



# MAXIMA GxB 500 Bifacial Module

A Trusted Quality Brand in Solar



### High Performance

Bifacial technology generates power from both the front and back faces of the module, resulting in up to 20% higher energy harvest (kWh). Our HCT bifacial cells packaged in frameless double glass modules yield higher power and do not suffer from light-induced degradation (LID) or potential induced degradation (PID).



### Robust Quality & Reliability

Double glass modules designed for durability. Certified to international certification body standards: IEC, UL, and CEC listed. Manufactured according to the International Quality Management System ISO9001.



### Extreme Climate Performance

As temperatures rise, our patented hybrid cell technology produces more power [kW] than conventional crystalline silicon solar panels at the same elevated temperature.



### Guaranteed Performance

All modules have a 10 year product warranty and 25 year power output warranty.



### Superior Aesthetics

Thin profile double-glass construction provides superior aesthetics that are a perfect complement to roofs, carports, and canopies.

### About Sunpreme

Sunpreme is an innovative solar PV module manufacturer headquartered in Sunnyvale, California with manufacturing facilities in the United States and China. We provide high quality, reliable and aesthetically superior modules to residential, commercial, and utility customers globally. Sunpreme solar systems are delivering clean energy on 5 continents.

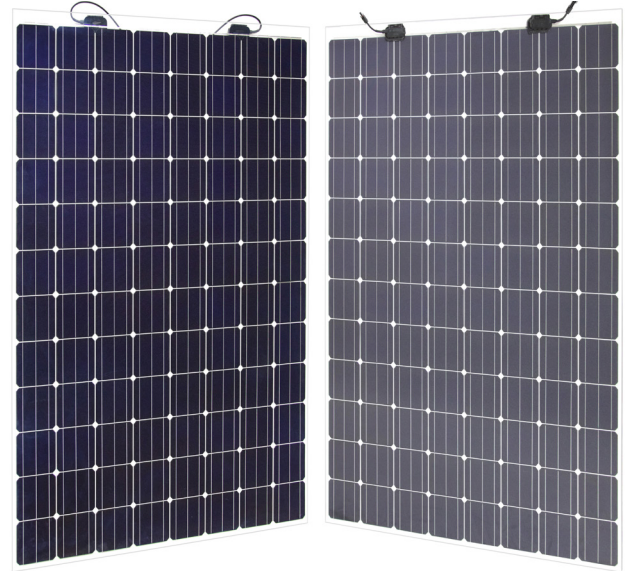
Sunpreme solar panels are designed and engineered in Silicon Valley, CA, USA.

### Hybrid Cell Technology

Sunpreme modules use our patented Hybrid Cell Technology platform that utilizes enabling thin-film materials on surface engineered Silicon substrate to achieve high-efficiency power output and reliable energy production for increased project returns.

Unlike conventional crystalline silicon cell technologies, Sunpreme uses highly scalable process to deliver high output solar power at very competitive Levelized Cost of Energy (LCOE).

www.sunpreme.com | info@sunpreme.com  
Toll Free: +1.866.245.1110



Front view

Back view

### High Efficiency

19.3 % Module Efficiency (STC),  
21.2 % efficiency with 10% Backside Power Boost,  
23.2 % with 20% Backside Power Boost

### Bifacial Energy Boost

Harvests sun from the backside to increase power output up to 20%

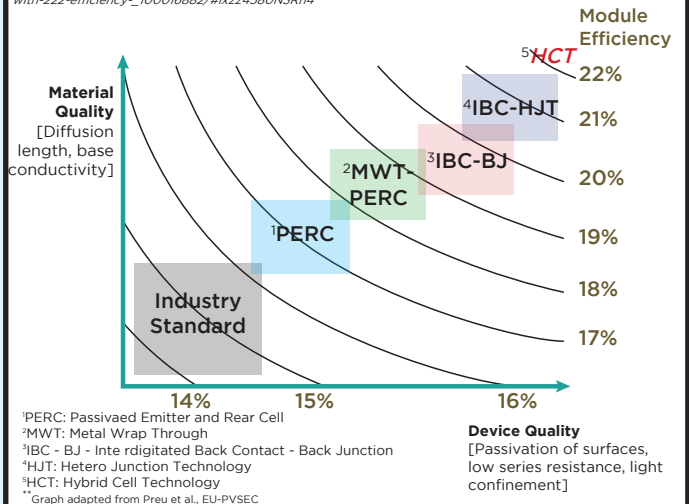
### Dual-Glass Frameless Design

Sunpreme Design is more robust, and does not require module grounding

**10 YEAR**  
PRODUCT WARRANTY

**25 YEAR**  
POWER WARRANTY

"At 22%, Sunpreme HCT Bifacial Double Glass modules move to the top of the class in effective efficiency" Dr. Eicke Weber quoted in: <http://www.pv-magazine.com/news/details/beitrag/sunpreme-unveils-500-w-bifacial-double-glass-module-with-22-efficiency-100016882/#ixzz4580N3Rh4>



<b>ELECTRICAL SPECIFICATIONS<sup>1</sup></b>	<b>490</b>	<b>500</b>	<b>510</b>
STC rated output $P_{MPP}$ (W)	490	500	510
Cell Efficiency	20.9%	21.3%	21.8%
Module Efficiency STC	18.9%	19.3%	19.7%
Standard sorted output	-3%/+5%	-3%/+5%	-3%/+5%
Open Circuit Voltage $V_{OC}$ (V)	71.8	72.9	74.7
Short circuit current $I_{SC}$ (A)	9.2	9.3	9.4
Rated Voltage $V_{MPP}$ (V)	56.3	57.4	57.3
Rated Current $I_{MPP}$ (A)	8.7	8.8	8.9

<sup>1</sup>: Standard Test Conditions for front-face of panel: 1000 W/m<sup>2</sup>, 25°C.

### BI-FACIAL OUTPUT\*

*With 10% Backside Power Boost*

Power Output (W)	539	550	561
Module Efficiency	20.8%	21.2%	21.7%

*With 20% Backside Power Boost*

Power Output (W)	588	600	612
Module Efficiency	22.7%	23.2%	23.6%

\*Backside boost for flush mount configuration is ≤5%, resulting in  $I_{sc}$  ≤9.56 - 9.77 A

### TEST OPERATING CONDITIONS

Operating Temperature	- 40 to + 85°C
Storage Temperature	- 40 to + 85°C
Maximum Series Fuse	15 A
Maximum System Voltage	1,000VDC (UL & IEC)
Power/Sq.Ft. w/ 20% backside power boost	21.5 W / Sq. Foot
Maximum load capacity	3,600 Pa (snow load) 125 mph (wind rating)
Fire Class	Class A - Type 3

### TEMPERATURE COEFFICIENTS

Temperature coefficient $P_{MPP}$	-0.30%/C
Temperature coefficient $I_{SC}$	+0.04%/C
Temperature coefficient $V_{OC}$	-0.24%/C
Normal operating cell temperature (NOCT)°C	45C +/- 2

### WARRANTY

10 year product warranty

95% power warranty first 5 years

-0.6% per year degradation for the following 20 years

### CERTIFICATION

Certified to UL 1703, IEC 61646, IEC 61730-01, IEC 61730-02, IEC 61701 standards, CEC & FSEC listed, and CE mark



### MECHANICAL SPECIFICATIONS

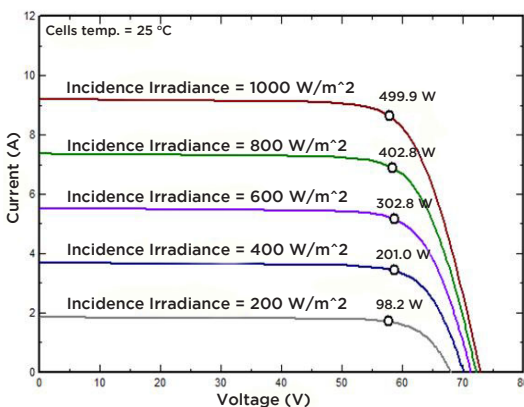
Dimensions	1,981 x 1,308 x 6 mm (6.43 x 3.25 x 0.02 ft)
Weight	36.3 kg (80.0 lbs)
Area	2.59m <sup>2</sup> (27.90 ft <sup>2</sup> )
Cell type	Bifacial Hybrid Cell Technology (HCT)
Module type	96 Cells, Frameless double glass design with tempered glass, no grounding required
Glass	Tempered 2.9mm anti-reflective coating, low-iron
Junction Box	Tyco IP-67 rated; 1,000V UL/IEC, 3 diodes (2 units)
Cables	4mm <sup>2</sup> x 1.2 m cable: MC4 or MC4 compatible Tyco connectors
Clamps	Recommended Sunpreme 200mm

### PACKAGING

Modules per crate	26
Crate per shipping container	16

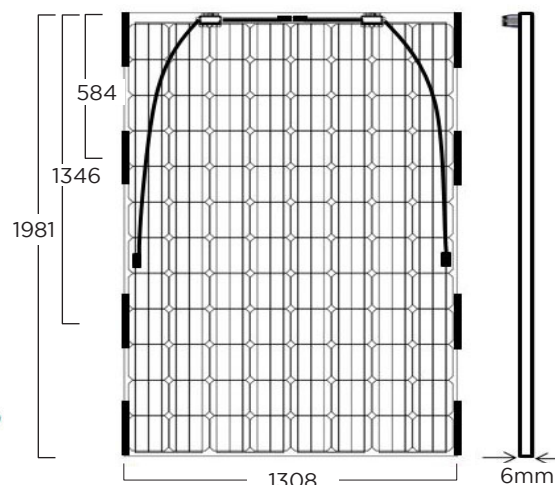
### Imax - Vmax (96 cell Version)

#### Multi-Irradiance Curve for Maxima GxB - 500



Covered by one or more of the following U.S. patents:  
7,951,640; 7,956,283; 7,960,644

### Rear & Side View (mm)



### Clamp Profiles

