

# 125W and 130W Photovoltaic modules BP 3125J - BP 3130J

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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:

#### **Enhanced warranty**

BP Solar provides an industry leading warranty, guaranteeing lower degradation rates on our modules manufactured beginning January 1st, 2010. Our superior long-term performance is proven by internal testing standards that go well beyond international requirements.





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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 reliability with effective cooling

IntegraBus™

technology ensures high quality interconnections while positioning the bypass diodes in a printed circuit board for cooler operation and greater reliability.



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.

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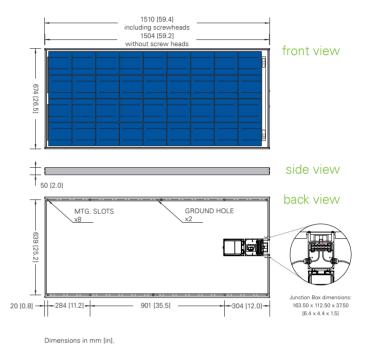


### 125W and 130W Photovoltaic modules

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## BP 3125J - BP 3130J

Electrical	3125J		3130J	
characteristics	<sup>(1)</sup> STC 1000W/m <sup>2</sup>	(2) NOCT 800W/m <sup>2</sup>	<sup>(1)</sup> STC 1000W/m <sup>2</sup>	(2) NOCT 800W/m <sup>2</sup>
Maximum power (P <sub>max</sub> )	125W	90W	130W	93.6W
Voltage at P <sub>max</sub> (V <sub>mpp</sub> )	17.4V	15.5V	17.4V	15.5V
Current at Pmax (Impp)	7.20A	5.76A	7.50A	6.0A
Short circuit current (Isc)	8.10A	6.56A	8.23A	6.67A
Open circuit voltage (Voc)	22.0V	20.0V	22.0V	20.0V
Module efficiency	12.3%	-	12.8%	-
Tolerance Pmax	±5%	-	±5%	-
Nominal voltage	12V	-	12V	-
Efficiency reduction at 200W/m <sup>2</sup>	<5% reduction <5% reduction (efficiency 11.7%) (efficiency 12.1%)			
Limiting reverse current	8.10A 8.23A			23A
Temperature coefficient of Isc	0.105%/ °C			
Temperature coefficient of $V_{\mbox{\tiny oc}}$	-0.360%/ °C			
Temperature coefficient of Pmax	-0.45%/ °C			
<sup>(3)</sup> NOCT	47±2°C			
Maximum series fuse rating	20A			
Application class	Class A (according to IEC 61730:2007)			
Maximum system voltage	600V			
1: Values at Standard Test Conditions (STC): 1000/W/m <sup>2</sup> irradiance. AM15 colar spectrum and 25% module temperature				



Values at Standard Test Conditions (STC): 1000W/m<sup>2</sup> irradiance, AM15 solar spectrum and 25°C module temperature
 Values at 800W/m<sup>2</sup> irradiance, Nominal Operation Cell Temperature (NOCT) and AM1.5 solar spectrum
 Nominal Operation Cell Temperature: Module operation temperature at 800W/m<sup>2</sup> irradiance, 20°C air temperature, 1m/s wind speec

3: Nominal Operation Cell Temperature: Module operation temperature at 800W/m<sup>2</sup> irradiance, 20<sup>o</sup>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 typi power degradation (LID effect) which occurs during the first few days of deployment.

#### **Mechanical characteristics**

Solar cells	36 polycrystalline 6" silicon cells (156x156mm) in series		
Front cover	High transmission 3.2mm (1/8th in) glass		
Encapsulant	EVA		
Back cover	White polyester		
Frame	Silver anodized aluminum		
Diodes	IntegraBus™ with 2 Schottky bypass diodes		
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	1510x674x50mm / 59.4x26.5x2in		
Weight	12kg / 26.5lbs		

All dimensional tolerances within  $\pm 1\,\%$  unless otherwise stated.

#### Warranty

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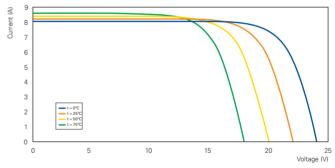
• Free from defects in materials and work	kmanship for 5 years
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- 93% min. power output over 12 years
- 85% min. power output over 25 years

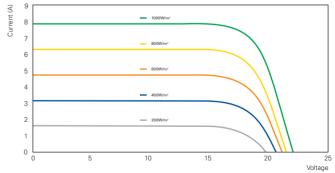
#### Certification

- 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.
- This data sheet complies with the EN 50380 requirements.

Dependence of the temperature (BP 3130J)



Dependence of the irradiance (BP 3130J)



#### Contact:

Your BP Solar partner
Find more information in: www.bpsolar.com 10 4104US-1 11/10 @BP Solar 2010

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