

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 Maximum power (P _{max}) ³	BP 340 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 Voc	-(80±10)mV/°C
Temperature coefficient of power	-(0.5±0.05)%/°C
NOCT (Air 20°C; Sun 0.8kW/m²; wind 1m/s)	47±2°C
Maximum series fuse rating	20A
Maximum system voltage	50V (U.S. NEC rating)



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 85% power output; 12-year limited warranty of 93% power output; 5-year limited warranty of materials and workmanship. See your local representative for full terms of these warranties.

^{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

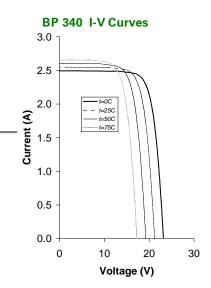


Listed to UL 1703 Standard for safety by Intertek ETL (Class C fire rating)

Approved by Intertek ETL for use in NEC Class 1, Division 2, Groups A to D hazardous locations

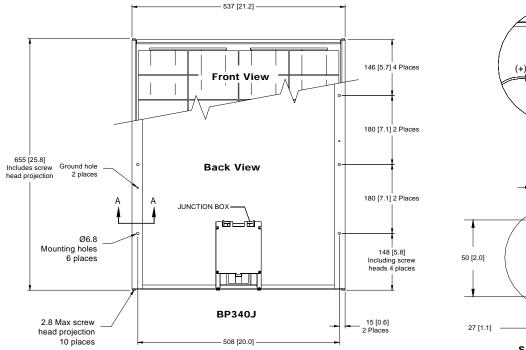


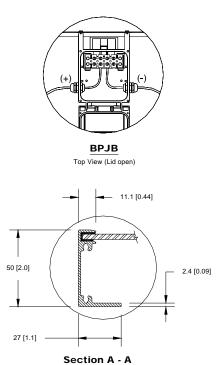
Temperature cycling range	-40°C to +85°C (-40°F to 185°F)
Humidity freeze, damp heat	85% RH
Static load front and back (e.g. wind)	50psf (2400 pascals)
Front loading (e.g. snow)	113psf (5400 pascals)
Hailstone impact	25mm (1 inch) at 23 m/s (52mph)



Module Diagram

Dimensions in brackets are in inches. Un-bracketed dimensions are in millimeters. Overall tolerances ± 3 mm (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**



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