

175 Watt Photovoltaic Module

BP 3175

High-efficiency photovoltaic module using silicon nitride multicrystalline silicon cells

Performance

	BP3175	BP 3170	BP3165	BP3160	BP3155
Rated power (Pmax)	175W	170W	165W	160W	155W
Power tolerance	± 3%	± 3%	± 3%	± 3%	± 3%
Nominal voltage	24V	24V	24V	24V	24V
Limited warranty ¹	25years				

Configuration

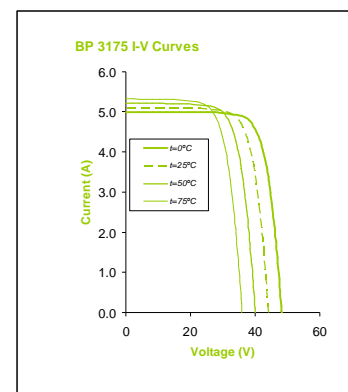
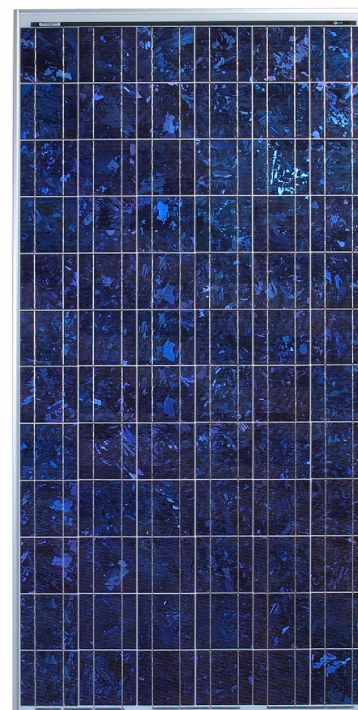
S/N BP 3165S/N	Clear universal frame with LoPro J-box and polarised multicontact (MC) connectors
J BP 3165J	Clear universal frame and standard J-box

Qualification test parameters

Temperature cycling range	-40°C to +85°C (-40°F to 185°F)
Damp heat test	85°C , 85% relative humidity
Front & rear static load test (e.g.: wind)	2,400 pa (50psf)
Front load test (e.g.: snow)	5,400 pa (113psf)
Hailstone impact test	25mmØ (1 inch) at 23m/s (52mph)

Typical electrical characteristics²

	BP3175	BP 3170	BP 3165	BP 3160	BP3155
Rated maximum power (Pmax) ³	175W	170W	165W	160W	155W
Voltage at Pmax (Vmp)	36V	35.9V	35.2V	35.1V	34.9V
Current at Pmax (Imp)	4.9A	4.8A	4.7A	4.6A	4.5A
Short-circuit current (Isc)	5.3A	5.2A	5.1A	4.8A	4.8A
Open-circuit voltage (Voc)	44.2	44.2V	44.2V	44.2V	43.9V
Temperature coefficient of Isc	(0.065±0.015)%/ °C				
Temperature coefficient of Voc	-(160±20)mV/°C				
Temperature coefficient of power	-(0.5±0.05)%/ °C				
NOCT	47±2°C (Air 20°C; Sun 0.8kW/m ² ; wind 1m/s)				
Maximum series fuse rating	15A (S); 20A (J)				
Maximum system voltage	600V (US NEC rating)				
	1000V (TÜV Rheinland rating)				
	1000V (IEC 61215 rating)				

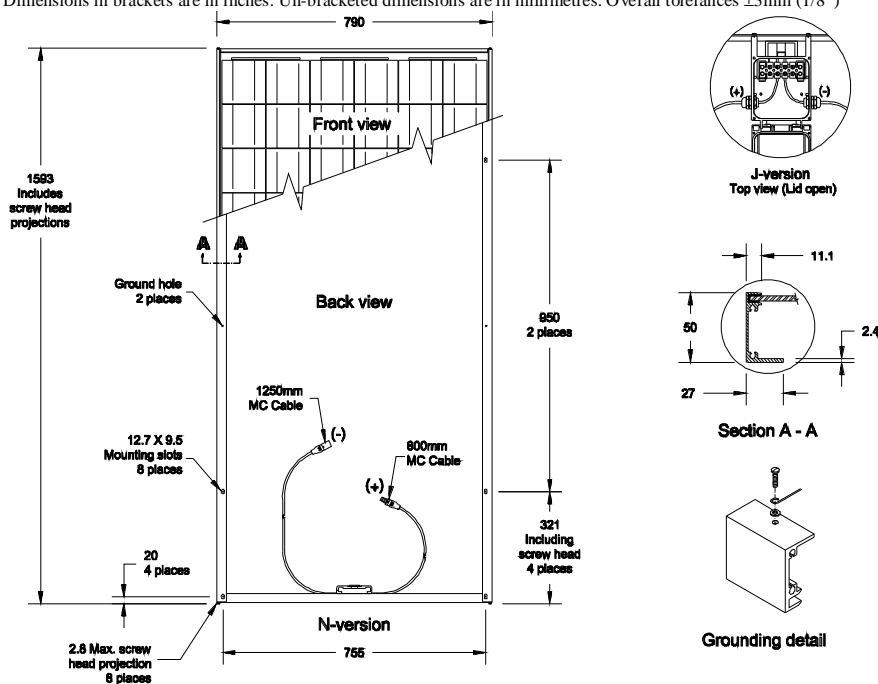


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Module diagram

Dimensions in brackets are in inches. Un-bracketed dimensions are in millimetres. Overall tolerances $\pm 3\text{mm}$ (1/8")



Mechanical characteristics: BP3175

Dimensions	S,N,J,	Length: 1593mm (62.8inch) Width: 790mm(31.1inch) Depth: 50mm(1.97inch)
Weight	S,N,J,	15.4 kg (33.9pound)
Solar cells	S,N,J	72 cells (125mm x 125mm), 4 x 9 matrix connected in series
Output cables	S,N	RHW AWG# 12 (4mm ²) cable with polarized weatherproof DC rated Multicontact connectors; asymmetrical lengths - 1250mm (-) and 800mm (+)
Junction boxJ	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,N,J	IntegraBus™ technology includes Schottky by-pass diodes integrated into the printed circuit board bus
Construction	S,N,J	Front: high-transmission 3mm (1/8 inch) tempered glass Back: polyester Encapsulant: EVA
Frame	S,N,J	Clear anodised aluminium alloy type 6063T6 Universal frame; Colour: 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 BP3175 products, and are based on measurements made in accordance with ASTM E1036 corrected to SRC (STC.)

3. During the stabilisation process that occurs during the first few months of deployment, module power may decrease by up to 3% from typical www.bpsunoasis.com