

The BP 2150S PV module is part of BP Solar's new series of 72-cell modules designed specifically for large PV systems. With the strongest frame in the industry, time-tested monocrystalline silicon solar cells, integral bypass diodes, and installation-speeding MultiContact® polarized connectors, it provides cost-effective power for DC loads or, with an inverter, AC loads. Its 72-cell series string charges 24V batteries (or multiples of 24V) efficiently in virtually any climate. With 150 watts of nominal maximum power, the BP 2150S is primarily used in utility grid-supplemental systems, telecommunication systems, pumping and irrigation, cathodic protection, remote villages and homes, and land-based navigation aids.

## Proven Materials and Construction

BP Solar's quarter-century of field experience shows in every aspect of this module's construction and materials:

- Frame strength exceeds requirements of certifying agencies;
- 72 monocrystalline silicon solar cells in series;
- Cells are laminated between sheets of ethylene vinyl acetate (EVA) and high-transmissivity low-iron 3 mm tempered glass;
- MultiContact® plug-and-socket connectors provide reliable low-resistance connections and eliminate wiring errors.



## Clear Anodized Universal Frame

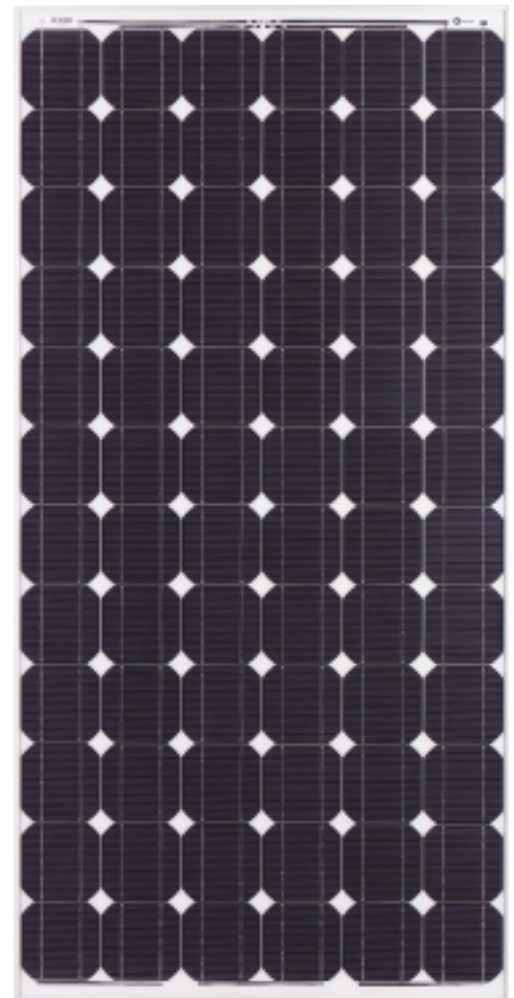
## Limited Warranties

- Power output for 20 years;
- Freedom from defects in materials and workmanship for 1 year.

See our website or your local representative for full terms of these warranties.

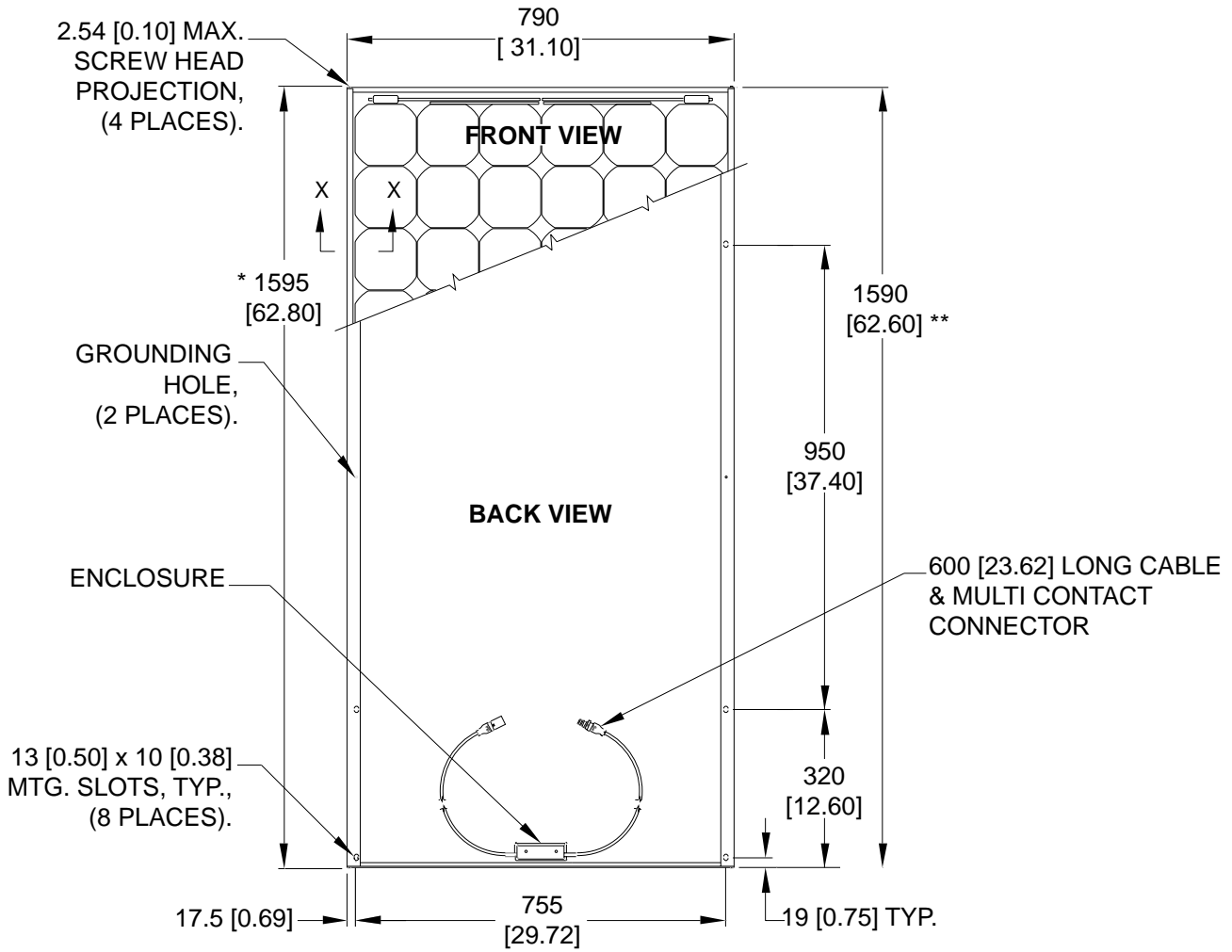
## Quality and Safety

- Manufactured in ISO 9001-certified factories;
- Listed by Underwriter's Laboratories for electrical and fire safety (Class C fire rating);
- Certified by TÜV Rheinland as Class II equipment for use in systems with voltage up to 1000VDC;
- Complies with the requirements of IEC 61215, including:
  - repetitive cycling between -40°C and 85°C at 85% relative humidity;
  - simulated impact of 25 mm (one-inch) hail at terminal velocity;
  - 2200 VDC frame/cell string isolation test;
  - static loading, front and back, of 2400 pascals (50 psf); front loading (e.g. snow) of 5400 pascals (113 psf)



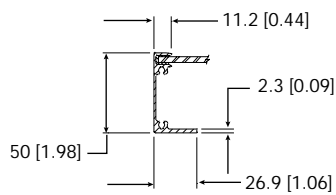
BP 2150S



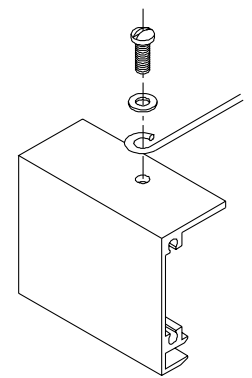


### BP 2140S, BP 2150S

\* includes screw head projection on each end  
 \*\* does not include screw head projection



Section X-X



Grounding Detail

### Dimensions

Unbracketed dimensions are in millimeters.  
 Dimensions in brackets are in inches.  
 Overall tolerances  $\pm 3\text{mm}$  (1/8")

### Mechanical Characteristics

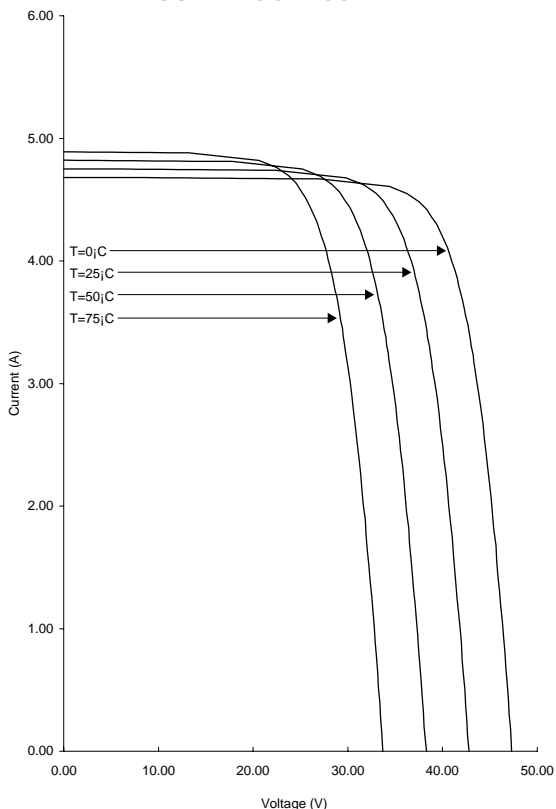
	Weight
BP 2150S	15.4 kg (34 pounds)

Typical Electrical Characteristics <sup>(1)</sup>	BP 2140S	BP 2150S
Maximum Power ( $P_{max}$ ) <sup>4</sup>	140W	150W
Voltage at $P_{max}$ ( $V_{mp}$ )	34.0V	34.0V
Current at $P_{max}$ ( $I_{mp}$ )	4.16A	4.45A
Warranted minimum $P_{max}$	130W	140W
Short-circuit current ( $I_{sc}$ )	4.48A	4.75A
Open-circuit voltage ( $V_{oc}$ )	42.8V	42.8V
Temperature coefficient of $I_{sc}$	(0.065±0.015)%/°C	
Temperature coefficient of $V_{oc}$	-(160±20)mV/°C	
Temperature coefficient of power	-(0.5±0.05)%/°C	
NOCT <sup>3</sup>	47±2°C	
Maximum system voltage <sup>2</sup>	600V	

### Notes

- These data represent the performance of typical BP 2140S and BP 2150S modules as measured at their output connectors. The data are based on measurements made in accordance with ASTM E1036-85 corrected to SRC (Standard Reporting Conditions, also known as STC or Standard Test Conditions), which are:
  - illumination of 1 kW/m<sup>2</sup> (1 sun) at spectral distribution of AM 1.5 (ASTM E892-87 global spectral irradiance);
  - cell temperature of 25°C.
- U.S. NEC rating.
- The cells in an illuminated module operate hotter than the ambient temperature. NOCT (Nominal Operating Cell Temperature) is an indicator of this temperature differential, and is the cell temperature under Standard Operating Conditions: ambient temperature of 20°C, solar irradiation of 0.8 kW/m<sup>2</sup>, and wind speed of 1 m/s.
- During the stabilization process which occurs during the first few months of deployment, module power may decrease approximately 3% from typical Pmax.

### BP 2150 I-V Curves





This publication summarizes product specifications and warranty. For details of construction, performance, and warranty, see our website [www.bpsolar.com](http://www.bpsolar.com) or contact your local representative. Specifications subject to change without notice.



BP Solar uses recycled and recyclable materials in its operation to the fullest extent.