



G12

Bifacial 120 cells (Glass-T type)

Power Output (STC): **590 - 610 Watt**
Max. Efficiency (STC): **21.55%**



High Mechanical Load

Certified to withstand high wind and snow loads up to 5400Pa



Enhanced Performances

Bifacial feature allows a power boost up to 20% vs monofacial



Lower LCOE

Higher power output over the long term increases projects ROI



Excellent Low-Light Performance

Tier 1 certified solar cells allows better performance in low-light environments



Ideal for Large Scale Installations

Lower installations time and BOS (Balance of Systems) costs



Salt Mist and Ammonia Resistant

Certified by Bureau Veritas to withstand usage near coastal environments



PID resistant

Designed to minimise cell degradation in extreme environments



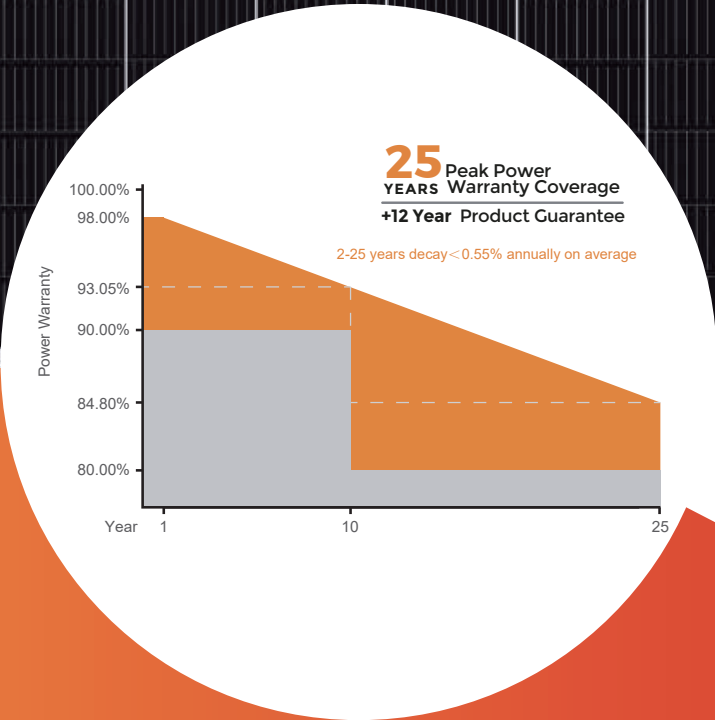
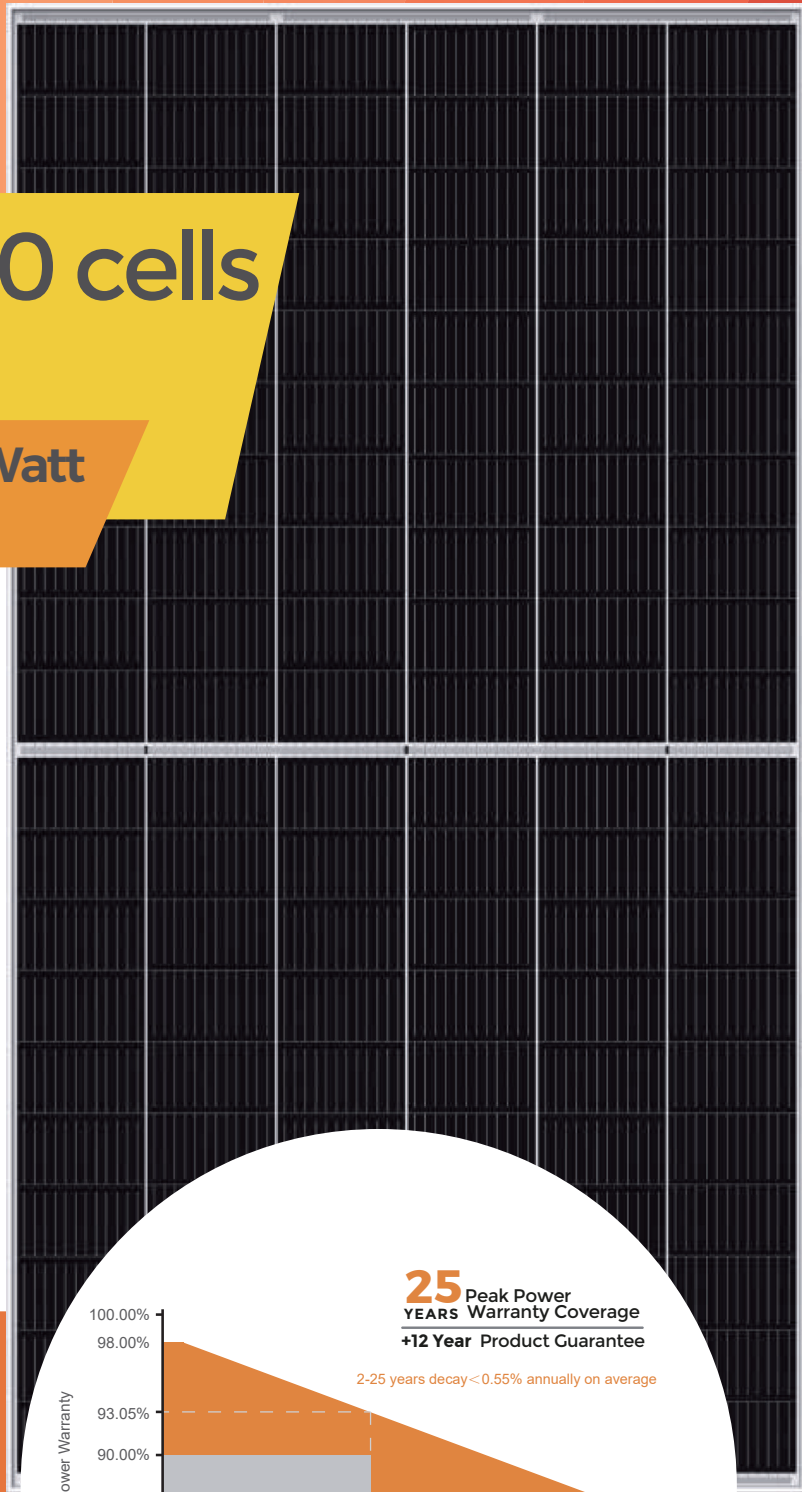
Secure Investment

Upsolar provides exceptional product coverage for all modules to ensure our customers achieve superior long-term value from their solar installations. To further improve our product warranty, which covers unanticipated module damage, we've recently expanded our terms from a 10-year period to a 12-year period.

In addition, Upsolar offers a 25-year performance guarantee known as the Linear Module Warranty. Whereas traditional policies feature a single trigger point leading to drastic coverage reductions after just 10 years, Upsolar's coverage more accurately corresponds to system performance, providing coverage for over 25-years.

Overall, our goal is to deliver not only top-notch modules, but also peace of mind, for decades to come.

*Upsolar has expanded its manufacturing operations in Asia, Europe and North America, keeping its modules duty-free in the event of new CVD or AD policies. Please ask about pricing, payment terms and conditions to meet your needs.



Bifacial Series | Mono 210 120 cells

Electrical Characteristics at STC

STC: Irradiance 1,000 W/m², Module temperature 25°C, AM=1.5

MODEL	UP-B590MH-T (60G12)	UP-B595MH-T (60G12)	UP-B600MH-T (60G12)	UP-B605MH-T (60G12)	UP-B610MH-T (60G12)
Max Power P _m at STC (Wp)	590	595	600	605	610
Max Power Voltage V _m (V)	34.15	34.35	34.55	34.75	34.95
Max Power Current I _m (A)	17.28	17.32	17.37	17.41	17.45
Open-Circuit Voltage V _{oc} (V)	41.25	41.45	41.65	41.85	42.05
Short-Circuit Current I _{sc} (A)	18.30	18.35	18.40	18.45	18.65
Module Efficiency (STC)	20.85%	21.02%	21.20%	21.38%	21.55%
Bifacial Factor	0.70+/-0.05				

Bifacial Output-rearside Power Gain

5%	Max Power P _m (STC)	620	625	630	635	641
	Module Efficiency (STC)	21.89%	22.08%	22.26%	22.45%	22.63%
15%	Max Power P _m (STC)	679	684	690	696	702
	Module Efficiency (STC)	23.97%	24.18%	24.38%	24.58%	24.79%
25%	Max Power P _m (STC)	738	744	750	756	763
	Module Efficiency (STC)	26.06%	26.28%	26.50%	26.72%	26.94%

Components & Additional Data

Power tolerance	0/+3%
Front Glass	High Transparency Tempered Glass 0.126" // 3.2 mm
Junction Box	IP 68 or above
Output Cables	0.3m // IEC/ UL approved (4 mm ² , 12AWG) (PV Wire Type)
Connectors	MC4 compatible (IP67, IEC and UL approved)
Frame	Anodized aluminium alloy type 6063-T5
Encapsulation Material	EVA or POE
Back Sheet	Transparent backsheet
Temperature Range	-40°F to +194°F // -40°C to +90°C
Series fuse rating	35A
Maximum system voltage	1,500V (IEC/UL)

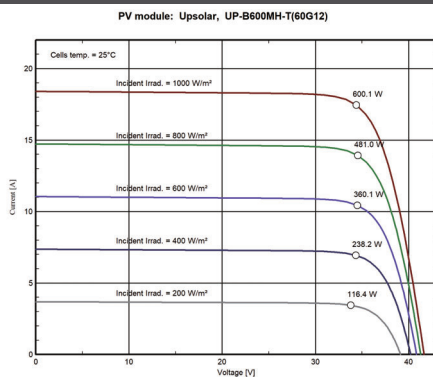
Specifications

Cells	Monocrystalline bifacial solar cells 210 x 105
Number of Cells	120 (6 x 20)
Dimensions (in // mm)	85.51 x 51.30 x 1.38 // 2172 x 1303 x 35
Weight (lb // kg)	67.2 // 30.5

Temperature Coefficients

NMOT (°C)	45 ± 2
Temperature Coefficients of I _{sc} (% / °C)	0.04 ± 0.01
Temperature Coefficients of V _{oc} (% / °C)	-0.25 ± 0.02
Temperature Coefficients of I _m (% / °C)	-0.04 ± 0.01
Temperature Coefficients of V _m (% / °C)	-0.25 ± 0.02
Temperature Coefficients of P _m (% / °C)	-0.34 ± 0.02

IV Curves



Options Available

- Frameless option available
- Glass-glass option available

