

Power Output (STC) : 455-475 Watt Max. Efficiency (STC): 21.85\%


## High Mechanical Load

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

## Enhanced Performances

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


## Lower LCOE

Aigher power output over the long term increases projects RO

## Excellent Low-Light Performance

Ideal for Large Scale Installations
cower installations time and BOS (Balance of Systems) costs
Salt Mist and Ammonia Resistant
Certified by Bureau Veritas to withstand usage near coastal environments

PID PID resistant
Designed to minimise cell degradation in extreme environments
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Secure Investment
Upsolar provides exceptional product coverage for all HJT modules toensure our customers achieve superior long-term value from theirsolar installations. To further improve our product warranty, whichcovers 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 30 -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 HJI Series | M6 Half-cut 144 cells 

| Electrical Characteristics at STC STC: Irradiance $1,000 \mathrm{~W} / \mathrm{m}^{2}$, Module temperature $25^{\circ} \mathrm{C}, \mathrm{AM}=1.5$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MODEL |  | $\begin{aligned} & \text { UP-B455MH-G } \\ & \text { (72M6) } \end{aligned}$ | $\begin{aligned} & \text { UP-B460MH-G } \\ & \text { (72M6) } \end{aligned}$ | $\begin{aligned} & \text { UP-B465MH-G } \\ & \text { (72M6) } \end{aligned}$ | $\begin{aligned} & \text { UP-B470MH-G } \\ & \text { (72M6) } \end{aligned}$ | $\begin{aligned} & \text { UP-B475MH-G } \\ & \text { (72M6) } \end{aligned}$ |
| Max Po | wer Pm at STC (Wp) | 455 | 460 | 465 | 470 | 475 |
| Max Po | wer Voltage Vm (V) | 45.10 | 45.30 | 45.50 | 45.70 | 45.90 |
| Max Po | wer Current Im (A) | 10.09 | 10.15 | 10.22 | 10.28 | 10.35 |
| Open-C | ircuit Voltage Voc (V) | 53.05 | 53.35 | 53.65 | 53.95 | 54.25 |
| Short-C | ircuit Current Isc (A) | 10.90 | 10.94 | 10.98 | 11.02 | 11.06 |
| Module | Efficiency (STC) | 20.93\% | 21.16\% | 21.39\% | 21.62\% | 21.85\% |
| Bifacial | Factor |  |  | 0.85+/-0.05 |  |  |
| Bifacial Output-rearside Power Gain |  |  |  |  |  |  |
| 5\% | Max Power Pm (STC) | 478 | 483 | 488 | 494 | 499 |
|  | Module Efficiency (STC) | 21.98\% | 22.22\% | 22.46\% | 22.70\% | 22.94\% |
| 15\% | Max Power Pm (STC) | 523 | 529 | 535 | 541 | 546 |
|  | Module Efficiency (STC) | 24.07\% | 24.33\% | 24.60\% | 24.86\% | 25.13\% |
| 25\% | Max Power Pm (STC) | 569 | 575 | 581 | 588 | 594 |
|  | Module Efficiency (STC) | 26.16\% | 26.45\% | 26.74\% | 27.03\% | 27.31\% |

Components \& Additional Data

| Power tolerance | 0/+3\% |
| :---: | :---: |
| Front Glass | High Transparency Tempered Class 0.078" // 2.0 mm |
| Junction Box | IP 67 or above |
| Output Cables | 0.3m // IEC/ UL approved (4 mm², 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 Class 0.078" // 2.0 mm |
| Temperature Range | $-40^{\circ} \mathrm{F}$ to $+185^{\circ} \mathrm{F} / /-40^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$ |
| Series fuse rating | 20A |
| Maximum system voltage | 1,500V (IEC/UL) |

## Specifications

| Cells | Mono bifacial HJT solar cells <br> $166 \times 83$ |
| :--- | :--- |
| Number of Cells | $144(6 \times 24)$ |
| Dimensions $(\mathrm{in} \mathrm{//} \mathrm{~mm} \mathrm{)}$ | $82.44 \times 40.87 \times 1.18 ~ / /$ <br> $2094 \times 1038 \times 30$ |
| Weight ( lb // kg ) | $59.5 / / 27.0$ |

## Temperature Coefficients

| NOCT ( ${ }^{\circ} \mathrm{C}$ ) | $45 \pm 2$ |
| :--- | :---: |
| Temperature Coefficients of $\mathrm{Isc}\left(\% /{ }^{\circ} \mathrm{C}\right)$ | $0.047 \pm 0.01$ |
| Temperature Coefficients of $\mathrm{Voc}\left(\% /{ }^{\circ} \mathrm{C}\right)$ | $-0.22 \pm 0.02$ |
| Temperature Coefficients of $\mathrm{Im}\left(\% /{ }^{\circ} \mathrm{C}\right)$ | $0.047 \pm 0.01$ |
| Temperature Coefficients of $\mathrm{Vm}\left(\% /{ }^{\circ} \mathrm{C}\right)$ | $-0.22 \pm 0.02$ |
| Temperature Coefficients of $\mathrm{Pm}\left(\% /{ }^{\circ} \mathrm{C}\right)$ | $-0.24 \pm 0.03$ |

## IV Curves



## Options Available

Frameless option available Transparent backsheet option available


