

# User Manual

Mono Solar Panel



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## Important

### Thank you for choosing BougeRV Solar Panel.

Please read and understand the installation manual before installing BougeRV Solar Panel. With proper operation and maintenance, this solar panel could provide you with clean, renewable solar electricity for many years. This manual contains important installation, maintenance, and safety information. Retain this manual for future reference.


## Limited Warranty


BougeRV Solar Panel comes with an **10-year limited warranty** that commences from the date of purchase. We offer the following two types of limited warranty for all BougeRV Mono Solar Panels:

1. 10 years Material & workmanship warranty
2. 25/30 years Linear power output warranty
  - 5 year 95% output warranty
  - 10 year 90% output warranty
  - 25/30 year 80% output warranty


If you have any questions during use, please feel free to contact BougeRV Tech Support:

It is recommended to choose the corresponding tech support team according to the purchasing platform to obtain a quicker response.

 (US/CA) [service@bougeRV.com](mailto:service@bougeRV.com)  
(BougeRV Website) [support@bougeRV.com](mailto:support@bougeRV.com)

 1-408-656-8402 (Mon.-Fri. 9 am - 6 pm PST)

 [www.bougeRV.com](http://www.bougeRV.com)

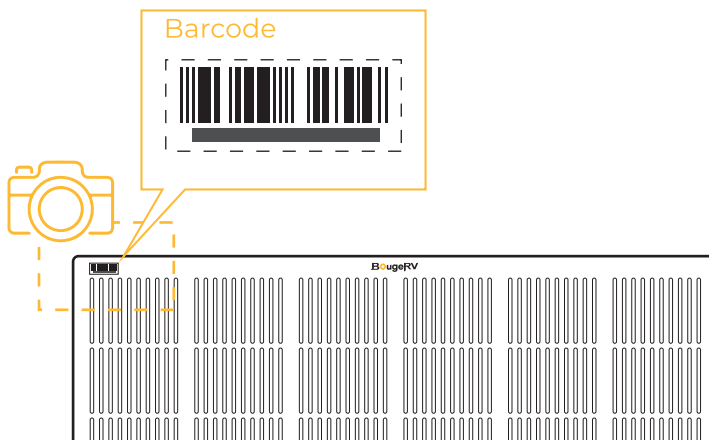
 1-669-232-7427

  
@BougeRV

  
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Note: If you have any after-sales questions about the BougeRV solar panel, please provide **the barcode on the upper left corner** of the solar panel, the appearance picture of the solar panel, with the test parameters (voltage and current) and operating environment of the solar panel. We will respond within 24 hours.



Before using the product, please carefully read the User Manual and the product disclaimer. Once you use the product, it will be deemed that you have understood, acknowledged, and accepted all the contents and terms of this document. BougeRV hereby disclaims any liability for any losses caused by users' failure to use the product in accordance with the user manual. On the premise of complying with laws and regulations, the company has the final right to interpret the documents and the documents related to this product.

**Ps: The limited warranties do not apply to any of the following:**

The solar panel which in BougeRV's absolute judgment have been subjected to misuse, abuse, neglect or accident, alteration, or improper installation, application, or removal. This includes, but is not limited to, installation, application, or removal by any party other than a BougeRV authorized dealer; non-observance of BougeRV's installation, user's and/or maintenance instructions; power failure surges, lightning, flood, fire, accidental breakage, or other events beyond BougeRV's control.

# Safety Precautions

- Do not stand on, drop, scratch, or allow objects to fall on the solar panels as doing so may damage them and void the warranty.
- Do not place anything on the solar panel, even for a moment because the resulting residue may damage or stain the glass surface.
- If the front glass is broken, or the back sheet is torn, contact with any panel surface or panel frame can cause electric shock.
- Broken J-boxes or connectors are electrical hazards as well as laceration hazards. Installers should remove any such solar panel from the array and contact BougeRV for disposal instructions.
- Do not install or handle the solar panel when they are wet or during periods of high wind.
- Do not block drain holes or allow water to pool in or near module frames.
- Unconnected connectors must always be protected from pollution (e.g dust, humidity, foreign particles, etc), prior to installation. Do not leave unconnected (unprotected) connectors exposed to the environment. A clean assembly environment is therefore essential to avoid performance degradation.
- Save these instructions!

# Electrical Parameters

## P Type Mono Solar Panel

| MODEL                                       | 100W SOLAR PANEL                                              | 200W SOLAR PANEL                                              |
|---------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Model Number                                | BJ100W-B016                                                   | BJ200W-B016                                                   |
| Peak Power Pm                               | 100W±5%                                                       | 200W±5%                                                       |
| Open circuit voltage Voc                    | 21.4V±5%                                                      | 22.5V±5%                                                      |
| Max.power voltage Vmp                       | 18.15V±5%                                                     | 19.1V±5%                                                      |
| Max.power current Imp                       | 5.51A±5%                                                      | 10.99A±5%                                                     |
| Short circuit current Isc                   | 6.11A±5%                                                      | 12.21A±5%                                                     |
| Solar cells Efficency                       | 23%                                                           | 23%                                                           |
| Operating temperature limits                | -40°F~+185°F                                                  | -40°F~+185°F                                                  |
| Cable/<br>Cable connector Model             | 14AWG 3FT MC4<br>connectors                                   | 12AWG 3FT MC4<br>connectors                                   |
| Max.static load,<br>front(e.g.snow/wind)    | 2400 Pa                                                       | 2400 Pa                                                       |
| Max.static load,<br>back(e.g.,wind)         | 2400 Pa                                                       | 2400 Pa                                                       |
| Max.hailstone impact<br>(diameter/velocity) | 227g stell ball fall<br>down from 1m<br>height and 60m/s wind | 227g stell ball fall<br>down from 1m<br>height and 60m/s wind |
| Max.system voltage(V)                       | 1000V DC                                                      | 1000V DC                                                      |
| Series fuse rating                          | 10A                                                           | 15A                                                           |
| Application Class                           | Class A                                                       | Class A                                                       |
| Product Certification<br>/Standard          | CE,ETL                                                        | CE,ETL                                                        |
| Product diameter (mm)                       | 995x540x35                                                    | 1485x705x35                                                   |

# Electrical Parameters

## P Type Mono Solar Panel

| MODEL                                       | 300W SOLAR PANEL                                              | 400W SOLAR PANEL                                              |
|---------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Model Number                                | BJ300W-B064                                                   | BJ400W-B064                                                   |
| Peak Power Pm                               | 300W±5%                                                       | 400W±5%                                                       |
| Open circuit voltage Voc                    | 20.8V±5%                                                      | 37.07V±5%                                                     |
| Max.power voltage Vmp                       | 17.5V±5%                                                      | 31.01V±5%                                                     |
| Max.power current Imp                       | 17.14A±5%                                                     | 12.90A±5%                                                     |
| Short circuit current Isc                   | 18.85A±5%                                                     | 13.79A±5%                                                     |
| Solar cells Efficiency                      | 23%                                                           | 23%                                                           |
| Operating temperature limits                | -40°F~+185°F                                                  | -40°F~+185°F                                                  |
| Cable/<br>Cable connector Model             | 12AWG 3FT MC4<br>connectors                                   | 12AWG 4.9FT MC4<br>connectors                                 |
| Max.static load,<br>front(e.g.snow/wind)    | 2400 Pa                                                       | 2400 Pa                                                       |
| Max.static load,<br>back(e.g.,wind)         | 2400 Pa                                                       | 2400 Pa                                                       |
| Max.hailstone impact<br>(diameter/velocity) | 227g stell ball fall<br>down from 1m<br>height and 60m/s wind | 227g stell ball fall<br>down from 1m<br>height and 60m/s wind |
| Max.system voltage(V)                       | 1000V DC                                                      | 1000V DC                                                      |
| Series fuse rating                          | 20A                                                           | 25A                                                           |
| Application Class                           | Class A                                                       | Class A                                                       |
| Product Certification<br>/Standard          | CE,ETL                                                        | CE,ETL                                                        |
| Product diameter (mm)                       | 1640x880x35                                                   | 1724x1134x35                                                  |



# Electrical Parameters

## P Type Bifacial Mono Solar Panel

| MODEL                                       | 100W<br>BIFACIAL SOLAR PANEL                                  | 200W<br>BIFACIAL SOLAR PANEL                                  |
|---------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Model Number                                | BJ100W-B-B016                                                 | BJ200W-B-B016                                                 |
| Peak Power Pm                               | 100W±5%                                                       | 200W±5%                                                       |
| Open circuit voltage Voc                    | 20.1V±5%                                                      | 23.96V±5%                                                     |
| Max.power voltage Vmp                       | 17.1V±5%                                                      | 8.35A±5%                                                      |
| Max.power current Imp                       | 5.8A±5%                                                       | 28.56V±5%                                                     |
| Short circuit current Isc                   | 6.1A±5%                                                       | 8.8A±5%                                                       |
| Solar cells Efficiency                      | 23%                                                           | 23%                                                           |
| Operating temperature limits                | -40°F~+185°F                                                  | -40°F~+185°F                                                  |
| Cable/<br>Cable connector Model             | 14AWG 3FT MC4<br>connectors                                   | 12AWG 3FT MC4<br>connectors                                   |
| Max.static load,<br>front(e.g.snow/wind)    | 2400 Pa                                                       | 2400 Pa                                                       |
| Max.static load,<br>back(e.g.,wind)         | 2400 Pa                                                       | 2400 Pa                                                       |
| Max.hailstone impact<br>(diameter/velocity) | 227g stell ball fall<br>down from 1m<br>height and 60m/s wind | 227g stell ball fall<br>down from 1m<br>height and 60m/s wind |
| Max.system voltage(V)                       | 1000V DC                                                      | 1000V DC                                                      |
| Series fuse rating                          | 15A                                                           | 20A                                                           |
| Application Class                           | Class A                                                       | Class A                                                       |
| Product Certification<br>/Standard          | CE,ETL                                                        | CE,ETL                                                        |
| Product diameter (mm)                       | 990 x 586 x 35                                                | 1358 x 767 x 35                                               |

# Electrical Parameters

## P Type Bifacial Mono Solar Panel

| MODEL                                       | 300W<br>BIFACIAL SOLAR PANEL                                  | 400W<br>BIFACIAL SOLAR PANEL                                  |
|---------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Model Number                                | BJ300W-B-B064                                                 | BJ400W-B-B064                                                 |
| Peak Power Pm                               | 300W±5%                                                       | 400W±5%                                                       |
| Open circuit voltage Voc                    | 40.7V±5%                                                      | 37.1V±5%                                                      |
| Max.power voltage Vmp                       | 34.8V±5%                                                      | 31V±5%                                                        |
| Max.power current Imp                       | 8.62A±5%                                                      | 12.9A±5%                                                      |
| Short circuit current Isc                   | 9.64A±5%                                                      | 13.8A±5%                                                      |
| Solar cells Efficiency                      | 23%                                                           | 23%                                                           |
| Operating temperature limits                | -40°F~+185°F                                                  | -40°F~+185°F                                                  |
| Cable/<br>Cable connector Model             | 12AWG 3FT MC4<br>connectors                                   | 12AWG 3FT MC4<br>connectors                                   |
| Max.static load,<br>front(e.g.snow/wind)    | 2400 Pa                                                       | 2400 Pa                                                       |
| Max.static load,<br>back(e.g.,wind)         | 2400 Pa                                                       | 2400 Pa                                                       |
| Max.hailstone impact<br>(diameter/velocity) | 227g stell ball fall<br>down from 1m<br>height and 60m/s wind | 227g stell ball fall<br>down from 1m<br>height and 60m/s wind |
| Max.system voltage(V)                       | 1000V DC                                                      | 1000V DC                                                      |
| Series fuse rating                          | 15A                                                           | 25A                                                           |
| Application Class                           | Class A                                                       | Class A                                                       |
| Product Certification<br>/Standard          | CE,ETL                                                        | CE,ETL                                                        |
| Product diameter (mm)                       | 1640x880x35                                                   | 1724x1134x35                                                  |

# Electrical Parameters

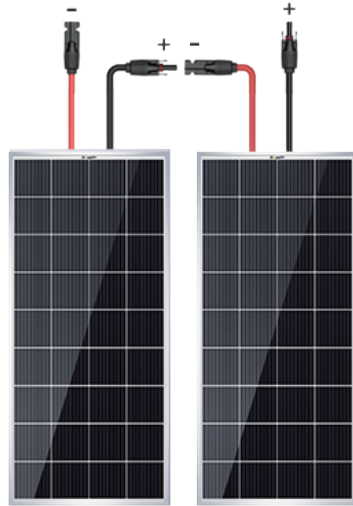
## N Type TOPCon Bifacial Mono solar panel

| MODEL                                       | 100w N Type TOPCon BIFACIAL SOLAR PANEL                       | 200w N Type TOPCon BIFACIAL SOLAR PANEL                       |
|---------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Model Number                                | TBJ100W-B-B016                                                | TBJ200W-B-B016                                                |
| Peak Power Pm                               | 100W±5%                                                       | 200W±5%                                                       |
| Open circuit voltage Voc                    | 35.7V±5%                                                      | 36.4V±5%                                                      |
| Max.power voltage Vmp                       | 31.1V±5%                                                      | 31.7V±5%                                                      |
| Max.power current Imp                       | 3.2A±5%                                                       | 6.3A±5%                                                       |
| Short circuit current Isc                   | 3.4A±5%                                                       | 6.6A±5%                                                       |
| Solar cells Efficiency                      | 25%                                                           | 25%                                                           |
| Operating temperature limits                | -40°F~+185°F                                                  | -40°F~+185°F                                                  |
| Cable/<br>Cable connector Model             | 14AWG 3FT MC4 connectors                                      | 14AWG 3FT MC4 connectors                                      |
| Max.static load,<br>front(e.g.snow/wind)    | 2400 Pa                                                       | 2400 Pa                                                       |
| Max.static load,<br>back(e.g.,wind)         | 2400 Pa                                                       | 2400 Pa                                                       |
| Max.hailstone impact<br>(diameter/velocity) | 227g stell ball fall<br>down from 1m<br>height and 60m/s wind | 227g stell ball fall<br>down from 1m<br>height and 60m/s wind |
| Max.system voltage(V)                       | 1000V DC                                                      | 1000V DC                                                      |
| Series fuse rating                          | 15A                                                           | 15A                                                           |
| Application Class                           | Class A                                                       | Class A                                                       |
| Product Certification<br>/Standard          | CE,ETL                                                        | CE,ETL                                                        |
| Product diameter (mm)                       | 853x586x35                                                    | 1287x767x35                                                   |

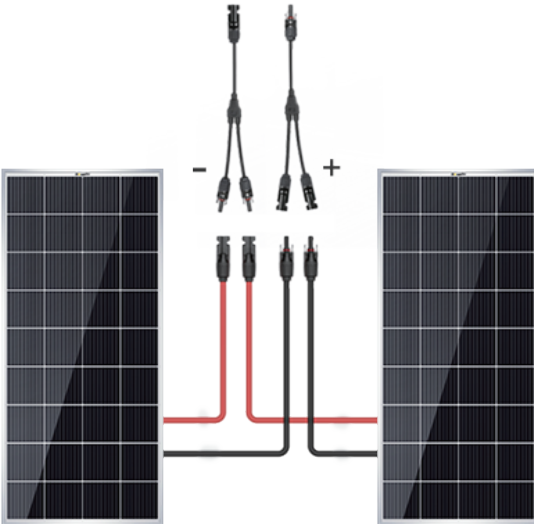
# Electrical Connections

## Series Connection

The panel may be wired in series to produce the desired voltage output.



Series Connection



Parallel Connection

## Parallel Connection

The solar panel can be wired in parallel to produce the desired current output with the parallel connector.

# Frequently Asked Questions

**Q1**

How to choose the appropriate solar accessories that fit the solar panel if I want to build a solar system on my own?

**A1**

BougeRV provides you with professional technical services. You can send us your needs and the parameter information or instructions of your purchased accessories directly to our email: [service@bougeerv.com](mailto:service@bougeerv.com), we will help you build the ideal DIY solar system.

**Q2**

What should I do if the solar panel I received is damaged, missing parts, or no output?

**A2**

Please send relevant pictures to our after-sales mailbox [service@bougeerv.com](mailto:service@bougeerv.com) immediately, and leave your order number. We will reply one by one according to the chronological order sent by the customers.

**Q3**

What causes the low output power or no output during the use of solar panels? How can I solve it?

**A3**

The output power of solar panels is mainly affected by light intensity, light angle, and shadow occlusion during the use of solar panels. Therefore, during daily use, the angle of illumination must be adjusted to prevent shadows, and the obstructions on the solar panel must be cleaned regularly, such as bird droppings, dust, and garbage. Such obstructions may cause the solar panel to not output at all.

**Q4**

Does it work with the portable power station?

**A4**

Yes, BougeRV solar panels with mc4 connectors are suitable for most portable power stations on the market. If you want to inquire about the specific model, please contact us.

**BougeRV**

Make The Journey