DNA™ 144-Bifacial Dual Glass

Solar for Innovators

aptos™
solar technology

DNA-144-BF10-550W-DG

Residential | Commercial

Industry Leading 30 Years
Product and Performance Warranty

Our DNA Split Cell Series uses advanced selective emitter PERC technology with thin film layers to improve heat tolerance, maximize energy harvest, minimize resistive loss, and use 5% more of the available active area for optimal power performance.

540W | 545W | 550W

Linear Performance Warranty





Designed & Engineered In Silicon Valley

Key Features

Advanced Technology

Patented DNA™ technology boosts power performance & module efficiency.

Durable Design

Robust product design is resilient in extreme weather. Up to 5400 Pa snow load and 4000 Pa wind load

Awards

Winners of the Leadership in Solar Energy award for three consecutive years and listed as one of the Top Solar Products from 2021-2022.

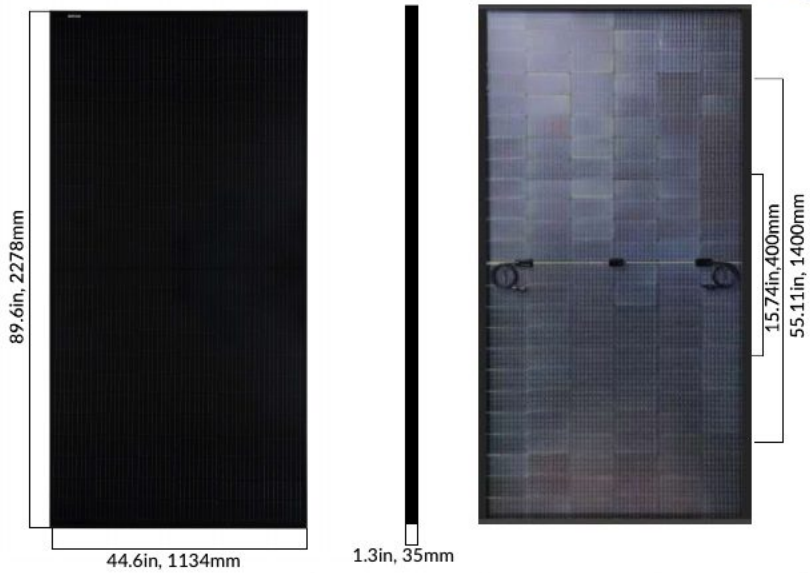
Bankable Investment

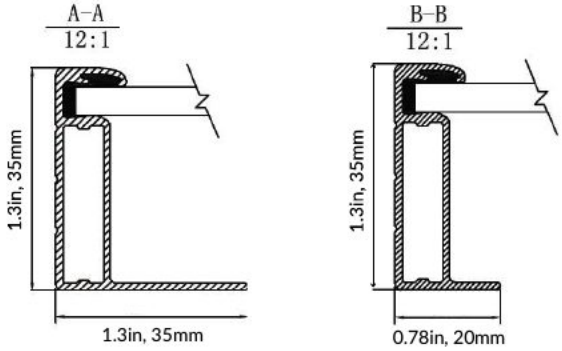
Comprehensive warranty that covers both **30-year product** and **30-year power** performance.

Aesthetics

All black design with advanced split cell technology features 10 ultra-thin busbars that allow for less resistance and greater energy harvest.

DNA™ 144 Bifacial Dual Glass





Electrical Specifications

	DNA-144-BF10-540W-DG		DNA-144-BF10-545W-DG		DNA-144-BF10-550W-DG	
	STC	NOCT	STC	NOCT	STC	NOCT
Rated Output P_{mpp} (W)	540W	411W	545W	415W	550W	416W
Open Circuit Voltage V_{OC} (V)	49.50	46.71	49.65	46.86	49.80	47.01
Short Circuit Current I_{SC} (A)	13.85	11.06	13.92	11.13	13.99	11.20
Rated Voltage V_{mp} (V)	43.84	39.21	44.00	39.36	44.15	39.15
Rated Voltage I_{mp} (A)	12.32	10.49	12.38	10.56	12.45	10.63
Module Efficiency	20.90%		21.09%		21.29%	

STC for front-face of panel: 1000 W/m², 25℃, measurement uncertainty ≤3%
NOCT for front-face of panel: 800W/m²,45℃, Wind speed 1 m/s

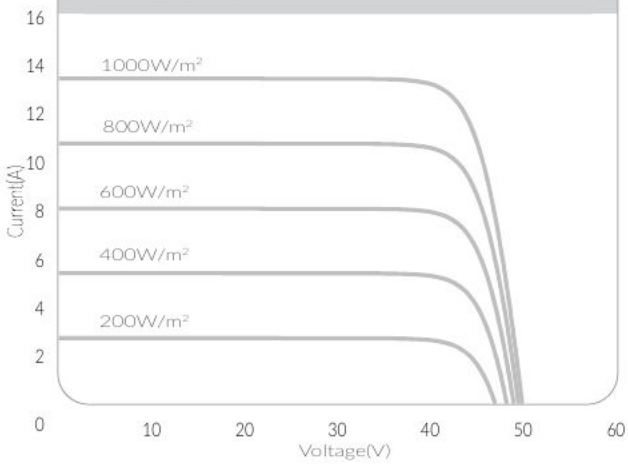
Mechanical Properties

Cell Type	SE-PERC
Glass	Glass Thickness: Front Glass : 2mm, Rear Glass : 2mm, AR Coating, High Transmission, Low Iron, Semi-Tempered Dual Glass
Frame	Anodized Aluminum Alloy
Junction Box	IP68
Dimensions	89.68 X 44.6 X 1.3 in, 2278 X 1134 X 35 mm
Weight	71.20 lbs
Output Cable	4mm² (EU)12AWG,(1200mm)
Cable Length	47.2in, 1200mm
Connector Type	Staubli EVO2

Bifacial Output-Rearside Power Gain

5%-Maximum Power (Pmax)	567W	572W	578W
5%-Module Efficiency STC(%)	21.94%	22.14%	22.35%
15%-Maximum Power (Pmax)	621W	627W	633W
15%-Module Efficiency STC(%)	24.03%	24.27%	24.50%
25%-Maximum Power (Pmax)	675W	682W	688W
25%-Module Efficiency STC(%)	26.12%	26.40%	26.63%

I-V Curve



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 / 4000 Pa Wind Load
Fire Performance Class	Type 29

Temperature Coefficients

Temperature Coefficients P_{mmp}	-0.335%/°C
Temperature Coefficients I_{sc}	+0.036%/°C
Temperature Coefficients V_{OC}	-0.277%/°C
Normal Operating Cell Temperature (NOCT)	45°C±2°C

Packaging Configuration

Modules per Pallet	31
Pallets per 40ft. Container	20
Pallet Dimensions	91.06 X 44.48 X 49.76 in
Pallet Weight (lbs)	2208
Modules per 40ft. Container	620

Certifications

C22.2 No.61730-1:19
C22.2 No.61730-2:19

IEC61730-1
IEC61730-2

UL61730-1
UL61730-2

Ref _08.23.24

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Aptos Solar Technology reserves the right to make specification changes without notice.