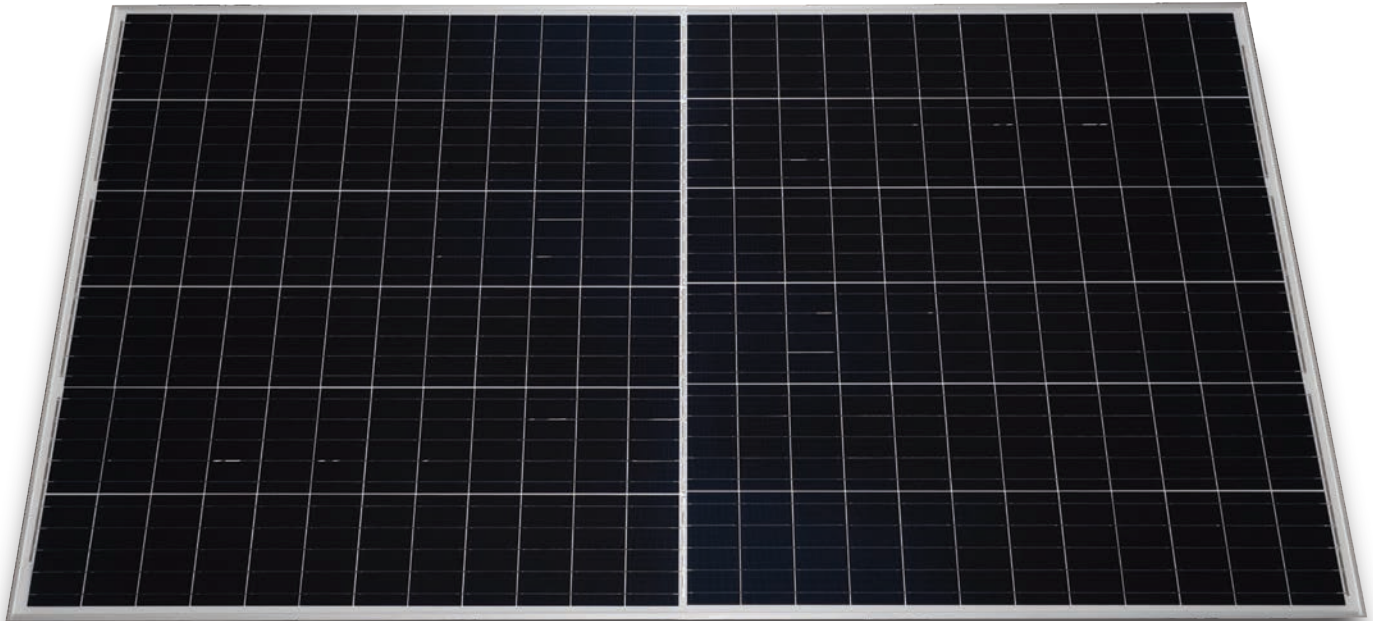


# DNA-144


SILVER FRAME, WHITE BACKSHEET


410W | 405W | 400W





## Maximize Energy Production

High-efficiency, half-cut cell panel

 Advanced technology boosts power generation

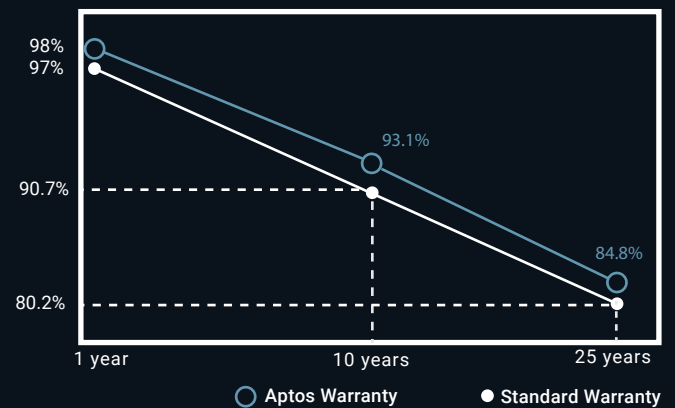
 Designed & engineered for extreme weather  
5400 Pa snow load  
5400 Pa (210 mph) wind load

 Ideal solution for applications affected by shading

 25 year warranty  
Extended reliability

Our DNA Half-cut Cell Series impressively combines advanced technologies to maximize performance. Our patented DNA, Dual Nano Absorber, technology allows for the panel to operate at high efficiencies in high temperature environments.

### 25 Year Linear Performance Warranty



### Factory Certifications



### Product Certifications





# DNA-144

SILVER FRAME, WHITE BACKSHEET  
HIGH EFFICIENCY, HALF-CUT CELL PANEL



## ELECTRICAL SPECIFICATIONS (+3%/-0%)

	DNA-144-MF23-400W	DNA-144-MF23-405W	DNA-144-MF23-410W
STCrated output $P_{mpp}$ (W)	400	405	410
Module Efficiency	19.76%	20.00%	20.26%
Open Circuit Voltage $V_{oc}$ (V)	48.55	48.73	48.91
Short Circuit Current $I_{sc}$ (A)	10.64	10.71	10.79
Rated Voltage $V_{mpp}$ (V)	40.77	40.95	41.12
Rated Current $I_{mpp}$ (A)	9.81	9.89	9.97

Standard Test Conditions for front-face of panel:  
1000 W/m<sup>2</sup>, 25 °C, measurement uncertainty ≤3%

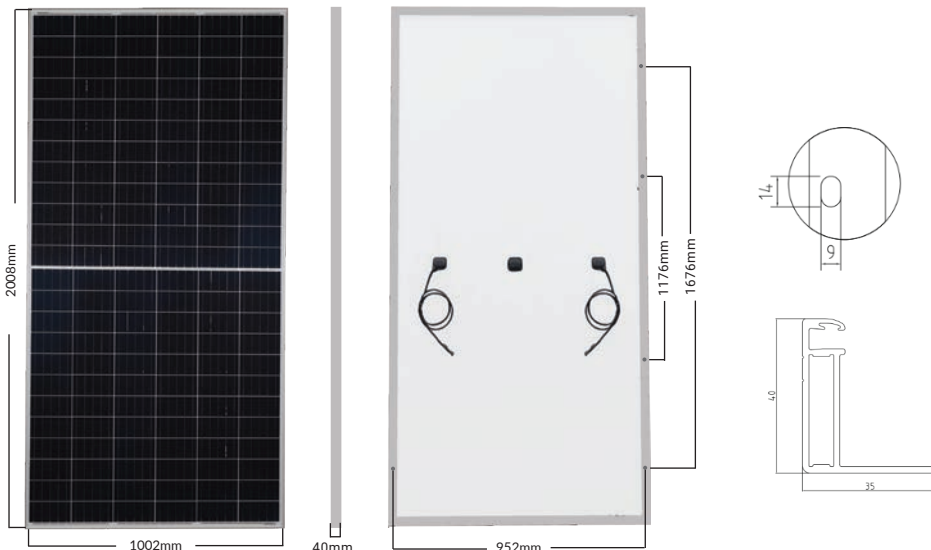
## TEMPERATURE COEFFICIENTS

Temperature Coefficients $P_{mpp}$	-0.36%/°C
Temperature Coefficients $I_{sc}$	+0.046%/°C
Temperature Coefficients $V_{oc}$	-0.306%/°C
Normal Operating Cell Temperature (NOCT)	45°C

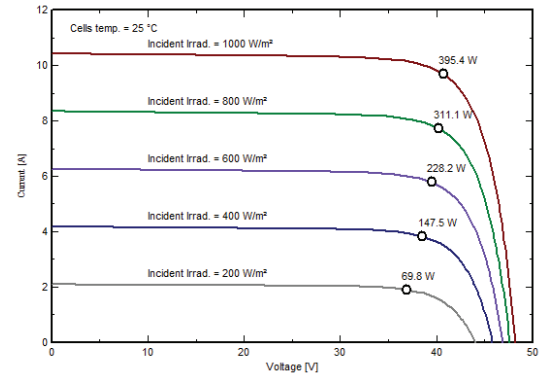
## TEST OPERATING CONDITIONS

Maximum Series Fuse	20A
Maximum System Voltage	1,500 VDC (UL&IEC)
Maximum Load Capacity (Per UL1703)	Front Load: 5400 PA Snow load / 113 PSF / 2444 lbs. Rated Load Rear Load: 5400 PA Wind load / 113 PSF / 210 MPH Rated Load
Fire Performance Class	Class C/Type 1

## MODULE DIMENSIONS



## I-V CURVE



## MECHANICAL PROPERTIES

Cell Type	Monocrystalline
Glass	Low Iron, Tempered
Frame	Anodized Aluminum Alloy
Junction Box	IP67
Dimension	2008 x 1002 x 40mm
Output Cable	4mm <sup>2</sup> (EU)12AWG, 39.37in(1200mm)
Weight	50.7lbs.(23kg)
Cable Length	1200mm

## PACKAGING CONFIGURATION

Number of Modules per Pallet	27
Number of Pallets per 40ft HQ Container	22
Pallet Dimensions (mm)	2050 X 1140 X 1140
Pallet weight (kg)	680
Container weight (kg)	14960

## PRODUCT CERTIFICATIONS



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www.aptoossolar.com | info@aptoossolar.com

DNA-144-MF23-XXXW  
RESIDENTIAL | COMMERCIAL | UTILITY