



# DNA-108-MFN10-440W

440W | 445W | 450W

RESIDENTIAL



## Advanced Technology

Patented DNA™ technology boosts power performance & module efficiency.

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.

## INDUSTRY-LEADING 30-YEAR PRODUCT & PERFORMANCE WARRANTY.

### Certifications:



### Miami-Dade Approved

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



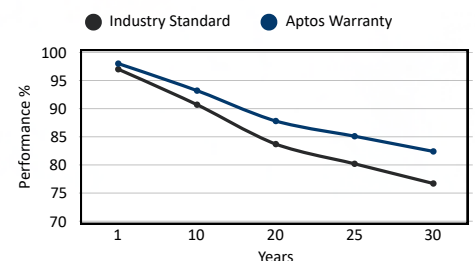
### Aesthetics

All black design with advanced split cell technology.



### Awards

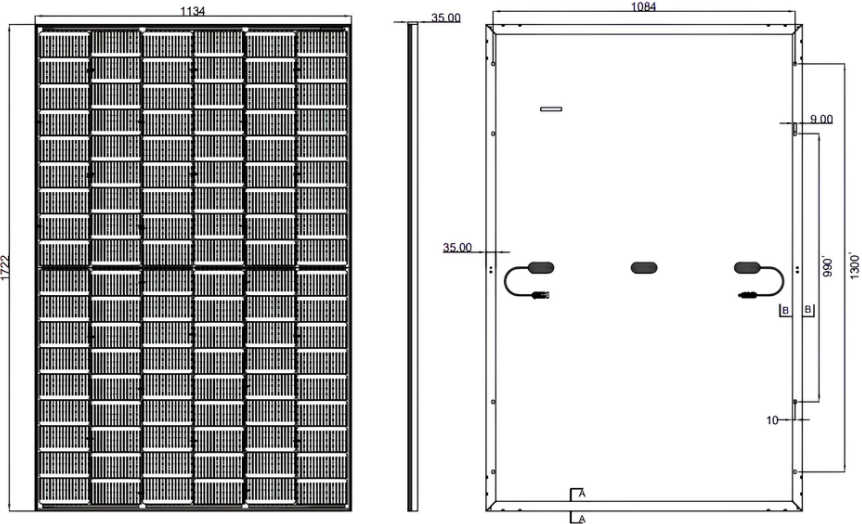
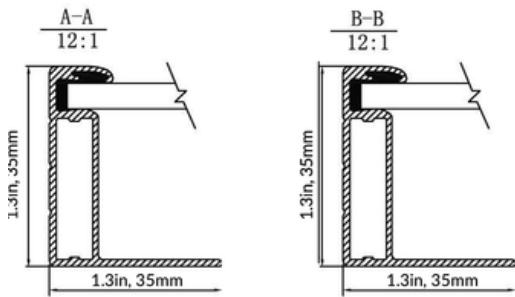
Winners of the Leadership in Solar Energy award for three consecutive years.



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.**



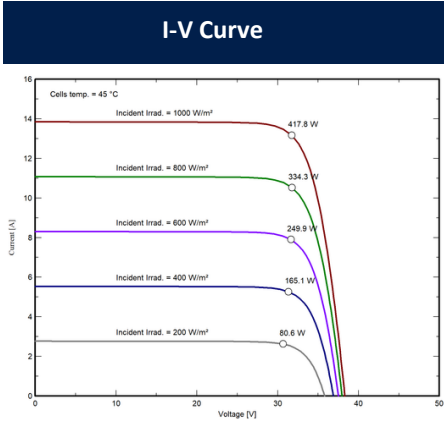
| Mechanical Properties |                                                                                     |
|-----------------------|-------------------------------------------------------------------------------------|
| Cell Type             | N-TYPE Technology                                                                   |
| Glass                 | 3.2mm(0.12in), anti-reflection coating, high transmission, low-iron, tempered glass |
| Frame                 | Anodized Aluminum Alloy                                                             |
| Junction Box          | IP68                                                                                |
| Dimensions            | 67.7 X 44.6 X 1.3 in, 1722 X 1134 X 35 mm                                           |
| Weight                | 46.29lbs. (21kg)                                                                    |
| Output Cable          | 4mm <sup>2</sup> (EU)12AWG                                                          |
| Cable Length          | 47.2 in, 1200mm                                                                     |
| Encapsulant           | POE and EVA                                                                         |
| Connector Type        | Staubli EVO2                                                                        |

| Electrical Specifications                 | DNA-108-MFN10-440W |       | DNA-108-MFN10-445W |       | DNA-108-MFN10-450W |       |
|-------------------------------------------|--------------------|-------|--------------------|-------|--------------------|-------|
|                                           | STC                | NOCT  | STC                | NOCT  | STC                | NOCT  |
| STC Rated Output P <sub>mpp</sub> (W)     | 440W               | 336W  | 455W               | 340W  | 450W               | 344W  |
| Open Circuit Voltage V <sub>OC</sub> (V)  | 39.03              | 37.48 | 39.16              | 37.57 | 39.29              | 37.66 |
| Short Circuit Current I <sub>SC</sub> (A) | 13.73              | 11.20 | 13.81              | 11.32 | 13.89              | 11.44 |
| Rated Voltage V <sub>mpp</sub> (V)        | 33.48              | 31.92 | 33.62              | 31.99 | 33.76              | 32.06 |
| Rated Current I <sub>max</sub> (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/m<sup>2</sup> , 25°C, measurement uncertainty ±3%  
NOCT for front-face of panel: 800W/m<sup>2</sup>,45°C, Wind speed 1 m/s

| 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                                             |

| Temperature Coefficients                  |            |
|-------------------------------------------|------------|
| Temperature Coefficients P <sub>mpp</sub> | -0.29%/°C  |
| Temperature Coefficients I <sub>SC</sub>  | +0.046%/°C |
| Temperature Coefficients V <sub>OC</sub>  | -0.23%/°C  |
| Nominal Operating Cell Temperature (NOCT) | 45°C±2     |



| 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 <sup>2</sup> |
| Fire Performance Type               | Type 1 <sup>3</sup>                                |

