Maxima GxB 520
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 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 30 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 utilize 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
20.5% Module Efficiency (STC)
22.3% Module Efficiency with 10% Backside Power Boost
24.2% Module Efficiency 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

30 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:


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Material Quality

*Diffusion length, base conductivity*

Device Quality

Passivation of surfaces, low series resistance, light confinement

PERC: Passivated Emitter and Rear Cell

MWT: Metal Wrap Through

IBC - BJ: Inte/digitated Back Contact - Back Junction

HCT: Hybrid Cell Technology

Graph adapted from Prev et al., EJ PVSEC
Maxima GxB 520 Bifacial Solar Module
High Performance Thin-Film enabled Solar Module

ELECTRICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>STC rated output $P_{mpp}$ (W)</td>
<td>500</td>
</tr>
<tr>
<td>Cell Efficiency</td>
<td>21.5%</td>
</tr>
<tr>
<td>Module Efficiency</td>
<td>19.3%</td>
</tr>
<tr>
<td>Standard sorted output</td>
<td>-3%/5%</td>
</tr>
<tr>
<td>Open Circuit Voltage $V_{oc}$ (V)</td>
<td>70.5</td>
</tr>
<tr>
<td>Short circuit current $I_{sc}$ (A)</td>
<td>9.30</td>
</tr>
<tr>
<td>Rated Voltage $V_{mpp}$ (V)</td>
<td>57.1</td>
</tr>
<tr>
<td>Rated Current $I_{mpp}$ (A)</td>
<td>8.9</td>
</tr>
</tbody>
</table>

1: Standard Test Conditions for front-face of panel: 1000 W/m², 25°C

BIFACIAL OUTPUT

With 10% Backside PowerBoost

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Output (W)</td>
<td>550</td>
</tr>
<tr>
<td>Module Efficiency</td>
<td>21.2%</td>
</tr>
</tbody>
</table>

With 20% Backside PowerBoost

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Output (W)</td>
<td>600</td>
</tr>
<tr>
<td>Module Efficiency</td>
<td>23.2%</td>
</tr>
</tbody>
</table>

*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: 20 A
- Maximum System Voltage: 1,500 VDC (UL & IEC)
- Power/Sq. Ft. w/ 20% backside power boost: 22.4 W/Sq. Foot
- Maximum load capacity: 3,600 PA (snow load) 125 mph/200 km/h wind rating
- Fire Class: Class A – Type 3

TEMPERATURE COEFFICIENTS

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>$P_{mpp}$</td>
<td>-0.3%/C</td>
</tr>
<tr>
<td>$I_{sc}$</td>
<td>+0.04%/C</td>
</tr>
<tr>
<td>$V_{oc}$</td>
<td>-0.24%/C</td>
</tr>
<tr>
<td>Normal operating cell temperature (NOCT)*</td>
<td>45°C +/- 2°C</td>
</tr>
</tbody>
</table>

WARRANTY

- 15-year extended product warranty
- 97.5% power warranty first 5 years
- -0.5% per year degradation for the following 25 years

CERTIFICATION

- Certified to IEC 61646, IEC 61730-01, IEC 61730-02, IEC 61701, UL 1703 and CEC(in progress), ISO 9001, ISO 14001, CE Mark, FSEC, MCS, SEC, and TÜV

MECHANICAL SPECIFICATIONS

- Dimensions: 1981 x 1308 x 6 mm (6.50 x 4.29 x 0.02 ft)
- Weight: 36.3 kg (80 lbs)
- Area: 2.59 m² (27.9 ft²)
- Cell Type: Bifacial Hybrid Cell Technology (HCT)
- Module Type: 96, Frameless double glass design with tempered glass
- Glass: Tempered 2.9 mm anti-reflective coating, low iron
- Junction Box: IP-67 rated; 1000V UL/IEC, 3 diodes
- Cables: 4 mm² x 1.2 m cable with MC4 connectors or MC4 compatible connectors
- Clamps: Sunpreme 200mm

PACKAGING

- Modules per crate: 20
- Crate per shipping container: 16

Iₘₐₓ – Vₘₐₓ

Multi-Irradiance Curve for Maxima GxB 520

Covered by one or more of the following U.S. patents: 7,851,640; 7,956,283; 7,960,644

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