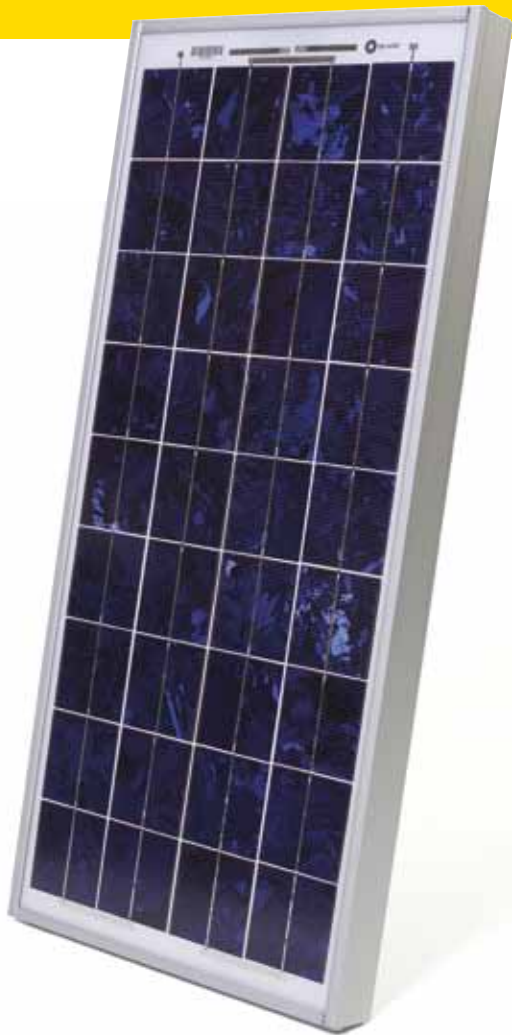


## 30W Photovoltaic module

# BP 330J

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BP Solar has been pioneering photovoltaic (PV) solar for almost 40 years. This experience shows that the best way to optimize module life and electrical energy production is to attend to every detail in the design and manufacture of our products, our process controls and testing methods. BP Solar's latest generation of small area modules offers the following benefits:

### Guaranteed to last

Our technology has been proven in the harshest environments – on satellites in space, on weather stations in the bitter cold of Antarctica, and on telephone signal repeaters in the Australian outback.



### Accessible junction box for off grid connections

BP J-type junction box has accessible terminals for easier module interconnections in off grid applications, and it allows fitting cable glands for various cable sections.



### Improved cell protection, strong protective frame

Robust frame, designed to support the harshest weather conditions, ensures best protection for higher energy-producing cells.



### Thick, durable, scratch resistant back sheet

Our new thicker back sheet provides extra insulation and increased resistance to protect your module against rough handling. Made of white polyester, it ensures longer term performance and increased energy production.

# 30W Photovoltaic module

## BP 330J

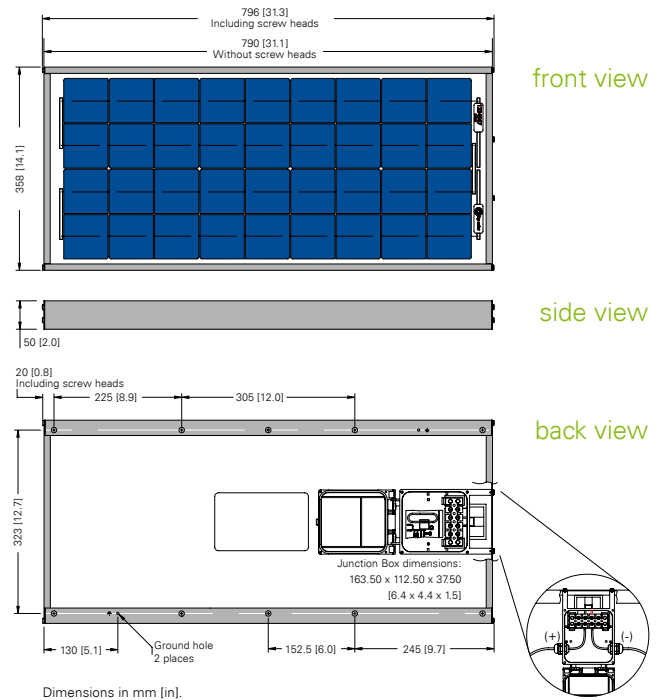


### Electrical characteristics

|   | <sup>(1)</sup> STC 1000W/m <sup>2</sup> | <sup>(2)</sup> NOCT 800W/m <sup>2</sup> |
|---|---|---|
| Maximum power (P <sub>max</sub> )               | 30W                                     | 21.6W                                   |
| Voltage at P <sub>max</sub> (V <sub>mpp</sub> ) | 16.8V                                   | 15.0V                                   |
| Current at P <sub>max</sub> (I <sub>mpp</sub> ) | 1.78A                                   | 1.42A                                   |
| Short circuit current (I <sub>sc</sub> )        | 1.94A                                   | 1.57A                                   |
| Open circuit voltage (V <sub>oc</sub> )         | 21.0V                                   | 19.1V                                   |
| Module efficiency                               | 10.5%                                   |   |
| Tolerance P <sub>max</sub>                      | ±10%                                    |   |
| Nominal voltage                                 | 12V                                     |   |
| Efficiency reduction at 200W/m <sup>2</sup>     | <5% reduction (efficiency 10%)          |   |
| Limiting reverse current                        | 1.94A                                   |   |
| Temperature coefficient of I <sub>sc</sub>      | 0.105%/ °C                              |   |
| Temperature coefficient of V <sub>oc</sub>      | -0.360%/ °C                             |   |
| Temperature coefficient of P <sub>max</sub>     | -0.45%/ °C                              |   |
| <sup>(3)</sup> NOCT                             | 47±2°C                                  |   |
| Maximum series fuse rating                      | 5A                                      |   |
| Application class (according to IEC 61730:2007) | Class C                                 |   |
| Maximum system voltage                          | 50V                                     |   |

1: Values at Standard Test Conditions (STC): 1000W/m<sup>2</sup> irradiance, AM1.5 solar spectrum and 25°C module temperature  
 2: Values at 800W/m<sup>2</sup> irradiance, Nominal Operation Cell Temperature (NOCT) and AM1.5 solar spectrum  
 3: Nominal Operation Cell Temperature: Module operation temperature at 800W/m<sup>2</sup> irradiance, 20°C air temperature, 1m/s wind speed

All solar modules are individually tested prior to shipment; an allowance is made within our factory measurement to account for the typical power degradation (LID effect) which occurs during the first few days of deployment.



### Mechanical characteristics

|              |  |
|--------------|--|
| Solar cells  | 36 polycrystalline 3" silicon cells (78x78mm) in series  |
| Front cover  | High transmission 3.2mm (1/8th in) glass   |
| Encapsulant  | EVA  |
| Back cover   | White polyester  |
| Frame        | Silver anodized aluminum   |
| Junction box | IP65 with 4 terminal screw connection block; accepts PG 13.5, M20 13mm (½") conduit, or cable fittings accepting 6-12mm diameter cable. Terminals accept 2.5-10mm <sup>2</sup> (8-14 AWG) wire |
| Dimensions   | 796x358x50mm / 31.3x14.1x2in   |
| Weight       | 3.9kg / 8.6lbs   |

All dimensional tolerances within ±1% unless otherwise stated.

### Warranty

- Free from defects in materials and workmanship for 2 years
- 90% min. power output over 12 years

### Certification

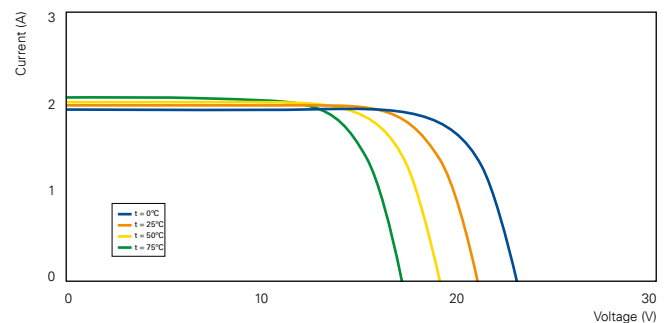
Certified according to the extended version of the IEC 61215 (ed.2), EN 61215:2005-08 (Crystalline silicon terrestrial photovoltaic modules - Design qualification and type approval)

Certified according to IEC 61730-1 and IEC 61730-2 (ed.1), EN 61730-1:2007-05 and EN 61730-2:2007-05. (Photovoltaic module safety qualification, requirements for construction and testing).

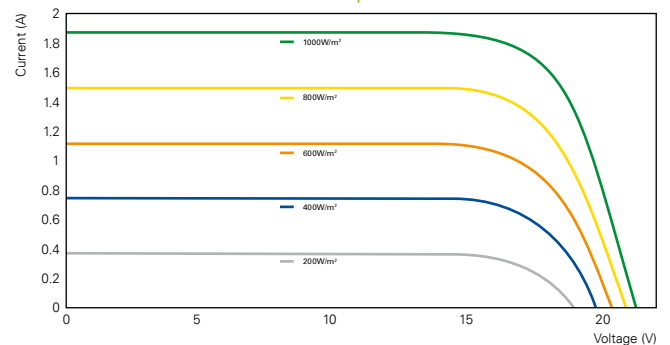
Listed to UL 1703 & ULC ORD-C1703 Standard for Safety by Intertek ETL

Approved by Intertek ETL according to FM 3611, Dec 2004, and according to CAN/CSA C22.2 No. 213-M1987, 1st Edition, Reaffirmed 2004, for use in a Class I, Division 2, Group A, B, C, D Hazardous (Classified) Location.

### Dependence of the temperature



### Dependence of the irradiance



### Contact:

Your BP Solar partner