

DNA™ 144 Bifacial

Solar for Innovators

Residential | Commercial | Utility

Designed & Engineered in Silicon Valley

440W | 435W | 430W

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

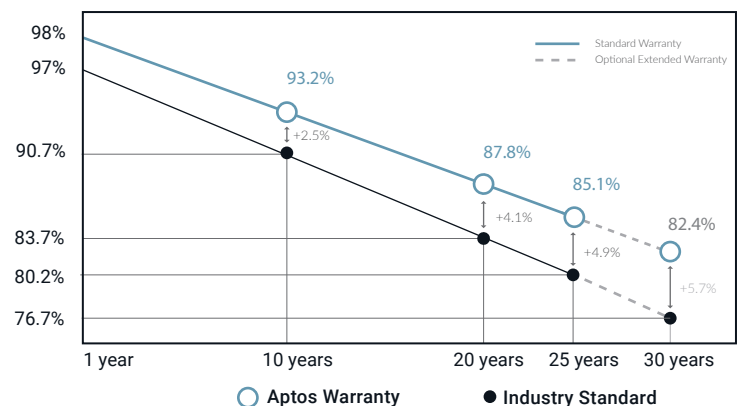


Robust product design is resilient in extreme weather. Up to 5400 Pa snow load and 210 mph wind speeds

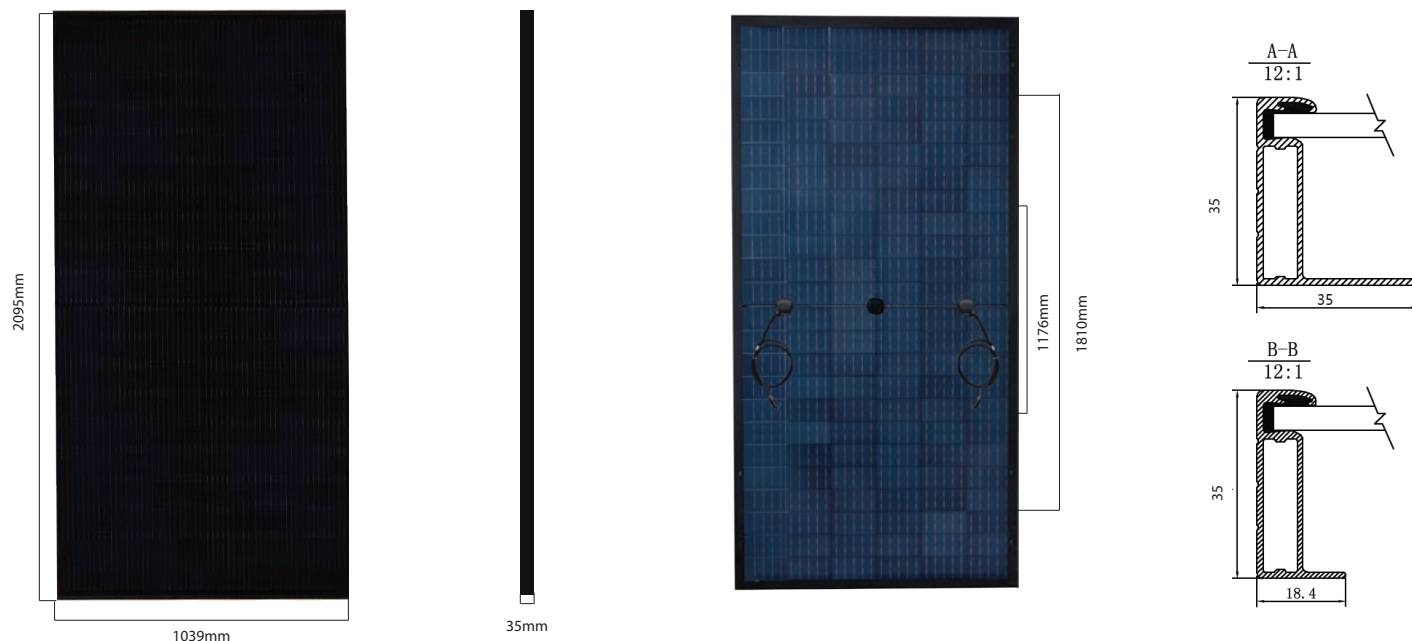


30 Year Warranty	3X IEC Standards	RETC Top Performer
------------------	------------------	--------------------

Linear Performance Warranty



3140 De La Cruz Blvd., Ste 200
Santa Clara, CA 95054
www.aptosolar.com
info@aptosolar.com



Electrical Specifications

	DNA-144-BF26-440W	DNA-144-BF26-435W	DNA-144-BF26-430W
STC Rated Output P_{mpp} (W)	440W	435W	430W
Module Efficiency	20.21%	19.98%	19.76%
Open Circuit Voltage V_{oc} (V)	49.9	49.7	49.5
Short Circuit Current I_{sc} (A)	11.33	11.26	11.19
Rated Voltage V_{mmp} (V)	41.0	40.8	40.6
Rated Voltage I_{mmp} (A)	10.74	10.67	10.60

Standard Test Conditions for front-face of panel: 1000 W/m², 25°C, measurement uncertainty $\leq 3\%$

Temperature Coefficients

Temperature Coefficients P_{mmp}	-0.36%
Temperature Coefficients I_{sc}	+0.05%/°C
Temperature Coefficients V_{oc}	-0.29%/°C
Normal Operating Cell Temperature (NOCT)	44°C

Test Operating Conditions

Maximum Series Fuse	20A
Maximum System Voltage	1,000 VDC (UL&IEC)
Maximum Load Capacity (Per UL 1703)	5400 PA Snow Load / 210mph Wind Rating
Fire Performance Class	Class C/Type 1

Packaging Configuration

Number of Modules per Pallet	27
Number of Pallets per 40ft. Container	22
Pallet Dimensions	2110 X 1120 X 2365
Pallet Weight (kg)	680
Container Weight (kg)	14960

Certifications



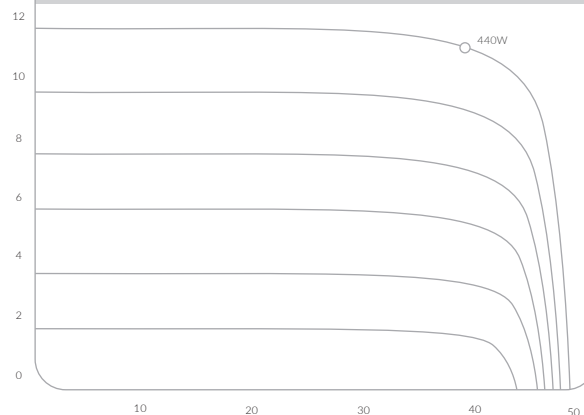
UL61730-1,
UL61730-2



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	2095 X 1039 X 35mm
Output Cable	4mm ² (EU)12AWG,39.37in.(1200mm)
Weight	53.13lbs.(24.1kg)
Cable Length	1200mm
Encapsulant	POE

I-V Curve



Bifacial Output

P_{mpp} (W) at STC	440	435	430
Bi-facial Boost 5%	462	456	451
Bi-facial Boost 10%	484	478	473
Bi-facial Boost 15%	505	500	495