

## MAXIMA GxB 320 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 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 SmartSilicon hybrid cell technology produces more power [kW] than conventional crystalline silicon solar panels at the same elevated temperature.



### Guaranteed Performance

All modules have a 15 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

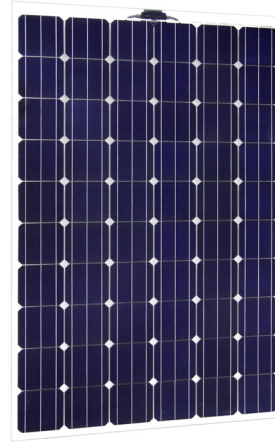
Sunpreme is an innovative solar PV module manufacturer headquartered in Sunnyvale, California with manufacturing facilities in the United States and China. We provide high quality, reliable and aesthetically superior modules to residential, commercial, and utility customers globally. Sunpreme solar systems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



Front view



Back view

### High Efficiency

19.4% Module Efficiency (STC),  
21.0% Efficiency with 10% Backside Power Boost, and  
23.0% with 20% Backside Power Boost

### Bifacial Energy Boost

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

### Double-Glass Frameless Design

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

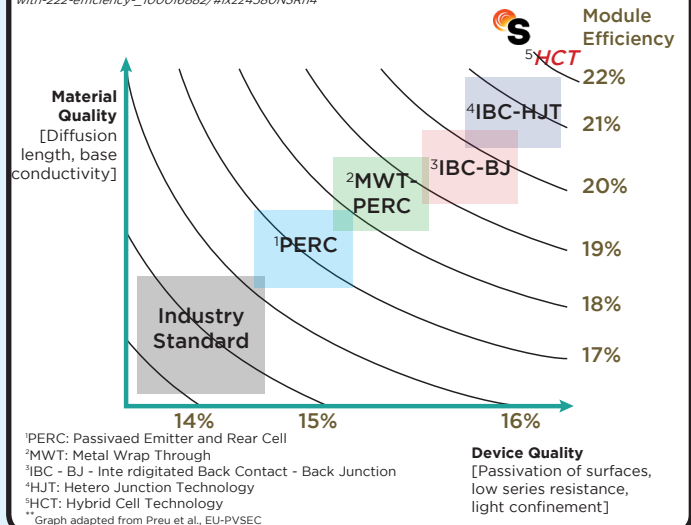
### 15 YEAR

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.ev-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>300</b>	<b>310</b>	<b>320</b>
STC rated output $P_{MPP}$ (W)	300	310	320
Cell Efficiency	21.3%	21.6%	22.0%
Module Efficiency STC	18.2%	18.8%	19.4%
Standard sorted output	-3%/+5%	-3%/+5%	-3%/+5%
Open Circuit Voltage $V_{OC}$ (V)	43.6	43.8	44.0
Short circuit current $I_{SC}$ (A)	9.26	9.3	9.34
Rated Voltage $V_{MPP}$ (V)	35.3	36.0	36.5
Rated Current $I_{MPP}$ (A)	8.6	8.7	8.8

<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)	330	341	352
Module Efficiency	20.1%	20.7%	21.0%

#### With 20% Backside Power Boost

Power Output (W)	360	372	384
Module Efficiency	22.0%	22.6%	23.0%

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

### TEST OPERATING CONDITIONS

Operating Temperature	- 40 to + 85°C
Storage Temperature	- 40 to + 85°C
Maximum Series Fuse	20 A
Maximum System Voltage	1,000VDC (UL & IEC)
Power/Sq.Ft. w/ 20% backside power boost	20.3 W / Sq. Foot
Maximum load capacity	5,400 Pa (snow load) 185 mph wind rating
Fire Class	Class A - Type 3

### TEMPERATURE COEFFICIENTS

Temperature coefficient $P_{MPP}$	-0.28%/C
Temperature coefficient $I_{SC}$	+0.015%/C
Temperature coefficient $V_{OC}$	-0.21%/C
Normal operating cell temperature (NOCT)°C	46C +/- 2

### WARRANTY

15 year extended product warranty  
97.5% power warranty first 5 years  
-0.5% per year degradation for the following 20 years

### CERTIFICATION

Certified to IEC 61646, IEC 61730-01, IEC 61730-02, IEC 61701, UL 1703, ISO 9001, ISO 14001, CEC, CE Mark, FSEC, MCS, SEC, and TUV



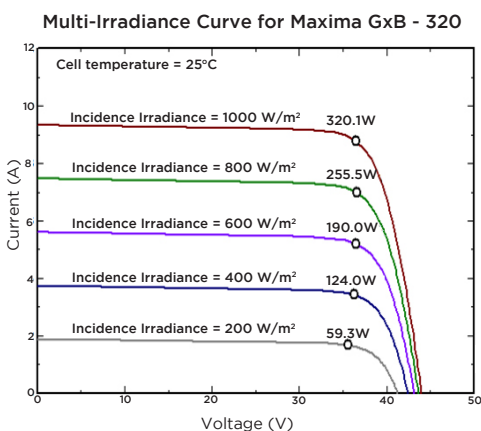
### MECHANICAL SPECIFICATIONS

Dimensions	1,663 x 990 x 6 mm (5.46 x 3.25 x 0.02 ft)
Weight	25.2 kg (55.56 lbs)
Area	1.64 m <sup>2</sup> (17.7 ft <sup>2</sup> )
Cell type	Bifacial Hybrid Cell Technology (HCT)
Module type	60 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
Cables	4mm <sup>2</sup> x 0.9 m cable: MC4 or MC4 compatible Tyco connectors
Clamps	Recommended Sunpreme 200mm

### PACKAGING

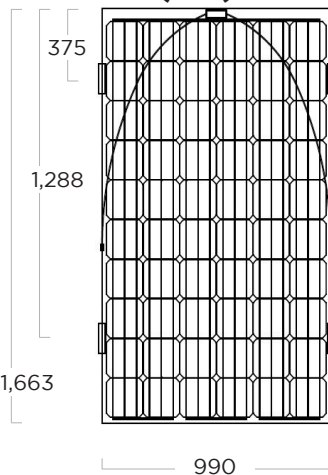
Modules per crate	26
Crates per shipping container	28

### $I_{max} - V_{max}$ (60 cell Version)



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

### Rear View (mm)



### Mounting method

- Rail structure runs parallel to short-side of module if in portrait mount on roof top (0.9m cable length)
- Rail structure runs parallel to long-side of module in ground mount (1.2m cable length)

Retaining clip

### Side View (mm)

