тм 144 Bifacial

Solar for Innovators

Residential I Commercial I Utility



30 Year	RETC Top
Warranty	Performer
vvarranty	Performer



8207 Callaghan Rd. Ste 100. San Antonio, Texas 78230 www.aptossolar.com info@aptossolar.com

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

Our DNA Split-cell Series impressively combines advanced technologies to maximize performance. Produce up to 30% more energy with the bi-facial rear side generation. Our patented DNA, Dual Nano Absorber, technology allows for panel to harvest energy from all directions and operate exceptionally in high heat temperatures.



Produce up to 30% more energy with rear-side generation



Advanced split cell technology with 9 ultra-thin busbars allows for less resistance and more photon capture



Ideal solution for applications affected by shading



All-black design for pristine aesthetics No excessive silver bussing or ribbons



Robust product design is reslient in extreme weather. Up to 5400 Pa snow load and 6200 Pa Wind Load









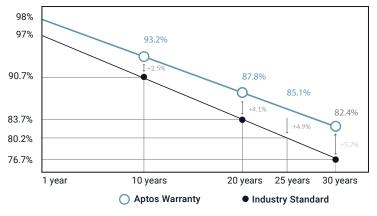
[PHOTOVOLTAIC MODULE OVER 600 VOLTS] ES11348





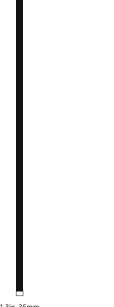


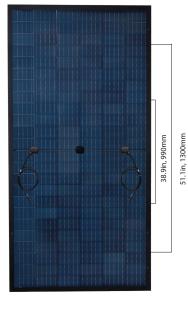
Linear Performance Warranty

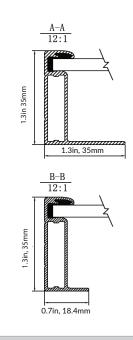


DNA[™] 144 Bifacial









40.9in, 1038mm

1.3in, 35mm

Electrical Specifiactions	DNA-144-BF26-440W	DNA-144-BF26-445W	DNA-144-BF26-450W
STCrated Output P _{mpp} (W)	440W	445W	450W
Module Efficiency	20.24%	20.47%	20.70%
Open Circuit Voltage V_{voc} (V)	49.0	49.2	49.4
Short Circiut Current ${\rm I}_{\rm sc}$ (A)	11.36	11.44	11.52
Rated Voltage $V_{_{mmp}}$ (V)	40.8	41.0	41.2
Rated Voltage I _{mmp} (A)	10.79	10.86	10.93
Standard Test Conditions for front-face of panel: 1000 V	V/m², 25°C, measurement uno	certainty <u><</u> 3%	

Temperature	Coefficients
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Temperature Coefficients P _{mmp}	-0.32%
Temperature Coefficients I _{sc}	+0.05%/°C
Temperature Coefficients V _{oc}	-0.26%/°C
Normal Operating Cell Temperature (NOCT)	45°C

Test Operating Conditions

Maximum Series Fuse	20A
Maximum System Voltage	1,500 VDC (UL&IEC)
Maximum Load Capacity (Per UL 1703)	5400 Pa Snow Load / 6200 Pa Wind Load
Fire Performance Class	Class C/Type 1

Packaging Configuration

Number of Modules per Pallet	31
Number of Pallets per 40ft. Container	22
Pallet Dimensions	2130 X 1125 X 1171mm, 83.8 X 44.2 X 46.1in
Pallet Weight (lbs)	1739.45
Container Weight (lbs)	39292.98

Certifications





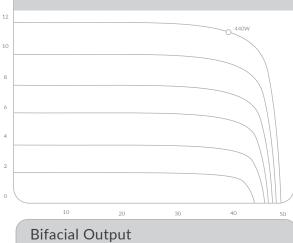
CE



Mechanical Properties

Cell Type	Monocrystalline
Glass	3.2mm, anti-reflection coating, high transmission, low iron, tempered glass
Frame	Anodized Aluminum Alloy
Junction Box	IP68
Dimensions	2094 X 1038 X 35mm, 82.4 X 40.9 X 1.3in
Weight	55.3lbs,24.1kg
Output Cable	4mm2 (EU)12AWG
Cable Length	47.24in1200mm
Encapsulant	POE
Connector Type	e Staubli EVO2





Pmpp(W) at STC 440 445 450 Bi-facial Boost 5% 462 467 472 Bi-facial Boost 10% 484 490 495 512 Bi-facial Boost 15% 505 518



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