

High-efficiency photovoltaic module using silicon nitride multicrystalline silicon cells.

Performance

 $\begin{array}{ll} \text{Rated power } (P_{\text{max}}) & 40 \text{W} \\ \text{Power tolerance} & \pm 10 \% \\ \text{Nominal voltage} & 12 \text{V} \\ \text{Limited Warranty}^1 & 25 \text{ years} \end{array}$

Configuration

J

Clear universal frame and standard J-Box

Electrical Characteristics ²	BP 340
Maximum power $(P_{max})^3$	40W
Voltage at Pmax (V _{mp})	17.3V
Current at Pmax (I _{mp})	2.3A
Warranted minimum P _{max}	36W
Short-circuit current (I _{sc})	2.5A
Open-circuit voltage (Voc)	21.8V
Temperature coefficient of I _{sc}	(0.065±0.015)%/°C
Temperature coefficient of V _{oc}	-(80±10)mV/°C
Temperature coefficient of power	-(0.5±0.05)%/°C
NOCT (Air 20°C; Sun 0.8kW/m ² ; wind 1m/s)	47±2°C
Maximum series fuse rating	20A
Maximum system voltage	50V (U.S. NEC & IEC 61215 rating)
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Mechanical Characteristics

Dimensions	Length: 655mm (25.8") Width: 537mm (21.1") Depth: 50mm (1.97")	
Weight	5.75 kg (12.7 pounds	
Solar Cells	36 cells (62.5mm x 125mm) in a 4x9 matrix connected in series	
Junction Box	J-Version junction box with 4-terminal connection block; IP 65, accepts PG 13.5, M20, ½ inch conduit, or cable fittings accepting 6-12mm diameter cable. Terminals accept 2.5 to 10mm² (8 to 14 AWG) wire.	
Construction	Front: High-transmission 3mm (1/8 th inch) tempered glass; Back: White Polyester; Encapsulant: EVA	
Frame	Clear anodized aluminum alloy type 6063T6 Universal frame; Color: silver	

^{1.} Module Warranty: 25-year limited warranty of 80% power output; 12-year limited warranty of 90% power output; 5-year limited warranty of materials and workmanship. See your local representative for full terms of these warranties.

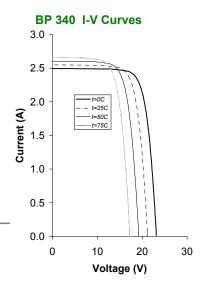
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^{2.} This data represents the performance of typical BP modules, and are based on measurements made in accordance with ASTM E1036 corrected to SRC (STC.)

^{3.} During the stabilization process that occurs during the first few months of deployment, module power may decrease by approx. 1% from typical P_{max} .

Quality and Safety

CE	Manufactured in ISO 9001-certified factories; conforms to European Community Directives 89/33/EEC, 73/23/EEC, 93/68/EEC; certified to IEC 61215
ESTI	Module power measurements calibrated to World Radiometric Reference through ESTI
(U _E)	Listed by Underwriter's Laboratories for electrical and fire safety (Class C fire rating)
₹M	Approved by Factory Mutual Research in NEC Class 1, Division 2, Groups C & D hazardous locations.

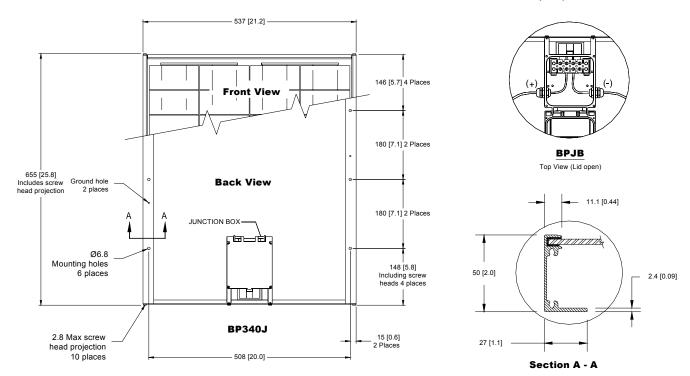


Qualification Test Parameters

Temperature cycling range	-40° C to $+85^{\circ}$ C (-40° F to 185° F)
Humidity freeze, damp heat	85% RH
Static load front and back (e.g. wind)	50psf (2400 pascals)
Front loading (e.g. snow)	113psf (5400 pascals)
Hailstone impact	25mm (1 inch) at 23 m/s (52mph)

Module Diagram

Dimensions in brackets are in inches. Un-bracketed dimensions are in millimeters. Overall tolerances ±3mm (1/8")



Included with each module: self-tapping grounding screw, instruction sheet, and warranty document.

Note: This publication summarizes product warranty and specifications, which are subject to change without notice. Additional information may be found on our web site: **www.bpsolar.com**

