



# G1

## Bifacial 144 cells (glass-glass type)

Power Output (STC): **425-440 Watt**  
Max. Efficiency (STC): **21.47%**



### 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 HJT 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 12-year period to a 25-year period.

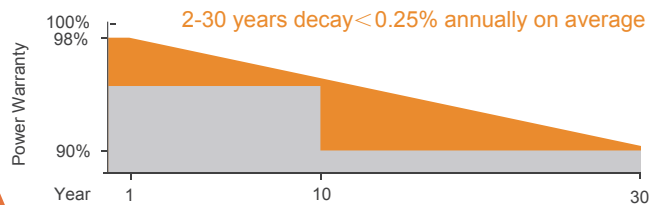
In addition, Upsolar offers a 30-year performance guarantee known as the Linear Module Warranty. Whereas traditional policies feature a single trigger point leading to drastic coverage reductions after just 12 years, Upsolar's coverage more accurately corresponds to system performance, providing coverage 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.

**30** Linear Peak Power  
**YEARS** Warranty Coverage

**+25 Year Product Guarantee**



# Bifacial Series | Mono 6" 144 cells

## Electrical Characteristics at STC

STC: Irradiance 1,000 W/m<sup>2</sup>, Module temperature 25°C, AM=1.5

MODEL	UP-B425HH-G (72G1)	UP-B430HH-G (72G1)	UP-B435HH-G (72G1)	UP-B440HH-G (72G1)
Max Power P <sub>m</sub> at STC (Wp)	425	430	435	440
Max Power Voltage V <sub>m</sub> (V)	45.17	45.46	45.75	46.04
Max Power Current I <sub>m</sub> (A)	9.41	9.46	9.51	9.56
Open-Circuit Voltage V <sub>oc</sub> (V)	53.70	54.00	54.30	54.60
Short-Circuit Current I <sub>sc</sub> (A)	10.03	10.08	10.13	10.18
Module Efficiency (STC)	20.73%	20.98%	21.22%	21.47%
Bifacial Factor	0.70+/-0.05			

## Bifacial Output-rearside Power Gain

5%	Max Power P <sub>m</sub> (STC)	446	452	457	462
	Module Efficiency (STC)	25.78%	26.08%	26.38%	26.69%
15%	Max Power P <sub>m</sub> (STC)	489	495	500	506
	Module Efficiency (STC)	28.23%	28.56%	28.90%	29.23%
25%	Max Power P <sub>m</sub> (STC)	531	538	544	550
	Module Efficiency (STC)	30.69%	31.05%	31.41%	31.77%

## Components & Additional Data

Power tolerance	0/+3%
Front Glass	High Transparency Tempered Glass 0.078" // 2.0 mm
Junction Box	IP 67 or above
Output Cables	0.3m // IEC/ UL approved (4 mm <sup>2</sup> , 12AWG) (PV Wire Type)
Connectors	MC4 compatible (IP67, IEC and UL approved)
Frame	Anodized aluminium alloy type 6063-T5
Encapsulation Material	EVA
Back Sheet	High Transparency Tempered Glass 0.078" // 2.0 mm
Temperature Range	-40°F to +185°F // -40°C to +85°C
Series fuse rating	20A
Maximum system voltage	1,500V (IEC/UL)

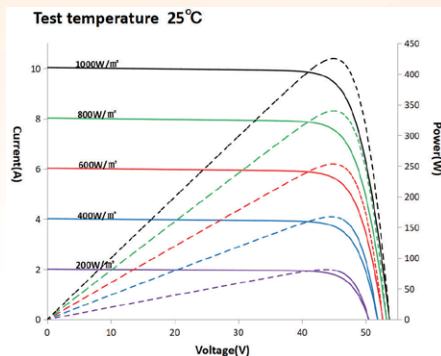
## Specifications

Cells	HJT bifacial solar cells 158.75x79.38
Number of Cells	144 (6 x 24)
Dimensions (in // mm)	79.92 x 39.76 x 1.18 // 2030 x 1010 x 30
Weight (lb // kg)	59.1 // 26.8

## Temperature Coefficients

NOCT (°C)	45 ± 2
Temperature Coefficients of I <sub>sc</sub> (% / °C)	0.05 ± 0.01
Temperature Coefficients of V <sub>oc</sub> (% / °C)	-0.22 ± 0.02
Temperature Coefficients of I <sub>m</sub> (% / °C)	-0.02 ± 0.02
Temperature Coefficients of V <sub>m</sub> (% / °C)	-0.25 ± 0.03
Temperature Coefficients of P <sub>m</sub> (% / °C)	-0.24 ± 0.05

## IV Curves



## Options Available

- Frameless option available
- Transparent backsheet option available

