → 2 → 3



Connection1.Solar Freezer + Solar Panel 10v~50vdc

Connection2.Solar Freezer + AC Power 110v~240v



Connection1.Solar Upright Showcase + Solar Panel 10v~50vdc

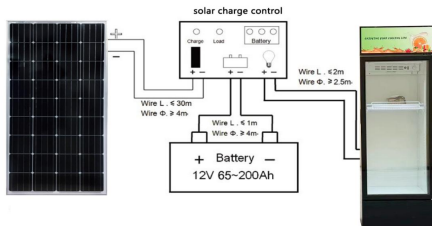
Connection2.Solar Upright Showcase + AC Power 110v~240v

Connection3.Solar Upright Showcase + Battery (lithium battery or lead acid battery)

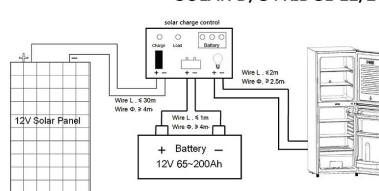
Three Power sources priority: 1 → 2 → 3



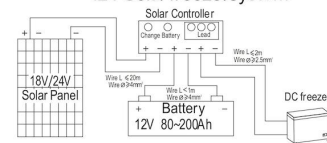
Normal solar showcase for 12v/24v connection



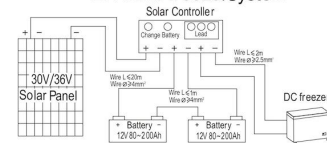
SOLAR D/C FRIDGE 12/24V



12V Solar freezersystem



24V Solar freezersystem





PART THREE

Product Advantages & Competitor Comparison

If there's nothing else, I'll have it, and if there's something else, I'll have it.



Product Advantages

One. Hardware :

- Foaming room with ambient temperature at 20 to 23 degrees all year round to ensure the stability of product foaming quality; Our company has vacuum pumps, liquid adding machines and leak detectors of reliable brands in the industry to ensure the reliability of refrigeration link; the company has a reliable laboratory and a constant temperature test room at the factory to ensure the accuracy of the product's refrigeration parameters, and to ensure that the product is tested in the same ambient conditions all year round to ensure the stability of the product's refrigeration performance. Stability;

Two. Aspects of management norms and process norms :

- The company has a special process and quality assurance department, formed a standardized process documents for each process, the production department in strict accordance with the process of production, without quality control department inspectors to confirm the qualified products can not be packed into the warehouse, the production of the production of the production of the quality control of the quality control to ensure the reliability and consistency of the quality of the product ;

Relevant specific measures:

1. Before connecting the tubes, the condenser and evaporator sections need to be inflated with nitrogen to ensure the cleanliness of the tubes.;
2. Vacuum standard specification: all in accordance with the achievement of 20Pa below, does not comply can't be filled with the liquid;
3. Refrigeration testing: there are detailed specification documents for the deployment requirements and the corresponding test standards for different ambient temperatures.
4. Each unit is tested twice for unenergized and operating conditions using an INFICON leak detector.



Competitor Comparison



Unique door locks,
no exposed lock
hooks, high-end
appearance, good
overall image



Outer case shell thickness is 0.4mm, inner
liner thickness is 0.32mm, most other
factories' products shell thickness are
0.35mm, inner liner thickness 0.26mm



The body frame is specially customized
LG130 low-temperature-resistant
material, which can effectively prevent
the body frame from the hidden danger
of cracking under the big temperature
difference between inside and outside.



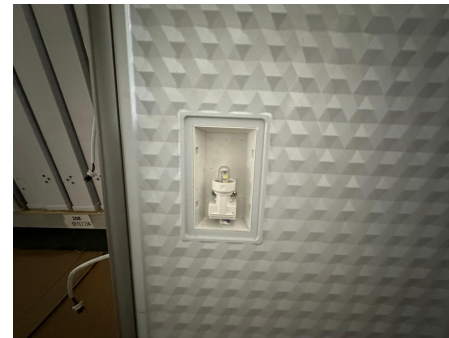
Competitor Comparison



The compressor room is made of metal material, not calcium plastic board or cardboard, which can better ensure the durability of the product and flame retardant.



The side plate of the compressor room cover is a metal side plate, which is more durable than the plastic shell, and the power cord plugging and unplugging is not easy to break.



The inner light is high quality led corn light, the inner light tube lasts for 10 years



Competitor Comparison



Condenser thick tube diameter is 6.0mm, more thicker than ordinary manufacturers 4.78, 120 fine wire (BD/BC-208) wire thicker and denser, better heat dissipation effect



The casters are pure white nylon wheels, no return material, more durable and long-lasting



Plug is 16A industrial large plug, through the current is large, will not heat and burn the plug



Competitor Comparison



All compressor controllers are large aluminum shell, better heat dissipation, to ensure product durability.



The motor of the compressor is guaranteed to be 100% copper coils.



The fan blows directly on the compressor controller, effectively reducing the temperature of the controller and ensuring the stability of the compressor.





PART FOUR

CKD/SKD

Meet your entrepreneurial needs, everyone can be the boss!



You start a business, I help, to solve your worries



SKD/CKD covers product categories: foam door series freezers, arc type (Flat Type) glass door cabinets, island cabinets, large freezers, display cabinets, cake cabinets, refrigerators, air conditioners, washing machines, gas canisters and so on ;

CKD parts



CKD parts



CKD parts



CKD-----Why do CKD freezer

- 1 save shipping cost,one container ckd can load 2~3 times more spare parts than cbu**
- 2 save customs clearance, ckd is free or lowest**
- 3 The labor costs in the Middle East , South America and Africa are low**
- 4 Produce low-priced and high-quality freezer quickly occupy and expand the market**

CKD-----Why choose us

AC/DC Freezer Product Line:
BD/BC-208L, BD/BC-308L ;Core
Technology: Exclusive 10V-50V DC
wide-voltage solar direct-drive
technology developed by Juka

No Inverter Required: Solar panels power the
freezer directly, leading to higher system
efficiency and lower costs. Wide Voltage
Adaptation: Perfectly matches the voltage of
solar panels under different lighting conditions.

Dual system compatibility: Supports
both AC (220V/50Hz/110V60Hz),
can use generators or grid power when
there is no sunlight.



Future expansion: Gradually expand
to the entire series of refrigerators,
washing machines, and air
conditioning products including
BD/BC-108L and 358L.

CKD-----Why choose us

The assembly process is
simple and easy to operate

Only one engineer is needed for
on-site training for 15-20
days,saving cost

We have extensive experience
in helping customers from
different countries to build
freezer factories



Engineer will visit factory to
improve the production every
year

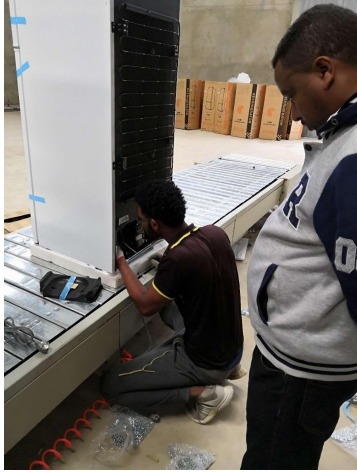
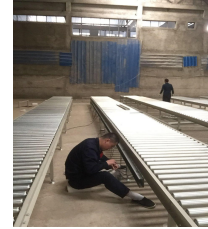
We help customer build factory



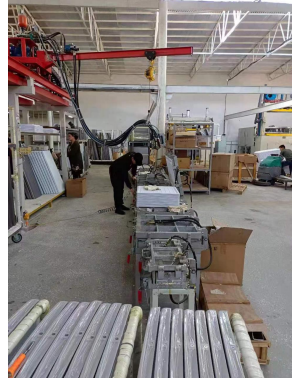
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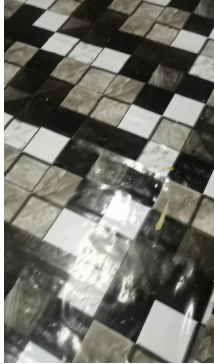
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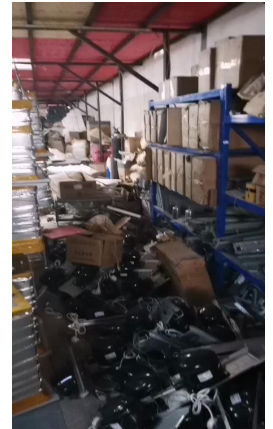
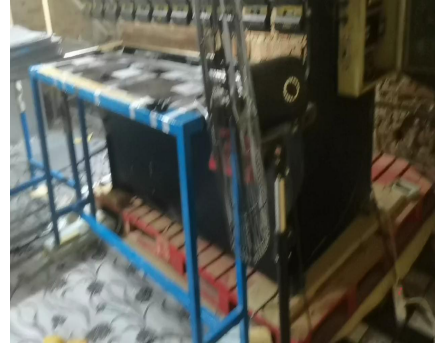
We help customer build factroy



We help customer build factory



We help customer build factory



CKD freezer



CKD----How to collaborate

Continuous empowerment: Providing support for subsequent new technology and product upgrades.

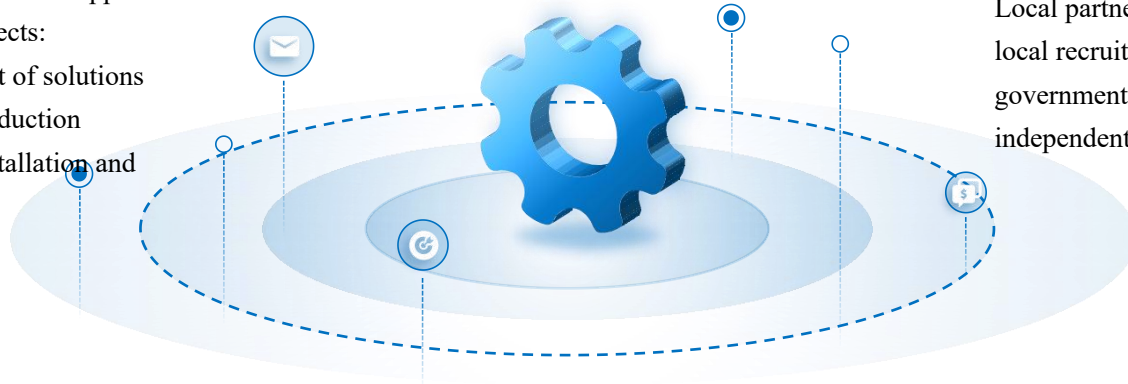
Sungreat Energy Roles:

Technology providers, supply chain partners, general contractors. Support

System: "Turnkey" projects:

Providing a complete set of solutions from factory layout, production equipment, molds to installation and commissioning.

Local partner role: Responsible for factory, local recruitment, sales channels, and government relations, operating independently and retaining ownership.



Buyer -----need to prepare before our engineer coming to your factory

1.workshop 800~2000M2.

2.worker is ready and stable .

3.There is a stable AC power and generator, 20KW of electricity.

4. AC power is better 380V, the vacuum pump and bending machine work relatively stably

5.Pay our engineer 150usd /day travel allowanceexcept all the cost after our engineer left our factory



Time for
shipping

55-60 days once got deposit



Time for
your factory
running

180 days after we got your deposit



Thank you

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