

# DNA™ 120 Bifacial

Solar for Innovators

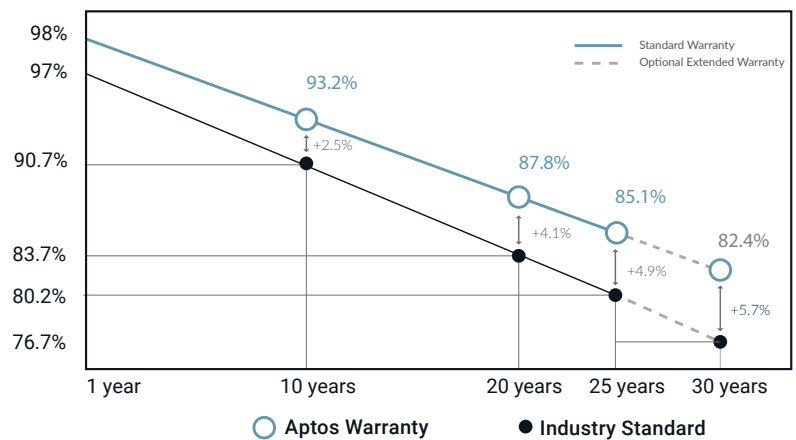
Residential | Commercial



## Designed & Engineered in Silicon Valley 440W | 445W | 450W

Our DNA Split Cell Series uses advanced selective emitter PERC technology with thin film layers to improve heat tolerance, increase photon capture, minimize resistive loss, and use 5% more of the available active area for optimal power performance. Our panels exceed IEC standards and come with an industry leading, 30-year warranty.

### Linear Performance Warranty



### Features



#### Advanced Technology

Patented DNA™ technology boosts power performance & module efficiency



#### Maximum Panel Density

Advanced split cell technology with 10 ultra-thin busbars allows for less resistance and more photon capture



#### Durable Design

Robust product design is resilient in extreme weather. Up to 5400 Pa snow load and 5400 Pa wind load

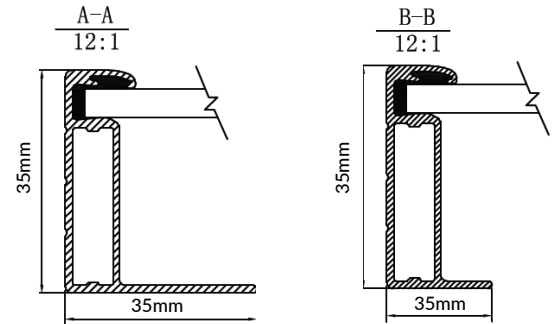
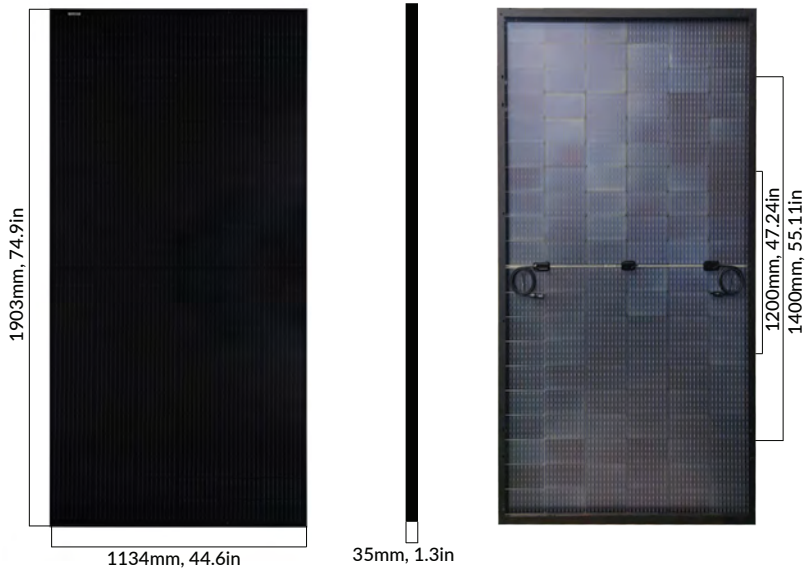


#### A Safe Investment

Industry leading 30 year warranty



2081 Business Center Drive, Ste 100  
Irvine, CA 92612  
[www.aptosolar.com](http://www.aptosolar.com) | [info@aptossolar.com](mailto:info@aptossolar.com)



## Electrical Specifications

	DNA-120-BF10-440W	DNA-120-BF10-445W	DNA-120-BF10-450W
STC Rated Output $P_{mpp}$ (W)	440W	445W	450W
Module Efficiency	20.39%	20.62%	20.85%
Open Circuit Voltage $V_{VOC}$ (V)	41.11	41.18	41.30
Short Circuit Current $I_{sc}$ (A)	13.71	13.79	13.86
Rated Voltage $V_{mp}$ (V)	33.89	34.00	34.15
Rated Voltage $I_{mp}$ (A)	13.01	13.11	13.20

Standard Test Conditions for front-face of panel: 1000 W/m<sup>2</sup>, 25°C, measurement uncertainty ≤3%

## Mechanical Properties

Cell Type	Monocrystalline
Glass	3.2mm, anti-reflection coating, high transmission, low iron, tempered glass
Frame	Anodized Aluminum Alloy
Junction Box	300mm
Dimensions	1903 X 1134 X 35 mm, 74.9 X 44.6 X 1.3 in
Output Cable	4mm <sup>2</sup> (EU)12AWG,39.37in,(1200mm)
Weight	24.2kg
Cable Length	1200mm, 47.2in

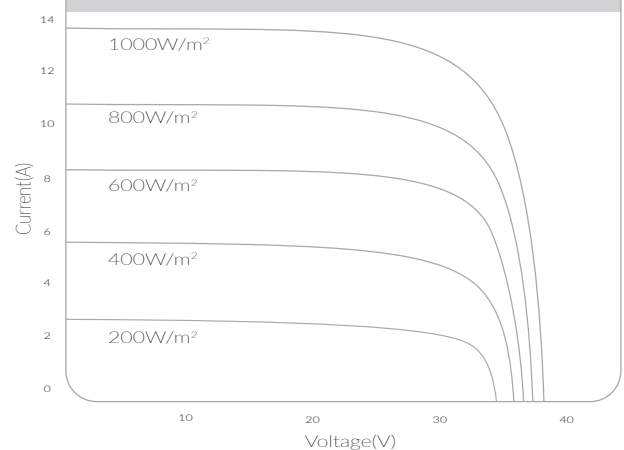
## Bifacial Output-Rearside Power Gain

5%-Maximum Power (Pmax)	462W	467W	473W
5%-Module Efficiency STC(%)	21.41%	21.65%	21.90%
15%-Maximum Power (Pmax)	506W	512W	518W
15%-Module Efficiency STC(%)	23.45%	23.71%	23.98%
25%-Maximum Power (Pmax)	550W	556W	563W
25%-Module Efficiency STC(%)	25.49%	25.78%	26.07%

## Test Operating Conditions

Maximum Series Fuse	30A
Maximum System Voltage	1,500 VDC (UL&IEC)
Maximum Load Capacity (Per UL 1703)	5400 PA Snow Load / 5400 Pa Wind Load
Fire Performance Class	Class C/Type 1

## I-V Curve



## Temperature Coefficients

Temperature Coefficients $P_{mpp}$	-0.350%/°C
Temperature Coefficients $I_{sc}$	+0.048%/°C
Temperature Coefficients $V_{oc}$	-0.280%/°C
Normal Operating Cell Temperature (NOCT)	45°C±2°C

## Packaging Configuration

Modules per Pallet	31
Pallets per 40ft. Container	24
Pallet Dimensions	1938 X 1130 X 1264 mm
Pallet Weight (kg)	766
Modules per 40ft. Container	744

## Certifications

