

## 30 watt photovoltaic module

# BP 330

The BP 330 is an advanced 30W photovoltaic module that addresses the needs of rural electrification, from remote homes that do not have access to the utility grid, to remote industrial applications such as telemetry and instrumentation systems. This product offers improved efficiency through the use of advanced polycrystalline cells with SiN coating and a 12V nominal output, making it ideal for battery charging applications. It has proven performance at high temperatures and its robust design makes the product durable in the field and easy to install.

### Performance

### BP330

Rated power	30W
Nominal voltage	12V
Warranty	90% of minimum warranted power output over 12 years Free from defects in materials and workmanship for 2 years

### Configuration

BP 330J	Universal frame with an accessible junction box for cable connection
---------	--

### Qualification Test Parameters

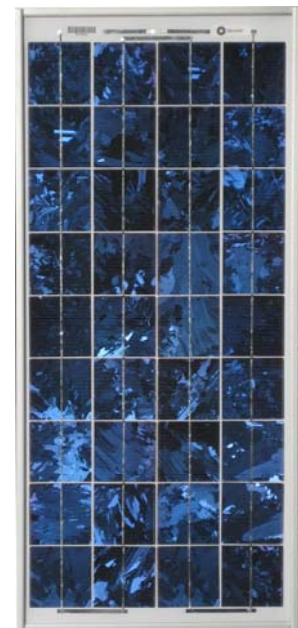
Temperature cycling range	-40°C to +85°C for 200 cycles
Damp heat test	85°C and 85% relative humidity for 1000h
Front & rear static load test (eg: wind)	2400 Pa
Front load test (eg: snow)	5400 Pa
Hailstone impact test	25mm hail at 23m/s from 1m distance

### Quality and Safety

- Manufactured in ISO 9001 certified factory

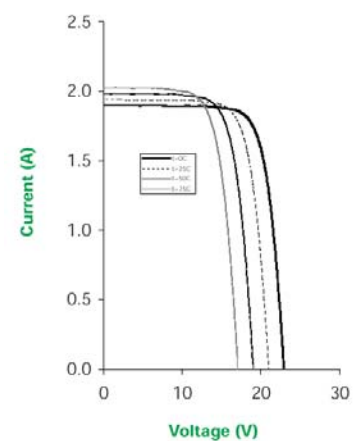
Listed to UL1703 Standard for Safety by Intertek ETL (Class C fire rating)

Approved by Factory Mutual Research in NEC Class 1, Division 2, Groups C and D hazardous locations



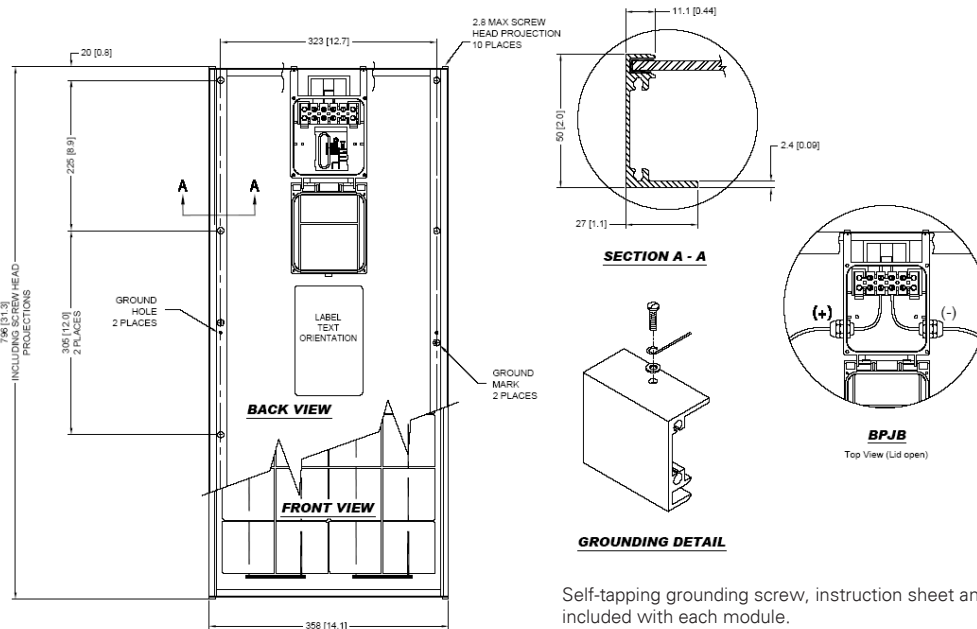
BP 330J

### BP 330 I-V Curves



## 30 Watt Photovoltaic Module BP 330

### Module Diagram



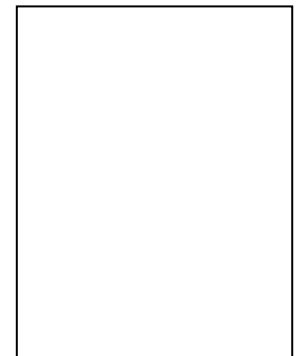
### Typical Electrical Characteristics BP 330

Rated power ( $P_{max}$ ) <sup>1</sup>	30W
Warranted minimum power	27W
Voltage at P max ( $V_{mp}$ )	16.8V
Current at P max ( $I_{mp}$ )	1.78A
Short circuit current ( $I_{sc}$ )	1.94A
Open circuit voltage ( $V_{oc}$ )	21.0V
Temperature coefficient of $I_{sc}$	(0.065±0.015)%/ °C
Temperature coefficient of $V_{oc}$	-(80±10)mV/ °C
Temperature coefficient of $P_{max}$	-(0.5±0.05)%/ °C
NOCT <sup>2</sup>	47±2°C
Maximum series fuse rating	5A
Maximum system voltage	50V (ETL rating)

### Mechanical Characteristics BP 330J

Dimensions (mm) (Overall tolerances +/-3mm)	796 x 358 x 50mm
Weight (kg)	3.9Kg
Frame	Clear anodised aluminium, alloy type 6063T6. Colour: silver.
Solar cells	36 cells (78mm x 78mm) configured geometrically for a 9 x 4 matrix connected in series.
Junction box	IP65 junction box with four terminal screw connection block, accepts PG 13.5, M20, 13mm conduit, or cable fittings accepting 6 – 12mm diameter cable. Terminals accept 2.5 – 10mm <sup>2</sup> (8-14 AWG) wire.
Construction	Front: high transmission 3mm tempered glass. Rear: white polyester; encapsulant: EVA.

Your BP Solar Distributor:



© BP Solar Pty Ltd 2009

- Standard test conditions (STC), irradiance of 1000W/m<sup>2</sup> at an AM1.5G solar spectrum and a cell temperature of 25°C.
- Normal Operating Cell Temperature (NOCT) air temperature of 20°C; irradiance 800W/m<sup>2</sup>; wind speed 1m/s.

[www.bpsolar.com.au](http://www.bpsolar.com.au)