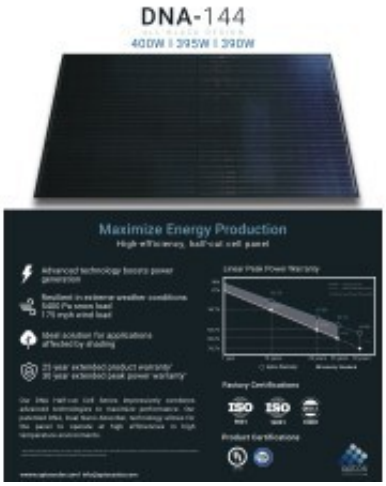
Aptos Solar DNA-144-BF26-400W BIFACIAL



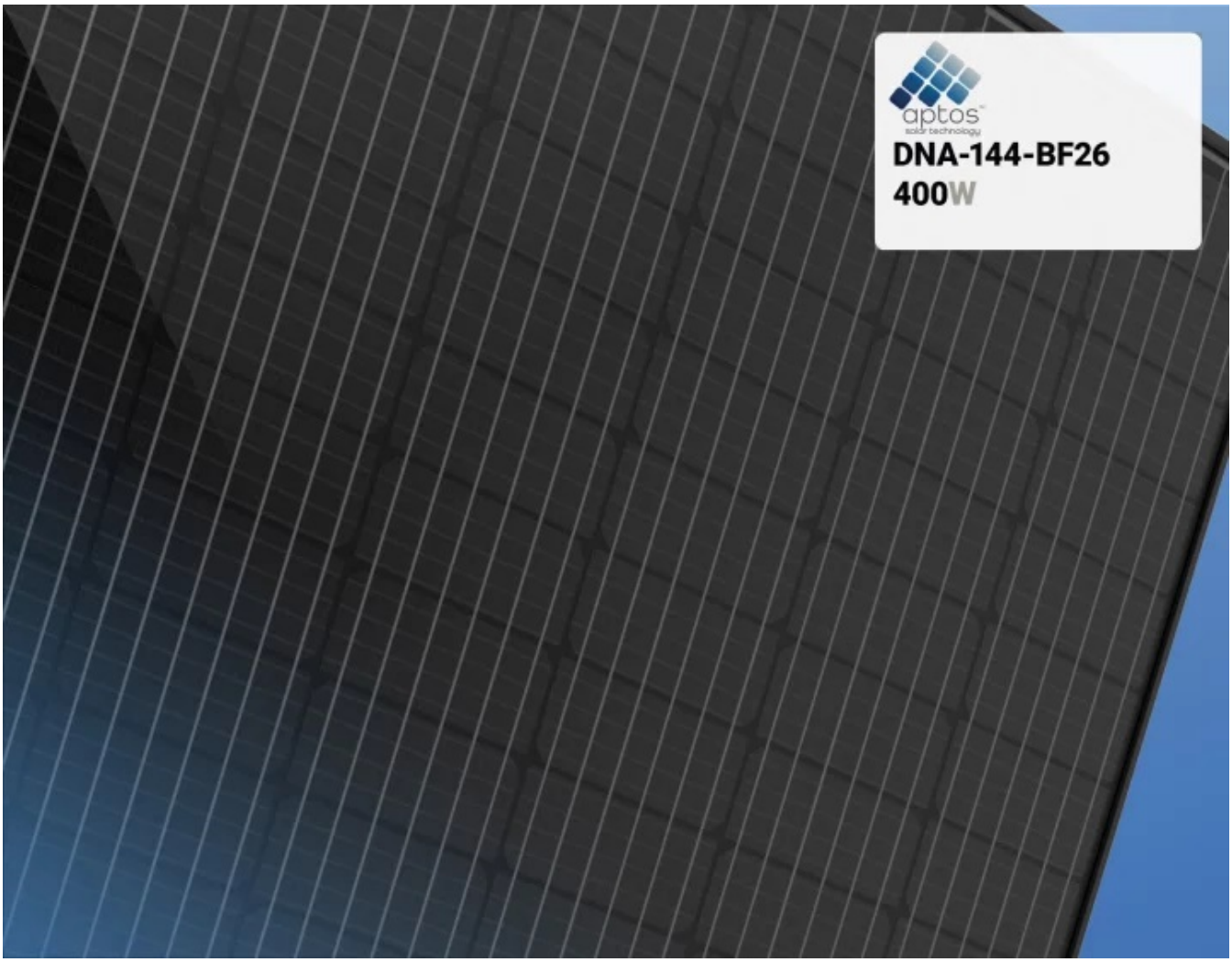
Brand: Aptos Solar Technology
Product Code: DNA-144-BF26-400W BIFACIAL
Availability: 2 - 3 Days
Weight: 0.00kg
Dimensions: 0.00cm x 0.00cm x 0.00cm

Price: $900.00

Ex Tax: $900.00

Description

Bifacial 400W Aptos Solar from DNA Half-cut Cell Series panel produces up to 30% more energy than standard monofacial modules. They are a great choice for commercial and utility-scale systems, but can be installed at home as well. Aptos 400W panels are very resilient in extreme weather and backed up by strong warranties.



Aptos Solar Technology

- **Power Rating:** 400W
  - Cell Type P type Monocrystalline
  - Panel Dimensions 2008.0 mm L, 1002.0 mm W, 40.0 mm D

Solar Panel Aesthetics Black Cell, Black Frame, Back Backsheet
Snow Load 5400 Pa, Wind Load 5400 Pa

- **Linear Warranty Term:** 30 years
- **Product Warranty Term:** 25 years
- **Made in Vietnam**
- **Approximate cost per watt** $2.98

Solar Panel Performance

Rated Power 400W

Aptos Solar Technology also offers solar panels for utility, and commercial sized projects. However, we are going to focus on the Aptos Solar 400W Solar Panel 144 cell DNA-144-BF26-400W BIFACIAL as used in Texas residential applications.

Efficiency 19.88%

The Aptos Technology DNA-144-BF Solar module's efficiency ratings range between 19.38% and 19.88%, ranking them on the higher end of average solar panel efficiency. This achievement occurs via implementation of their patented DNA cell technology. Aptos uses thinner bus bars, taking less space from the actual solar cells. This results in a rate of failure at less than 0.01%.

Power Tolerance 0/+3W

Power tolerance refers to the amount of electricity a panel will produce either above or below its rated power capacity, at Standard Test Conditions (STC). The smaller the power tolerance deviation or range, the more accurate the rated power capacity is.

Aptos Solar panels have a power tolerance of -0/+3%. This means Aptos panels will, at a minimum, operate at their rated capacity. However, these panels have exceeded their rated capacity by as much as 3%. For example, an Aptos Solar panel rated at 400 W will have an operational output ranging from 400 W to 412 W (or 3% higher than 400) under STC.

With a -0% tolerance rating, the AptosDNA-144-BF26-400W (BoB) panel operates at or above 400 W. These performance scores, coupled with Aptos' stringent, 3x manufacturing standards, will result in continued real world performance under Texas' most extreme operating conditions.

Temperature Coefficient PMax: -0.40%

Solar panels perform best at 77°F (25°C). Here in Texas, obviously, we see temperatures

that far exceed 77°F for long portions of the year. A solar panel's temperature coefficient is a measurement indicating how well a specific model of solar panel will perform outside of ideal operating conditions. Knowing a panel's temperature coefficient and the temperature of the panel allow you to predict your panel's performance during the dog days of summer.

Temperature coefficients are calculated in Celsius. With each degree above 25° C /77° F, a given solar panel's electric output will be diminished by its temperature coefficient.

Using the above methodology, the AptosDNA-144-BF26-400W (BoB) panel has a temperature coefficient of -0.4%/°C. Hence, when this panel's temperature increases by one degree, from 25°C to 26°C (77° F to 79° F), except a 0.4% reduction in potential electric output.

When it's July in Texas and temperatures have climbed to 95° F/35° C, expect electric output to decrease by 4.0%. When the hottest hours of the summer drives the mercury into the triple digits, say 113° F/ 45° C, the AptosDNA-144-BF26-400W (BoB) will decrease approximately 8.0%.

Aptos Solar 400W Solar Panel 144 cell DNA-144-BF26-400W BIFACIAL

Product Name and Model Number	DNA-144-BF26-400W BIFACIAL
Manufacturer Name and Rating	Aptos Solar
Rated Power Output	400 watt
Efficiency Percentage	19.8%
Power Tolerance	+3%
Temperature Coefficient	-0.31%
Resiliency Specs	Snow load 5400Pa, Wind load 5400Pa
Output Warranty Term Length	25 year, 30 year optional
Output Warranty Decline Rate	-0.54%
Materials Warranty Term Length	25 years
Cell Color(s)	Black
Frame	Black Anodized Aluminum Alloy
Backsheet Color(s)	Black
Cell Type (e.g. monocrystalline)	Monocrystalline half cut
Panel Dimensions	2008 X 1002 X 40mm
Weight	50.7 lbs/ 23kg
Number of Cells	144

Connector Type	MC$
Manufacturer Location	Vietnam
Certifications Received (UL, IEC, ISO)	IEC
Average Cost per Watt	.72
Marketplace Average Pricing	.90 - 1.50

Output Warranty Term 30 year, Linear

Output Decline

- Year 1 2.0%
- Years 2 to 30 0.54%
- End of Linear Warranty Term 85.1%
- Product Warranty Term 25 years

Learn More

Warranty Specifications

Warranty Specifications

Aptos Solar Technology is so confident that their solar panels will continue to perform year after year, that they include a 25-year product warranty on every panel they manufacture.

Aptos panels are guaranteed an annual attenuation rate not to exceed-0.54%. Aptos further guaranteeing +85% power output of their solar panels after 25 years. As noted above, an incident of failure in Aptos panels occurs in less than 1 in 10,000 panels tested. However, if you happen to be one of those extra rare occurrences, Aptos has an extremely easy and streamlined claims process in place for Texas residential customers. Unlike some other manufactures, Aptos doesn't require the consumer to go online to register for warranties. Instead, these panels come fully warranted immediately upon installation.

Aptos may be a new face in the Texas residential solar market, but they stand solidly behind the performance of their panels and back them with what is arguably the best warranty in its class. The DNA-144-BF26-400W BIFACIAL Black reports a rate of degradation guaranteed not to exceed 0.55% annually, with 85.1% capacity guaranteed after 25 years.

Specification

Solar Panel Configuration	
Cell Type	PMax: -0.4 Voc: -0.31
Panel Aesthetics	Black Cell, Black Frame, Back Backsheet
Panel Dimensions	2008.0 mm L, 1002.0 mm W, 40.0 mm D
Power Rating	400W
Snow load	5400 Pa
Wind Load	5400 Pa
Solar Panel Warranty	
Linear Production Warranty Term	30 Years
Product Warranty Term	25 Years
PV Product Performance	
Efficiency	19.8%
Max Power Output	400W
Power Tolerance	+3%
Temperature Coefficient	-0.31%
Others	
Average Cost / Watt	.72
Where it’s Made	Made in Vietnam