A joint venture between Sunoasis and BP

85 watt photovoltaic module

BP 485

High-efficiency photovoltaic module using silicon nitride monocrystalline silicon cells

Performance	BP 485	BP480	BP475
Rated power (P_{max})	85W	80W	75W
Module efficiency	± 3%	± 3%	± 3%
Nominal voltage	12V	12V	12V
Warranty[1]	25years		

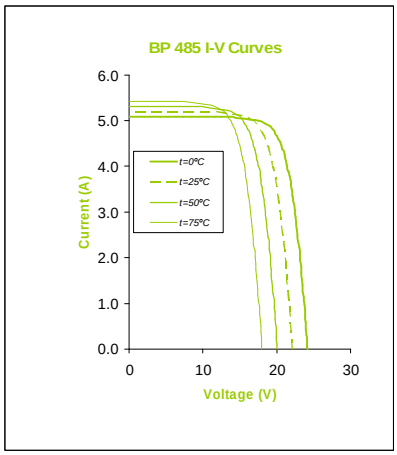
Configuration

S/N BP 485S/N	Clear universal frame with LoPro J-box and polarised multicontact (MC) connectors
J BP 485J	Clear universal frame and standard J-box

Qualification test parameters

Temperature cycling range	~40℃ to +85℃ (-40°F to 185°F)
Damp heat test	85°C ,85% relative humidity
Front and rear static load test (eg: wind)	2,400 Pa(50psf)
Front load test (eg: snow)	5,400 Pa (113psf)
Hailstone impact test	25mm Ø (1 inch) at 23m/s (52mph)

Typical electrical characteristics[2]	BP 485	BP480	BP475
Rated power (Pmax) [3]	85W	80W	75W
Voltage at Pmax (Vmp)	17.8V	17.2V	17.4V
Current at Pmax (Imp)	4.78A	4.7A	4.3A
Short circuit current (Isc)	5.1A	5.1A	4.7A
Open circuit voltage (Voc)	22.2V	22.0V	21.8V
Temperature coefficient of Is	(0.065±0.015)%/ ℃		
Temperature coefficient of Voc	-(80±10)mV/℃		
Temperature coefficient of Pmax	-(0.5±0.05)%/ ℃		
NOCT	47±2℃ (Air 20℃; Sun 0.8kW/m2 ; 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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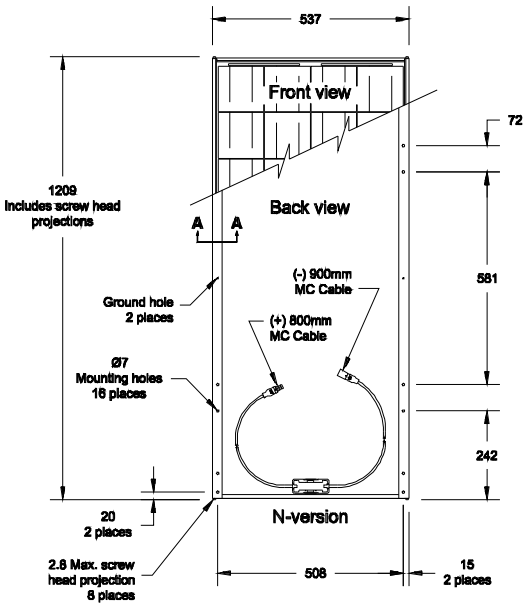
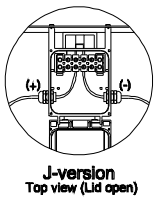
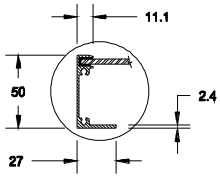
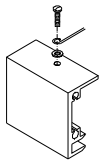
Module diagram

Dimensions in brackets are in inches. Un-bracketed dimensions are in millimetres. Overall tolerances ±3mm (1/8")









Mechanical characteristics: BP485

Dimensions	S,N,J,	Length: 1209mm (47.6inch)
		Width: 537mm (21.14inch)
		Depth: 50mm (1.97inch)
Weight	S,N,J,	7.7 kg (17.0pound)
Solar cells	S,N,J	36 cells (125mm x 125mm), in a 4 x 9 matrix connected in series
Output cables	S,N	RHW AWG# 12 (4mm2) 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 10mm2 (8 to 14 AWG) wire.。
Diodes	S,N,J	IntegraBus™ technology includes Schottky bypass 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 BP485 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 Pmax。 **www.bpsunoasis.com**