240W FLEXIBLE SOLAR PANEL – PRODUCT DATASHEET

Product Name: Flexible Panel - New - 182 Sixteen Busbar

Product Model: 1150109V01

Document Version: 2026-V1

Product Specification: 1150×1090×2.5mm

Brand: JSL Power

Distributed by : JSL Power

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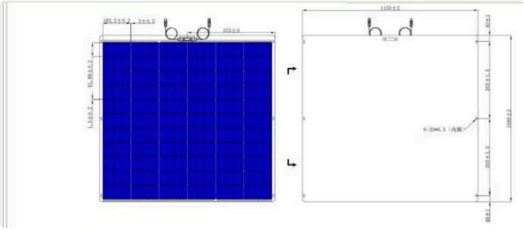
1. SOLAR PANEL RENDERING



The image displays two technical drawings of a solar panel. The left drawing is the front view, showing a blue grid of solar cells. Dimensions include a total width of 1100±2 mm, a total height of 1090±2 mm, and a frame thickness of 2.5±0.5 mm. The right drawing is the back view, showing the frame and mounting holes. It includes dimensions for the mounting holes: 1100±2 mm width, 1090±2 mm height, and a 6-20mm±0.5 (内圈) inner circle dimension. The drawings are labeled with 'F' for Front and 'B' for Back.

Technical drawing showing the front and back views of a solar panel with dimensions.

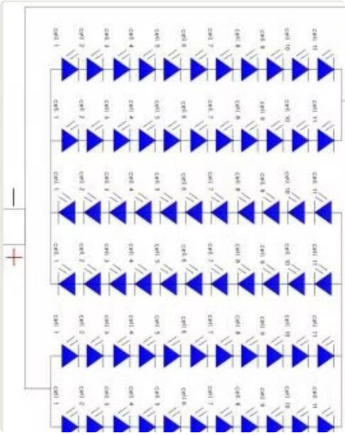
(Figure 1-1) Front and Back Mechanical Dimensions

PRODUCT MECHNICAL REQUIREMENTS

1. Back material: 0.3 Black CPC
2. Surface material: 0.3 Transparent CPC
3. Finished dimensions: 1150×1090×2.5
4. Parameter requirements: 19.8V / 240W
5. Unit: mm

2. SOLAR PANEL WORKING CONFIGURATION

Solar panel working configuration: 33 cells connected in series, 2 branches in parallel.



The diagram illustrates a solar panel working configuration. It shows two parallel branches, each containing 11 solar cells connected in series. The cells are represented by blue triangles with a diode symbol. The cells in the top branch are labeled from left to right as: Cell 1, Cell 2, Cell 3, Cell 4, Cell 5, Cell 6, Cell 7, Cell 8, Cell 9, Cell 10, and Cell 11. The cells in the bottom branch are labeled from left to right as: Cell 1, Cell 2, Cell 3, Cell 4, Cell 5, Cell 6, Cell 7, Cell 8, Cell 9, Cell 10, and Cell 11. The two branches are connected in parallel, with a positive terminal (+) on the left and a negative terminal (-) on the right. The total number of cells is 22, which contradicts the text stating 33 cells.

Schematic diagram of a solar panel working configuration showing 33 cells connected in series, with 2 branches in parallel.

(Figure 2-1) Working Configuration Schematic

3. MECHANICAL PARAMETERS

Parameter	Specification
Cell Type	182.2×183.75 16BB Monocrystalline Cell
Individual Cell Dimensions	182.2×91.88mm
Panel Length	1090mm ±2mm
Panel Width	1150mm ±2mm
Panel Thickness (measured 10mm from panel edge)	2.5mm ±0.5mm
Junction Box	PV-SY-012 (Inline Junction Box) with Diode
Module Output Cable	Cable length ≥900mm (excluding connector), 2.5mm², MC4 connector
Weight (single unit net weight)	3.6kg ±0.4kg
Accessories	/

*Cell busbar configuration, model, and brand may be subject to minor adjustments in response to market changes, which may result in minor dimensional adjustments accordingly.

4. SOLAR PANEL ELECTRICAL PERFORMANCE PARAMETERS

Parameter	Value
Peak Operating Power Pmax (@STC)	240W
Peak Operating Voltage Vmp (@STC)	19.8V
Peak Operating Current Imp (@STC)	12.45A
Open-Circuit Voltage Voc (@STC)	23.1V
Short-Circuit Current Isc (@STC)	13.1A

*STC: Standard Test Conditions (Standard Tested Condition): AM=1.5, 25°C, 1000W/m².

*Electrical performance parameters may vary for each individual product. Actual values refer to test data. Parameter tolerance: -5% ~ +10%.

5. CELL TEMPERATURE COEFFICIENTS

Parameter	Coefficient
Power Temperature Coefficient	-0.35%/°C
Voltage Temperature Coefficient	-0.3%/°C
Current Temperature Coefficient	+0.048%/°C

*Reference cell datasheet. °C = K - 273.15.

6. STANDARD TEST CONDITIONS

6.1 Prior to packaging, solar panels are primarily subjected to electrical performance testing.

6.2 Irradiance is calibrated to the customer-approved sample or the company's internal calibration sample. Test instruments are based on DeSUN's production test bench.

6.3 Temperature: 25°C, Humidity: 10~90%, Air Mass: AM1.5.

6.4 Using a module tester with cable-connected testing; a measured power value of $\geq 228\text{W}$ is considered acceptable.

6.5 Irradiance calibration is performed once every 2 hours.

7. PRECAUTIONS

7.1 OPERATING ENVIRONMENT

Use in an unobstructed outdoor environment with direct sunlight. The panel surface should be as perpendicular to sunlight as possible.

7.2 STORAGE CONDITIONS (LONG-TERM)

Temperature: 10–35°C; Humidity: not exceeding 60%.

7.3 OPERATING TEMPERATURE

-20°C ~ 60°C. Keep away from open flames. Do not allow high-temperature devices to contact the solar panel.

7.4 CHEMICAL EXPOSURE

This product must not come into contact with strongly corrosive substances.

7.5 PHYSICAL HANDLING

During use, avoid scratching or impacting the solar panel surface with hard objects. Handle with care.

7.6 STRUCTURAL STRESS

During transport and mounting, avoid subjecting the solar panel to significant bending stress.

7.7 ELECTRICAL SAFETY

When performing mounting, grounding, wiring, cleaning, or other operations on the photovoltaic module, always use appropriate electrical safety protective equipment to avoid electric shock or cuts.

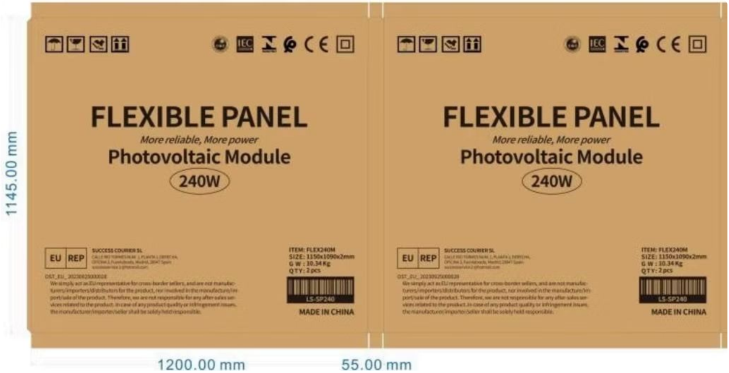
8. WARRANTY

Module warranty period: 1 year. Within the warranty period, if quality issues arise with the product, we will provide corresponding repair and replacement services.

9. PACKAGING

Products are affixed with a nameplate, then wrapped in pearl cotton for protection, bundled with tie straps and paper card sleeves, placed into cartons, with 2 pcs per carton, then palletized.

Full-wing carton, nameplate, and instruction manual print renderings are as follows:



The image displays two identical brown cardboard boxes for a 'FLEXIBLE PANEL Photovoltaic Module 240W'. Each box features a nameplate with the product name, power rating, and technical specifications. The boxes are labeled with 'EU REP' and 'SUCCESS COURIER SL'. Dimensions are indicated: 1145.00 mm for height, 1200.00 mm for width, and 55.00 mm for depth. The boxes are shown side-by-side, illustrating the full-wing carton packaging.

Two brown cardboard boxes for 'FLEXIBLE PANEL Photovoltaic Module 240W'. The boxes are identical and feature various labels including 'More reliable, More power', '240W', 'EU REP', 'SUCCESS COURIER SL', 'ITEM: FLEX240M', 'SIZE: 1150x1090x2mm', 'G W : 10.34 Kg', 'QTY: 2 pcs', 'MADE IN CHINA', and a barcode. The boxes are shown side-by-side with dimensions: 1145.00 mm (height), 1200.00 mm (width), and 55.00 mm (depth).

Carton Specification	Detail
① Category	Full-wing outer carton
② Color	Yellow kraft paper color
③ Dimensions	1200×55×1145mm
④ Material	EB flute
⑤ Forming Process	Adhesive bonding

INSTRUCTION MANUAL – 240W FLEXIBLE PANEL

Dimensions: 315×150mm (folded dimensions: 105×150mm)

Material: 80g offset paper, accordion fold

Print: Black and white, double-sided

PRODUCT

You are welcome to buy and use our 240W solar energy products. This product can be used to power your equipment anytime, anywhere. This product is designed in accordance with industry technical specifications and standards, and it can provide sufficient free green energy.

Please read these instructions carefully before use, and then it is stored in a safe place for future reference.

DISCLAIMER

Before using this product, please read and follow this article and all safety and compliance operating guidelines related to this product.

PARAMETER

Parameter	Value
Module	FLEX240MD(BK)
Maximum power (Pmax)	240W
Open-Circuit Voltage (Voc)	23.10V
Short Circuit Current (Isc)	13.10A
Maximum power Voltage (Vmp)	19.80V
Maximum power Current (Imp)	12.45A
Normal Operating Cell Temp (NMOT)	45°C
Maximum System Voltage	DC 600V
Module Series Fuse	20A
Weight	3.6kg ±0.4kg
Dimension	1150 x 1090mm 2.5mm

PRECAUTIONS

Please do not scratch the surface of the solar panel with sharp objects, and prohibit violent impact or throwing of this product to avoid damage.

Please do not bend or apply external pressure to the solar panel, and avoid dropping it, as this may damage the monocrystalline silicon cells of the solar panel, resulting in a decrease in power output.

Do not allow this product to come into contact with strongly corrosive substances. Do not immerse this product in water.

It is strictly prohibited to use or store this product near heat sources, such as inside a car near a fire, near a fire, or in a heating furnace.

Be sure to use original or officially certified accessories.

Avoid direct sunlight on electrical equipment during use to prevent damage caused by overheating.

Please do not discard discarded solar panels at will. Dispose of discarded products in accordance with local regulations.

Please use it in a safe place.

To maximize the solar energy harvest, please mount the solar panel to be perpendicular to the direction of sunlight.

PROBLEM SOLUTION

WHY CAN'T SOLAR PANELS BE CHARGED?

1. Check if the output cable or plug is normal, unplug or replace with a new cable.
2. Is the sunlight directly facing the solar panel? Please adjust the direction of the solar panel to ensure that it receives sufficient sunlight.
3. Check if there are stains or obstructions on the surface of the solar panel, clean the surface with a cloth to avoid obstacles blocking the solar panel.

WHY DO ELECTRONIC DEVICES CHARGE SLOWLY?

1. Confirm if the usage environment and weather are cloudy or rainy? The bad weather causes solar panels to generate less power.
2. Please replace the cable with a new one or use it in a sunny environment.

A photograph of a portable solar power setup in an outdoor field. A black solar panel is mounted on a silver tripod stand, tilted towards the sun. A black power bank and a small orange lantern are connected to the panel via cables, demonstrating its use for charging devices. The background is a clear blue sky and a green grassy field.

A solar panel mounted on a portable tripod stand in a grassy field under a clear blue sky. A black power bank and a small orange lantern are connected to the panel via cables, demonstrating its use for charging devices.

USE

SOLAR PANELS CAN BE USED INDEPENDENTLY OR IN SERIES OR PARALLEL AS NEEDED.

1. Place the solar panel in an open space and align it with the sunlight.
2. Remove the wiring and connect it to the output lines on the solar panel.
3. Connect the other end of the wiring to the device that needs to be charged.

HOW TO MOUNT SOLAR PANELS?

1. Place it on the balcony or roof of the car, or other suitable scenarios.
2. When using the balcony, you can use straps or fibropax on the balcony for use.

NAMEPLATE SPECIFICATIONS

Dimensions: 90×50mm

Material: Silver-grey base, matte silver label, self-printed

Parameter	Value
Module	FLEX240MD(BK)
Maximum power (Pmax)	240.00W
Open Circuit Voltage (Voc)	23.10V
Short Circuit Current (Isc)	13.10A

Maximum power Voltage (Vmp)	19.80V
Maximum power Current (Imp)	12.45A
Normal Operating Cell Temp (NMOT)	45°C
Maximum System Voltage	DC 600V
Module Series Fuse	20A
Weight	3.6kg ±0.4kg
Dimension	1150 x 1090 mm ±2mm

Standard Test Conditions: AM: 1.5 | IRRADIANCE = 1000W/m^2 | Temp = 25°C

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WARNING – ELECTRICAL HAZARD: Solar modules generate electricity when exposed to sunlight. One module on its own is below the safety extra -low- voltage level, but multiple modules connected in series create hazardous high-voltage conditions.