

MAXIMA GxB 320T 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 framed 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 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 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

19.2% Module Efficiency (STC),
21.1% Efficiency with 10% Backside Power Boost, and
23.1% with 20% Backside Power Boost

Bifacial Energy Boost

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

Double-Glass Framed Design

Sunpreme's robust dual-glass design for high reliability, now with frames for ease of integration with traditional racking systems

15 YEAR

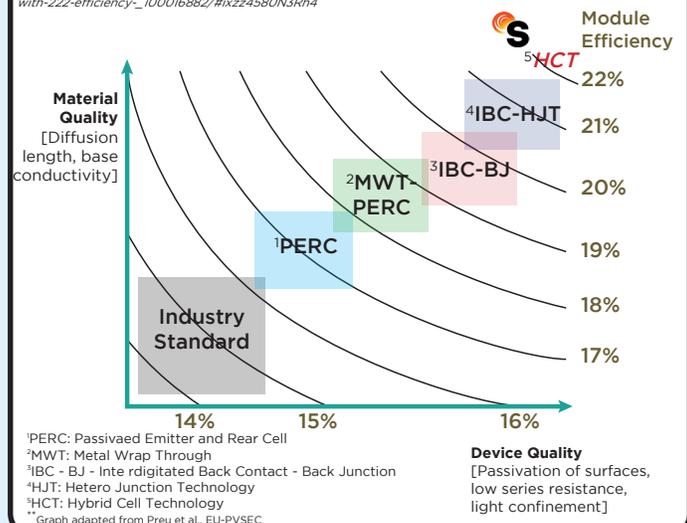
PRODUCT WARRANTY

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:

<http://www.pv-magazine.com/news/details/beitrag/sunpreme-unveils-500-w-bifacial-double-glass-module-with-22-efficiency-100016882/#ixzz4580N3Rt4>



ELECTRICAL SPECIFICATIONS¹	300	310	320
STC rated output P_{MPP} (W)	300	310	320
Cell Efficiency	21.3%	21.6%	22.0%
Module Efficiency STC	18.0%	18.6%	19.2%
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

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

BI-FACIAL OUTPUT*

With 10% Backside Power Boost

Power Output (W)	330	341	352
Module Efficiency	19.8%	20.4%	21.1%

With 20% Backside Power Boost

Power Output (W)	360	372	384
Module Efficiency	21.6%	22.3%	23.1%

*Backside boost for flush mount configuration is $\leq 5\%$, 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	20.1 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 25 years

CERTIFICATION (In Progress)

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



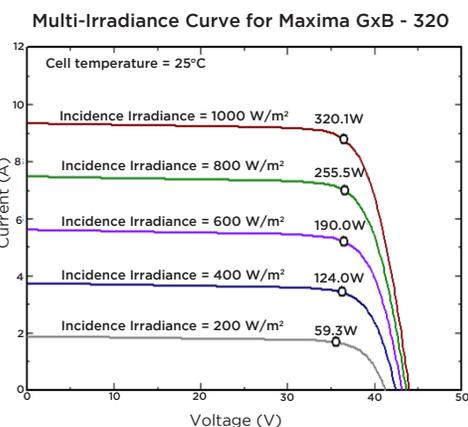
MECHANICAL SPECIFICATIONS

Dimensions	1,681 x 997 x 40 mm (5.52 x 3.27 x 0.13 ft)
Weight	27.2 kg (60.0 lbs)
Area	1.64 m ² (17.7 ft ²)
Cell type	Bifacial Hybrid Cell Technology (HCT)
Module type	60 Cells, Framed double glass design with tempered glass
Glass	Tempered 2.8mm anti-reflective coating, low-iron
Junction Box	Tyco IP-67 rated; 1,000V UL/IEC, 3 diodes
Cables	4mm ² x 1.2m cable: MC4 or MC4 compatible Tyco connectors
Frame	Anodized aluminium

PACKAGING

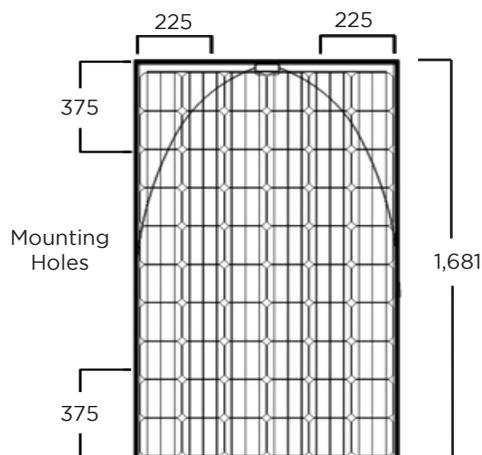
Modules per pallet	24
Pallets per shipping container	26

$I_{max} - V_{max}$ (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)



Cross Section

