

BP 3135

135 Watt Photovoltaic Module

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

Performance

Rated power (P _{max}) Power tolerance	135W ± 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 Characteristics ²	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 (Imp)	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 (Isc)	8.4A	8.2A	8.1A	7.5A	7.4A
Open-circuit voltage (Voc)	22.1V	22.0V	22.0V	21.8V	21.6V
Temperature coefficient of Isc		(0.0)65±0.015)%	6/ °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		1	5A (S); 20A	(J)	
Maximum system voltage		1000V (/ (US NEC ı ſÜV Rheinla ′ (IEC 61215	and 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	<i>IntegraBus</i> ™ 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	

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.
These data represent the performance of typical BP 3125 products, and are based on measurements made in accordance with ASTM E1036

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}.

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Quality and Safety

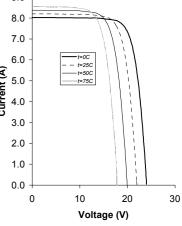
ESTI Module power measurements calibrated to World Radiometric Reference through ESTI (European Solar Test Installation at Ispra, Italy)		BF 9.0 ¬	9 3130 I-V Curve
CE	Manufactured in ISO 9001-certified factories; conforms to European Community Directives 89/33/EEC, 73/23/EEC, 93/68/EEC; certified to IEC 61215	8.0	
TÜV	Framed modules certified by TÜV Rheinland as Safety Class II (IEC 60364) equipment for use in systems up to 1000 VDC	6.0 - द	
	Listed by Underwriter's Laboratories for electrical and fire safety (Class C fire rating)	- 0.5 - 4.0 -	t=75C
FM	Approved by Factory Mutual Research in NEC Class 1, Division 2, Groups C & D hazardous locations (U)	3.0 - 2.0 -	

Qualification Test Parameters

Temperature cycling range
Humidity freeze, damp heat
Static load front and back (e.g. wind)
Front loading (e.g. snow)
Hailstone impact

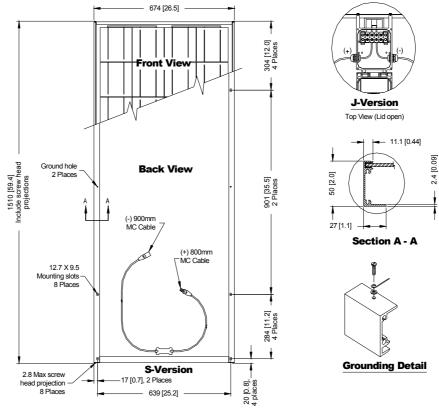
-40°C to +85°C (-40°F to 185°F) 85% RH 2,400 pa (50psf) 5,400 pa (113psf) 25mm Ø (1 inch) at 23 m/s (52mph)

es



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

