



DNA-120-BF10-460W

445W | 450W | 455W | 460W

RESIDENTIAL / COMMERCIAL



Advanced Technology

Patented DNA™ technology boosts power performance & module efficiency.

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.

INDUSTRY-LEADING 30-YEAR PRODUCT & PERFORMANCE WARRANTY.

Certifications:



Miami-Dade Approved

Maximum Durability: LEVEL 6
SALT MIST Tested, 5400 Pa
Wind Load Certified Panels.



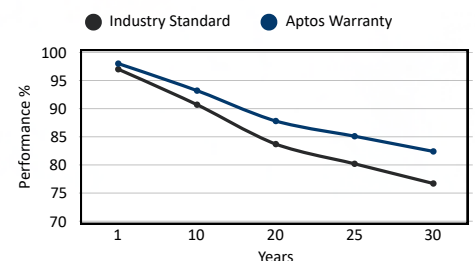
Aesthetics

All black design with advanced split cell technology.



Awards

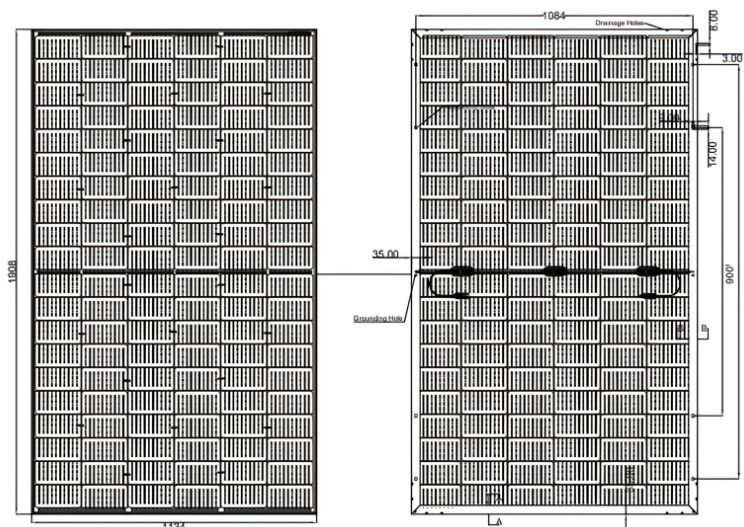
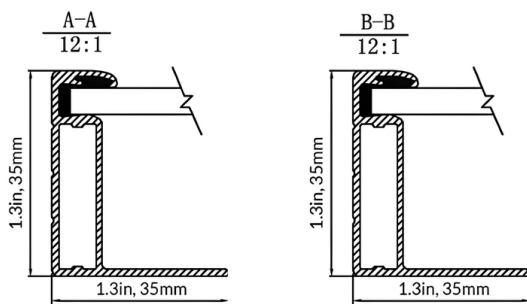
Winners of the Leadership in Solar Energy award for three consecutive years.



100% American Owned Company

Aptos products are designed and sourced to meet FEOC compliance requirements.

For FEOC-related questions or documentation, please contact your Aptos regional sales manager.



Mechanical Properties

Cell Type	SE-PERC
Glass	3.2mm(0.12in), anti-reflection coating, high transmission, low iron, tempered glass
Frame	Anodized Aluminum Alloy
Junction Box	IP68
Dimensions	75.1 X 44.6 X 1.3 in, 1908 X 1134 X 35 mm
Weight	51 lbs, 23.13Kg
Output Cable	4mm ² (EU)12AWG
Cable Length	47.2 in, 1200mm
Encapsulant	POE
Connector Type	Staubli EVO2

Electrical Specifications	DNA-120-BF10-445W		DNA-120-BF10-450W		DNA-120-BF10-455W		DNA-120-BF10-460W	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
STC Rated Output P_{mpp} (W)	445W	333W	450W	337W	455W	341W	460W	344W
Open Circuit Voltage V_{OC} (V)	41.20	39.32	41.30	39.41	41.50	39.50	41.60	38.92
Short Circuit Current I_{SC} (A)	13.79	11.90	13.86	12.01	13.92	12.12	14.01	12.43
Rated Voltage V_{mpp} (V)	34.00	32.25	34.20	32.32	34.30	32.39	34.43	32.44
Rated Current I_{max} (A)	13.11	10.33	13.20	10.42	13.27	10.51	13.38	10.60
Module Efficiency	20.57%		20.79%		21.03%		21.26%	

STC for front-face of panel: 1000 W/m², 25°C, Electrical parameters tolerance $\pm 3\%$

NOCT for front-face of panel: 800W/m², 45°C, Wind speed 1 m/s

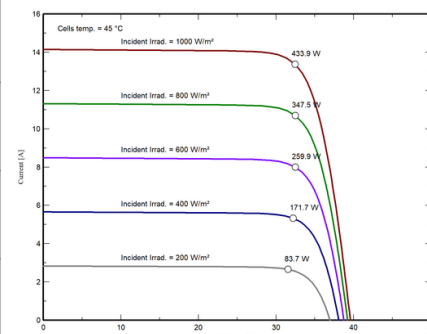
Packaging Configuration

Number of Modules per Pallet	31
Number of Pallets per 40ft. Container	24
Pallet Dimensions	76.29 X 44.48 X 49.76 in, 1938 X 1130 X 1264 mm
Pallet Weight (lbs)	1581lbs, 717.12 Kg
Modules per 40ft. Container	744

Temperature Coefficients

Temperature Coefficients P_{mpp}	-0.35%/°C
Temperature Coefficients I_{SC}	+0.0453%/°C
Temperature Coefficients V	-0.2738%/°C
Nominal Operating Cell Temperature (NOCT)	45°C $\pm$ 2°C

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 / 5400 Pa Wind Load ²
Fire Performance Type	Type 1 ³

Bifacial Output-Rearside Power Gain

5%-Maximum Power (P_{max})	467W	473W	478W	483W
5%-Module Efficiency STC(%)	21.60%	21.84%	22.08%	22.32%
15%-Maximum Power (P_{max})	512W	518W	523W	529W
15%-Module Efficiency STC(%)	23.65%	23.92%	24.18%	24.45%
25%-Maximum Power (P_{max})	556W	563W	569W	575W
25%-Module Efficiency STC(%)	25.71%	26.00%	26.29%	26.58%