

High Efficiency Low LID and PERC cell with Half-cut Technology Big Size: Cell 182mm × 91mm Monocrystalline

450W / 455W 460W / 465W / 470W



- Module Efficiency 21.7%
- No.of Cells $120(6 \times 20)$
- Weight 23.0±0.5kg
- Dimensions 1909mm × 1134mm × 30mm



Half cut cell technology can reduce the internal power loss and improve component overall power. Excellent heat dissipation avoids hot spot production.



10BB The optimized number and width of main gate lines, Maximize the light receiving area of components and reduce component power consumption.



Designed for high voltage systems of up to 1500 VDC, increasing the string length of solar systems and saving on BOS costs.



Entire module certified to with stand extreme wind (2400 Pa) and snow loads (5400 Pa).



All the modules are sorted and packaged by amperage, reducing mismatch losses and maximizing system output.

12Ys

25Ys

products

warranty on power output

PID

5W

PID resistant

positive tolerance 0/+5W guaranteed



microcrack resistant high performance White backsheet structure enhance reliability, triple EL tested of high quality control.

Comprehensive and First-rate Certification System

<code>IEC61215</code>: 2021 . <code>IEC61730</code>: 2023 . <code>UL61730</code>: 2017 . <code>IEC62804</code>: 2015 <code>ISO9001</code> . <code>ISO14001</code> . and . <code>ISO45001</code>

















MULTIWAY+

Better Choice For Higher Efficiency



Electrical Characteristics

| Module | | | HT60-18X | | |
|---------------------------------|---------------------|--------|----------|--------|--------|
| Maximum Power at STC (Pmax) | 450W | 455W | 460W | 465W | 470W |
| Open - Circuit Voltage (Voc) | 41.33V | 41.48V | 41.63V | 41.78V | 41.93V |
| Short - Circuit Current (Isc) | 13.90A | 13.97A | 14.04A | 14.11A | 14.18A |
| Optimum Operating Voltage (Vmp) | 34.78V | 34.93V | 35.08V | 35.23V | 35.38V |
| Optimum Operating Current (Imp) | 12.95A | 13.04A | 13.13A | 13.22A | 13.30A |
| Module efficiency | 20.8% | 21.1% | 21.3% | 21.5% | 21.7% |
| Power Tolerance | 0~+3% | | | | |
| Maximum System Voltage | 1500V DC (UL / IEC) | | | | |
| Maximum Series Fuse Rating | 25A | | | | |
| Operating Temperature | -40 °C to +85 °C | | | | |
| | | | | | |

^{*} STC: Irradiance 1000W/m², module temperature 25, AM=1.5 Optional black frame or white frame module according to customer requirements

NMOT

| Module | | | HT60-18X | | |
|-------------------------------|--------|--------|----------|--------|--------|
| Maximum Power | 335W | 338W | 342W | 346W | 350W |
| Open - Circuit Voltage (Voc) | 39.17V | 39.31V | 39.46V | 39.60V | 39.74V |
| Short - Circuit Current (Isc) | 11.22A | 11.27A | 11.33A | 11.39A | 11.44A |
| Maximum Power Voltage (Vmp) | 32.96V | 33.11V | 33.25V | 33.39V | 33.53V |
| Maximum Circuit Current (Imp) | 10.16A | 10.21A | 10.29A | 10.36A | 10.44A |
| NMOT | | | 45±2℃ | | |

^{*} NMOT: Irradiance 800W/m², ambient temperature 20°C, wind speed 1m/s

Mechanical Characteristics

| Solar Cells | Monocrystalline 182 × 91mm |
|-------------------------|--|
| No.of Cells | 120(6 × 20) |
| Dimensions | 1909mm × 1134mm × 30mm |
| Weight | 23.0±0.5kg |
| Front Glass | High transmission tempered glass; thickness; 3.2mm |
| Frame | Anodized aluminium alloy |
| Junction Box | IP68 |
| Cable | $4 mm^2 (UL / IEC) length$: (+)400mm, (-)200mm / length can be customized |
| Connectors | MC4/MC4 Compatible |
| Packaging Configuration | 36pcs / box, 864pcs / 40'HQ container |

Temperature Characteristics



Warranty

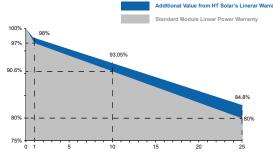
12 - years

product warranty

25 - years

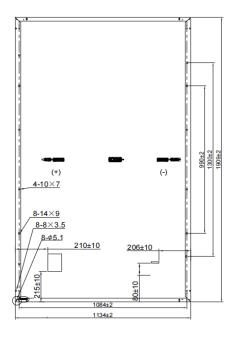
warranty on power output

Specific information is referred to the product quality guarantee

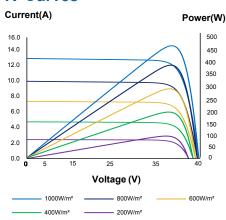


The module recycling should be carried out by the professional institutions at the end of module life cycle

Engineering Drawing



IV Curves





www.htsolar.com.tr