SUNPREME
Premium Bifacial Thin Film Solar

NEW PRODUCT

Maxima GxB 330 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).

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

Front View Back View

High Efficiency
20.0% Module Efficiency (STC)
22.0% Module Efficiency with 10% Backside Power Boost
24.1% Module Efficiency with 20% Backside Power Boost

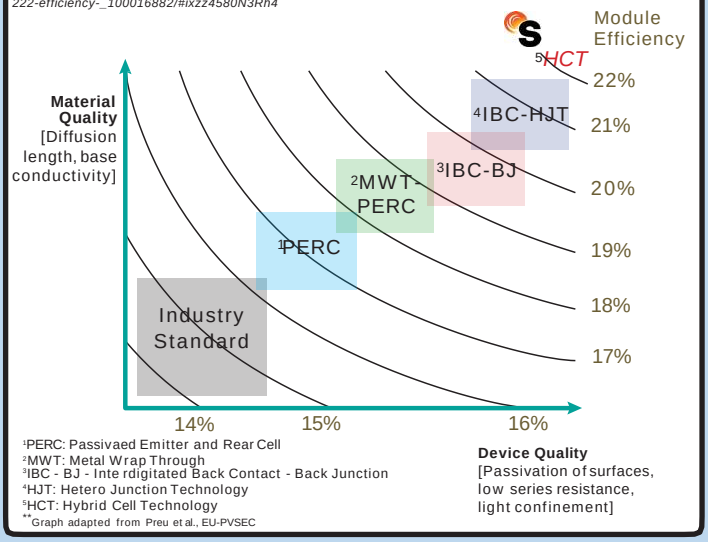
Bifacial Energy Boost
Harvests sun from the backside to increase power output up to 20%

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:
http://www.pv-magazine.com/news/details/beitrag/sunpreme-unveils-500-w-bifacial-double-glass-module-with-222-efficiency-_100016882/#ixzz4580N3Rh4



[1]PERC: Passivaed Emitter and Rear Cell
[2]MWT: Metal Wrap Through
[3]IBC - BJ - Interdigitated Back Contact - Back Junction
[4]HJT: Hetero Junction Technology
[5]HCT: Hybrid Cell Technology
**Graph adapted from Preu et al., EU-PVSEC

Maxima GxB 330 Bifacial Solar Module

High Performance 60-cell Thin-Film enabled Solar Module

ELECTRICAL SPECIFICATIONS[1]

STC rated output P_{mpp} (W)	310	320	330
Cell Efficiency	21.8%	22.0%	22.20%
Module Efficiency	18.8%	19.4%	20.0%
Standard sorted output	-3%/5%	-3%/5%	-3%/5%
Open Circuit Voltage V_{oc} (V)	43.8	44.0	44.2
Short circuit current I_{sc} (A)	9.30	9.34	9.38
Rated Voltage V_{mpp} (V)	36.0	36.5	37.1
Rated Current I_{mpp} (A)	8.7	8.8	8.9

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

BIFACIAL OUTPUT*

With 10% Backside PowerBoost			
Power Output (W)	341	352	363
Module Efficiency	20.7%	21.4%	22.0%
With 20% Backside PowerBoost			
Power Output (W)	372	384	396
Module Efficiency	22.6%	23.3%	24.1%

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

TEST OPERATING CONDITIONS

Operating Temperature	-40 to 85°C
Storage Temperature	-40 to 85°C
Maximum Series Fuse	20 A
Maximum System Voltage	1,000 VDC (UL & IEC
Power/Sq. Ft. w/ 20% backside power boost	22.3 W/Sq. Foot
Maximum load capacity	5,400 PA (snow load) 185 mph/300 km/h wind rating
Fire Class	Class A – Type 3

TEMPERATURE COEFFICIENTS

Temperature coefficients P_{mpp}	-0.28%/C
Temperature coefficients I_{sc}	+0.03%/C
Temperature coefficients V_{oc}	-0.23%/C
Normal operating cell temperature (NOCT)°	46°C +/- 2° C

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 TUV

MECHANICAL SPECIFICATIONS

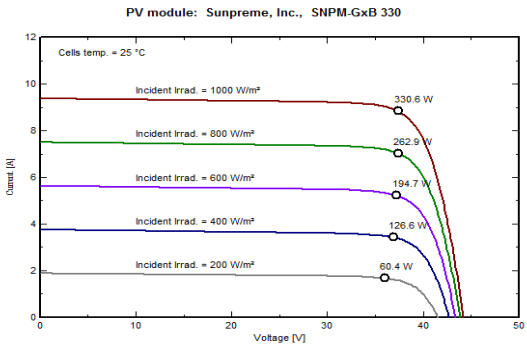
Dimensions	1663 x 990 x 6 mm (5.46 x 3.24 x 0.02 ft)
Weight	25.2 kg (55.6 lbs)
Area	1.65 m^2 (17.8 ft^2)
Cell Type	Bifacial Hybrid Cell Technology (HCT)
Module Type	60 Cells, Frameless double glass design with tempered glass
Glass	Tempered 2.9 mm anti-reflective coating, low iron
Junction Box	Tyco IP-67 rated; 1000V UL/IEC, 3 diodes
Cables	4 mm^2 x 0.9 m cable with MC4 connectors or MC4 compatible connectors
Clamps	Sunpreme 200mm

PACKAGING

Modules per crate	26
Crate per shipping container	28

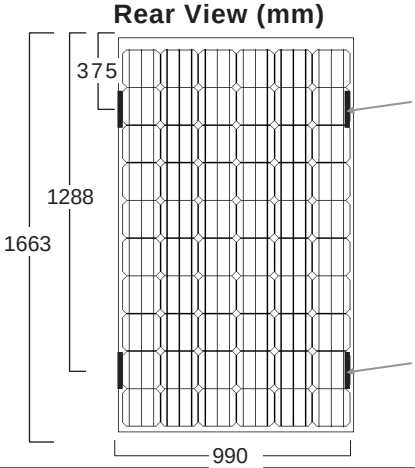
I_{max} - V_{max} (60 cell Version)

Multi-Irradiance Curve for Maxima GxB 330



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

Rear View (mm)



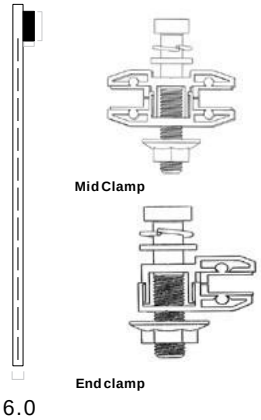
Mounting method

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

Rail structure runs parallel to long side of module in ground mount (1.2 m cable length)

Retaining clip

Side View (mm)



www.sunpreme.com | info@sunpreme.com Sunpreme: +1.866.245.1110