

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

Performance

Rated power (P_{max})	135W
Power tolerance	± 5% (BP3135) ±3% (BP3130 & BP3125) and ± 3% (BP3115 & BP3110)
Nominal voltage	12V
Limited Warranty ¹	25 years

Configuration

S BP 3125S	Clear universal frame with LoPro J-Box and polarized Multicontact (MC) connectors
J BP 3125J	Clear universal frame and standard J-Box

Electrical Characteristics²

	BP3135	BP3130	BP3125	BP3115	BP3110
Maximum power (P_{max}) ³	135W	130W	125W	115W	110W
Voltage at Pmax (V_{mp})	17.4V	17.4V	17.4V	17.1V	16.9V
Current at Pmax (I_{mp})	7.7A	7.5A	7.2A	6.7A	6.5A
Warranted minimum P_{max}	128.2W	126.1W	121.3W	109.3W	104.5W
Short-circuit current (I_{sc})	8.4A	8.2A	8.1A	7.5A	7.4A
Open-circuit voltage (V_{oc})	22.1V	22.0V	22.0V	21.8V	21.6V
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	15A (S); 20A (J)				
Maximum system voltage	600V (US NEC rating) 1000V (TÜV Rheinland rating) 1000V (IEC 61215 rating)				



Mechanical Characteristics

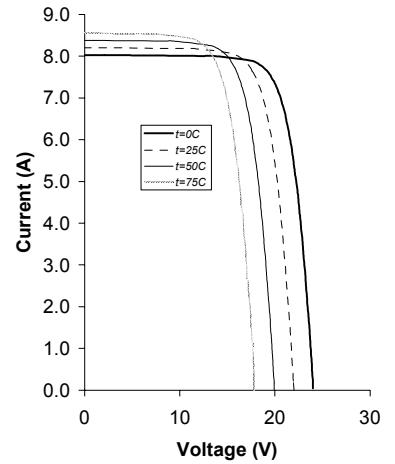
Dimensions	S,J	Length: 1510mm (59.4") Width: 674mm (26.5") Depth: 50mm (1.97")
Weight	S,J	12.0 kg (26.5 pounds)
Solar Cells	S,J	36 cells (156mm x 156mm) in a 4x9 matrix connected in series
Output Cables	S	RHW AWG# 12 (4mm ²) cable with polarized weatherproof DC rated Multicontact connectors; asymmetrical lengths - 900mm (-) and 800mm (+)
Junction Box	J	J-Version junction box with 6-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 10mm ² (8 to 14 AWG) wire.
Diodes	S,J	IntegraBus™ technology includes Schottky by-pass diodes integrated into the printed circuit board bus
Construction	S,J	Front: High-transmission 3mm (1/8 th inch) tempered glass; Back: Polyester; Encapsulant: EVA
Frame	S,J	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.
2. These data represent the performance of typical BP 3125 products, 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 up to 3% from typical P_{max} .

Quality and Safety

ESTI	Module power measurements calibrated to World Radiometric Reference through ESTI (European Solar Test Installation at Ispra, Italy)
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
TUV	Framed modules certified by TÜV Rheinland as Safety Class II (IEC 60364) equipment for use in systems up to 1000 VDC
UL	Listed by Underwriter's Laboratories for electrical and fire safety (Class C fire rating)
FM	Approved by Factory Mutual Research in NEC Class 1, Division 2, Groups C & D hazardous locations (U)

BP 3130 I-V Curves

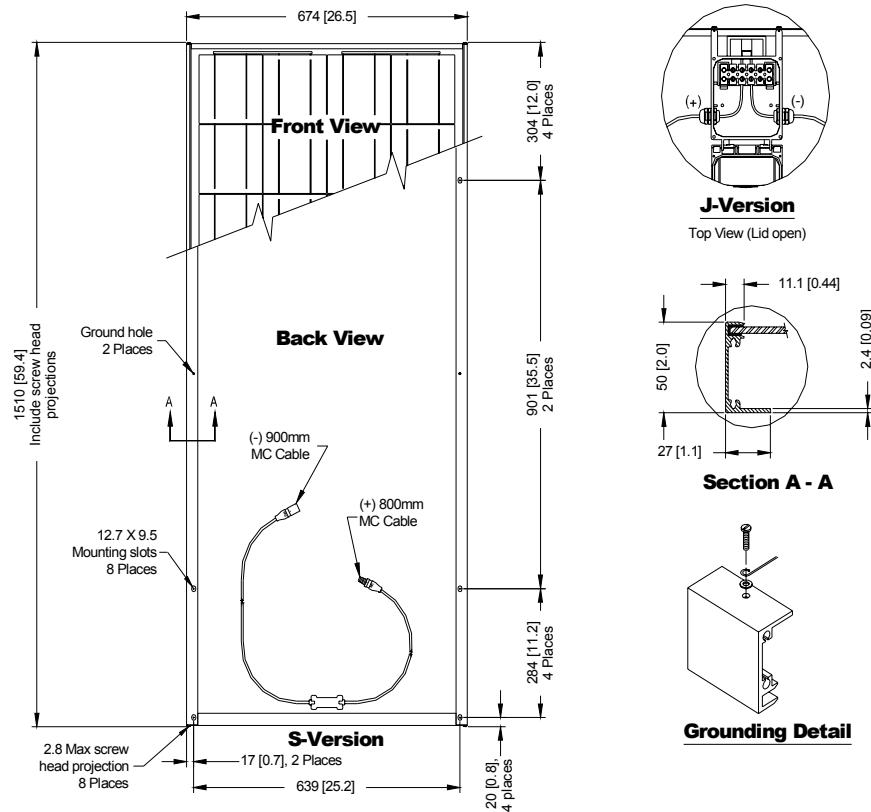


Qualification Test Parameters

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)	2,400 pa (50psf)
Front loading (e.g. snow)	5,400 pa (113psf)
Hailstone impact	25mm Ø (1 inch) at 23 m/s (52mph)

Module Diagram

Dimensions in brackets are in inches. Un-bracketed dimensions are in millimeters. Overall tolerances $\pm 3\text{mm}$ (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