# <sup>TM</sup> 120-Monofacial



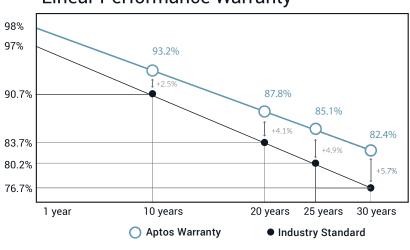
## **Industry Leading 30 Years Product and Performance Warranty**

Solar for Innovators

## DNA-120-MF10-460W Residential | Commercial

# 445W | 450W | 455W | 460W

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.



## Linear Performance Warranty

## **Key Features**



#### Advanced Technology

Patented DNA<sup>™</sup> technology boosts power performance & module efficiency.





Silicon Valley



#### Miami-Dade Approved

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



#### 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.

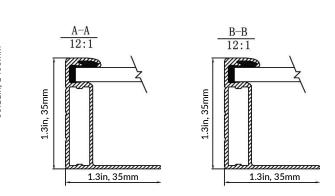
# **Aesthetics**

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

# $DNA^{TM}$ 120 Monofacial



35.43in, 900mm 55.11in, 1400mm



**Mechanical Properties** 

1.3in, 35mm

Electrical Specifications	DNA-120-MF10-445W		DNA-120-MF10-450W		DNA-120-MF10-455W		DNA-120-MF10-460W	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
STC Rated Output P <sub>mpp</sub> (W)	445W	333W	450W	336W	455W	341W	460W	344W
Open Circuit Voltage $\rm V_{\rm voc}$ (V)	41.79	39.42	41.79	39.50	41.88	39.58	41.97	39.67
Short Circuit Current $\rm I_{\rm sc}$ (A)	13.36	11.89	13.51	11.99	13.63	12.09	13.75	12.20
Rated Voltage $V_{mp}$ (V)	35.03	32.32	35.15	32.39	35.27	32.46	35.36	32.53
Rated Voltage $I_{_{\rm mp}}$ (A)	12.70	10.31	12.80	10.40	12.90	10.49	13.00	10.58
Module Efficiency	20.57%		20.79%		21.03%		21.26%	
STC for front-face of namely 1000 W/m <sup>2</sup> 25% measurement uncertainty < 3%								

STC for front-face of panel: 1000 W/m², 25°C, measurement uncertainty  ${\le}3\%$  NOCT for front-face of panel: 800W/m²,45°C, Wind speed 1 m/s

#### **Temperature Coefficients**

Temperature Coefficients P <sub>mmp</sub>	-0.35%/°C
Temperature Coefficients I <sub>sc</sub>	+0.054%/°C
Temperature Coefficients V <sub>oc</sub>	-0.27%/°C
Nominal Operating Cell Temperature (NOCT)	45±2°C

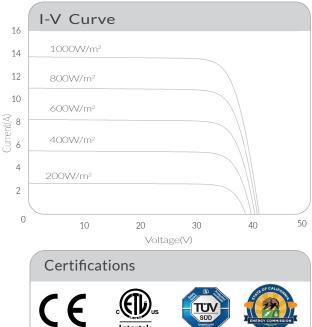
#### **Test Operating Conditions**

Maximum Series Fuse	25A
Maximum System Voltage	1,500 VDC (UL&IEC)
Maximum Load Capacity (Per UL 1703)	5400 PA Snow Load / 5400 Pa Wind Load
Fire Performance Type	Type 1

#### 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 (Ibs)	1640
Module per 40ft Container	744

Cell Type	SE-PERC
Glass	3.2mm, 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	52.9lbs.(24.2kg)
Output Cable	4mm2 (EU)12AWG,39.37in.(1200mm)
Cable Length	47.2 in
Encapsulant	POE
Connector Typ	e Staubli EVO2



Intertek

UL61730-1, UL61730-2

IEC61730-1 IEC61730-2



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