aptos™
solar technology

DNA™ 108 N-Type Monofacial

Solar for Innovators

Industry Leading 30 Years Product and Performance Warranty

DNA-108-MFN10-440W

440W | 445W | 450W

Residential | Commercial

Our DNA Split Cell Series uses advanced N-Type 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™ technology boosts power performance & module efficiency.

Aesthetics

All black design with advanced split cell technology features 16 ultra-thin busbars that allow for less resistance and greater energy harvest.

Miami-Dade Approved

Miami-Dade County wind load certified to withstand up to 5400 Pa.

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.

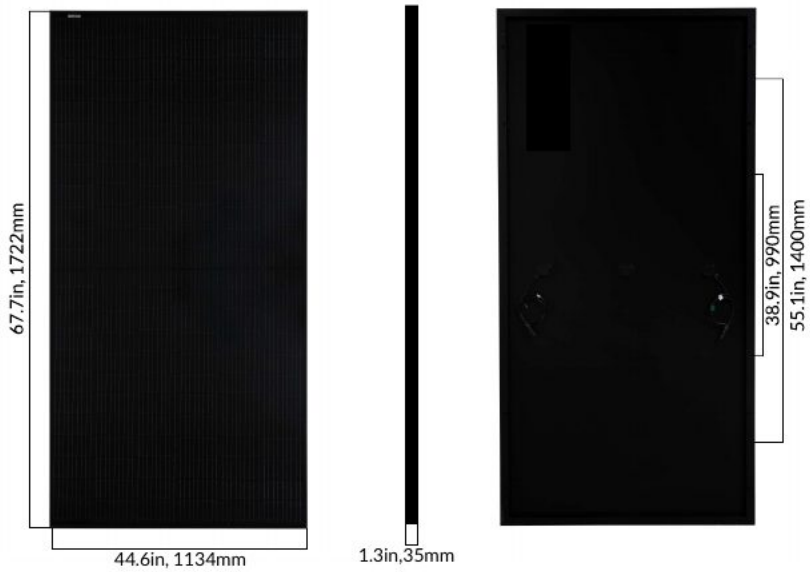
Anti-LID

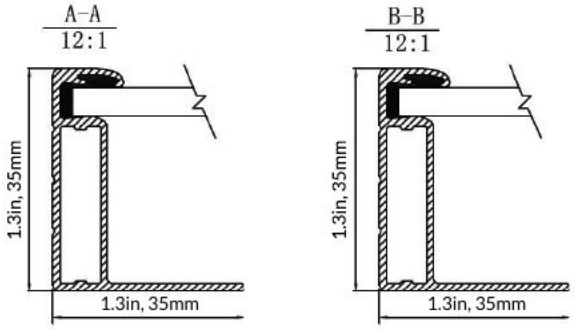
No Light Induced Degradation - maintaining optimal performance and longevity for sustainable energy production

Bankable Investment

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

DNA™ 108 N-Type Monofacial





Electrical Specifications

Electrical Specifications	DNA-108-MFN10-440W		DNA-108-MFN10-445W		DNA-108-MFN10-450W	
	STC	NOCT	STC	NOCT	STC	NOCT
Rated Output P_{mpp} (W)	440W	336W	445W	340W	450W	344W
Open Circuit Voltage V_{VOC} (V)	39.03	37.48	39.16	37.57	39.29	37.66
Short Circuit Current I_{SC} (A)	13.73	11.20	13.81	11.32	13.89	11.44
Rated Voltage V_{mmp} (V)	33.48	31.92	33.62	31.99	33.76	32.06
Rated Current I_{max} (A)	13.15	10.53	13.25	10.63	13.35	10.73
Module Efficiency	22.53%		22.79%		23.04%	

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

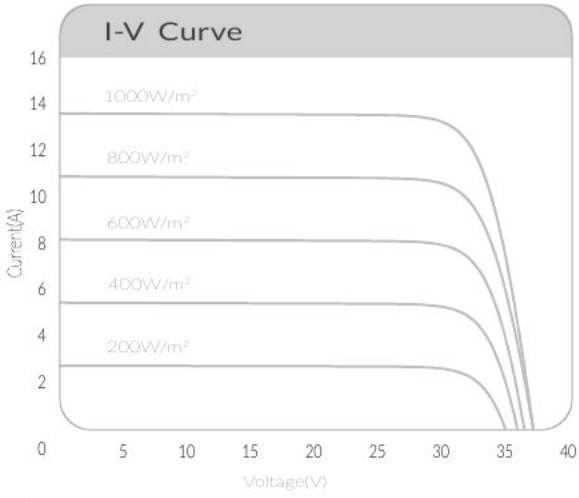
Mechanical Properties

Cell Type	N-TYPE TECHNOLOGY
Glass	AR coating, High Transmission, Low Iron,Tempered Glass
Frame	Anodized Aluminum Alloy
Junction Box	IP68
Dimensions	67.7 X 44.6 X1.3 in, 1722 X 1134 X35 mm
Weight	44.5lbs. (20.2kg)
Output Cable	4mm2 (EU)12AWG,39.37in.(1200mm)
Cable Length	47.2 in, (1200mm)
Encapsulant	POE and EVA
Connector Type	Staubli EVO2

Temperature Coefficients

Temperature Coefficients P_{mmp}	-0.30%/°C
Temperature Coefficients I_{sc}	+0.046%/°C
Temperature Coefficients V_{OC}	-0.25%/°C
Nominal Operating Cell Temperature (NOCT)	45°C

I-V Curve



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	26
Pallet Dimensions	68.97 X 44.48 X 49.76 in, 1752 X 1130 X 1264 mm
Pallet Weight (lbs)	1380.43
Modules per 40ft. Container	806

Certifications

CE

Intertek
UL61730-1,
UL61730-2

TÜV SÜD
IEC61730-1
IEC61730-2

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