

PHOTON ENERGY SYSTEMS

Blue Chip V180 module

Photon Energy Systems Photovoltaic Modules

- ✓ Lowest installed cost/watt of ANY PV technology.
- ✓ Ultrathin cells utilizes 6X less silicon than conventional solar cells to dramatically reduce module costs.
- ✓ All rear contact cells for improved efficiency and appearance – no front side interconnect lines.
- ✓ Front side plus back side module power generation – the back side of the module also can be used to collect power from sunlight – typical boost of an additional 15% with suitable rear white reflective surfaces.
- ✓ Integrated bypass diodes per supercell eliminates shading issues

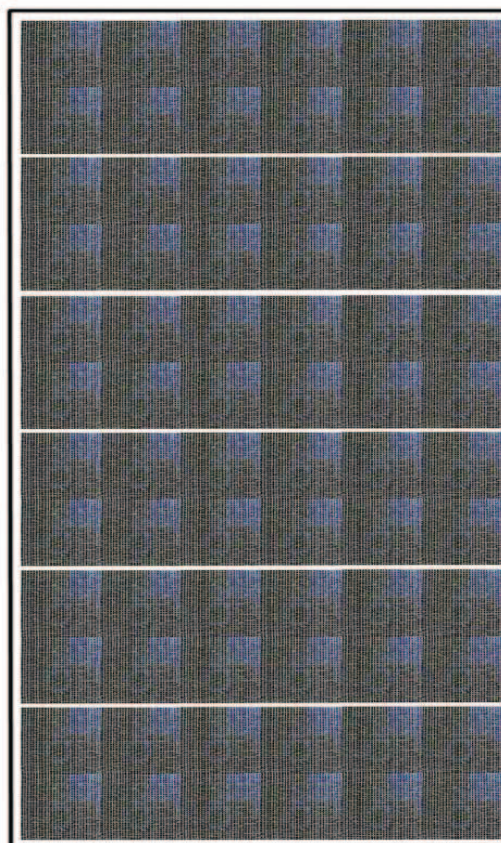
Performance

BCV180

Rated power	180W
Module efficiency	13%
Nominal voltage	25.8V

Extended lifetime with 25 year limited warranty.

Blue Chip V180 module



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Configuration

BCV180 universal frame, sealed junction box for use with multicontact connectors

Qualification Test Parameters

Temperature cycling range -40°C to $+85^{\circ}\text{C}$ for 200 cycles
 Damp heat test 85°C and 85% relative humidity for 1000h
 Front and rear static load test (wind loads) 2400 Pa
 Front load test (snow loads) 5400 Pa
 Hailstone impact test 25mm hail at 23m/s from 1m

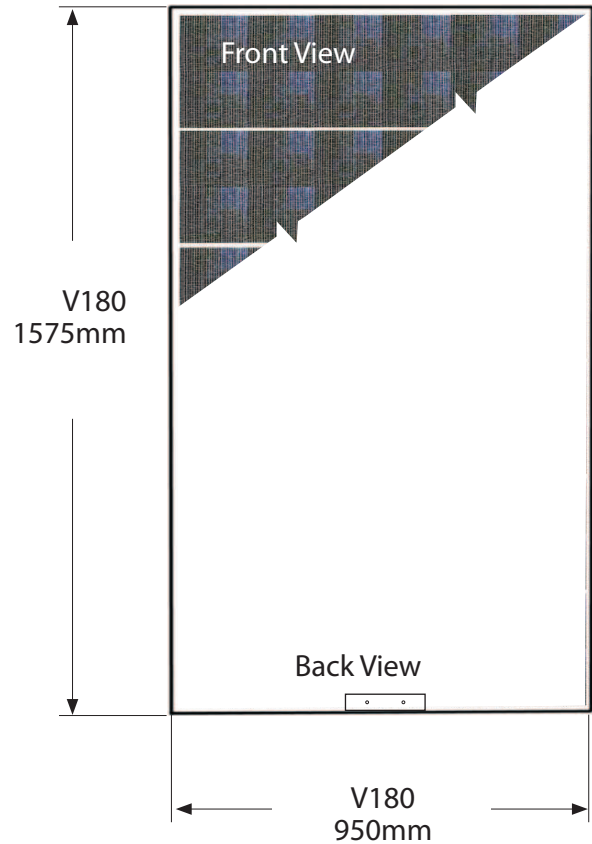
Quality and Safety

UL and IEC certifications to current standards UL 1703 and IEC 61215

Typical Electrical Characteristics

	BCV180
Rated power (Pmax) ¹	180W
Warranted minimum power	165W
Voltage at Pmax (Vmp)	25.8V
Current at Pmax (Imp)	6.9A
Voltage at Vmax (Voc)	33V
Short circuit current (Isc)	8.2A
Temperature coefficient of Pmax	$-(0.5 \pm 0.05)\%/^{\circ}\text{C}$

1. Standard test conditions irradiance of 1000W/m² at an AM1.5G solar spectrum and cell temp of 25°C.



Normal cell operating temp ²	47°C
Maximum series fuse rating	10A
Maximum system voltage	600V

Mechanical Characteristics

	BCV180
Dimensions (mm)	950x1575x50
Weight (kg)	12
Frame silver anodized aluminum	
Supercells	60
Each supercell nominal	0.43V
Junction box per customer requirements	

2. Normal operating temperature air temperature of 20°C, irradiance 800W/m², wind speed 1m/s.

Warranty and specifications subject to change without notice. © 2010 Photon Energy Systems.

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