

# AS-6M-HC

## 380W~410W

### MONOCRYSTALLINE MODULE

#### ADVANCED PERFORMANCE & PROVEN ADVANTAGES

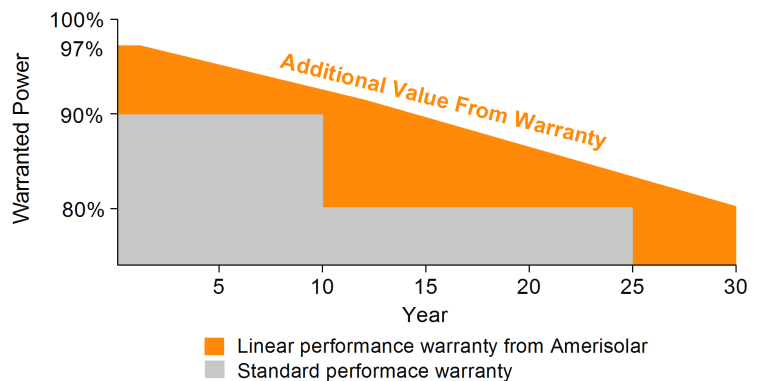
- High module conversion efficiency up to 20.36% by using innovative Half-cell design and five busbar cell technology.
- Low temperature coefficient and excellent performance under high temperature and low light conditions.
- Robust aluminum frame ensures the modules to withstand wind loads up to 2400Pa and snow loads up to 5400Pa.
- High reliability against extreme environmental conditions (passing salt mist, ammonia and hail tests).
- Potential induced degradation (PID) resistance.
- Positive power tolerance of 0 ~ +3 %.

#### CERTIFICATIONS

- IEC 61215, IEC 61730, UL 1703, IEC 62716, IEC 61701, IEC TS 62804, CE, CQC, ETL(USA), JET(Japan), J-PEC(Japan), KS(South Korea), BIS(India), MCS(UK), CEC(Australia), FSEC(FL-USA), CSI Eligible(CA-USA), Israel Electric(Israel), InMetro(Brazil), TSE(Turkey)
- ISO9001:2015: Quality management system
- ISO14001:2015: Environmental management system
- OHSAS18001:2007: Occupational health and safety management system

#### SPECIAL WARRANTY

- 12 years limited product warranty.
- Limited linear power warranty: 12 years 91.2% of the nominal power output, 30 years 80.6% of the nominal power output.



**Passionately**  
**committed to**  
**delivering innovative**  
**energy solution**

## ELECTRICAL CHARACTERISTICS AT STC

|                                       |   |        |        |        |        |        |        |
|---------------------------------------|---|--------|--------|--------|--------|--------|--------|
| Maximum Power ( $P_{max}$ )           | 380W  | 385W   | 390W   | 395W   | 400W   | 405W   | 410W   |
| Open Circuit Voltage ( $V_{OC}$ )     | 48.8V   | 49.0V  | 49.2V  | 49.4V  | 49.6V  | 49.8V  | 50.0V  |
| Short Circuit Current ( $I_{SC}$ )    | 9.97A   | 10.04A | 10.11A | 10.18A | 10.25A | 10.32A | 10.39A |
| Voltage at Maximum Power ( $V_{mp}$ ) | 40.4V   | 40.6V  | 40.8V  | 41.0V  | 41.2V  | 41.4V  | 41.6V  |
| Current at Maximum Power ( $I_{mp}$ ) | 9.41A   | 9.49A  | 9.56A  | 9.64A  | 9.71A  | 9.79A  | 9.86A  |
| Module Efficiency (%)                 | 18.87   | 19.12  | 19.36  | 19.61  | 19.86  | 20.11  | 20.36  |
| Operating Temperature                 | -40°C to +85°C                                      |        |        |        |        |        |        |
| Maximum System Voltage                | 1000V DC/1500V DC                                   |        |        |        |        |        |        |
| Fire Resistance Rating                | Type 1(in accordance with UL1703)/Class C(IEC61730) |        |        |        |        |        |        |
| Maximum Series Fuse Rating            | 20A   |        |        |        |        |        |        |

STC: Irradiance 1000W/m<sup>2</sup>, Cell temperature 25°C, AM1.5

## ELECTRICAL CHARACTERISTICS AT NOCT

|                                       |       |       |       |       |       |       |       |
|---------------------------------------|-------|-------|-------|-------|-------|-------|-------|
| Maximum Power ( $P_{max}$ )           | 285W  | 289W  | 293W  | 296W  | 300W  | 304W  | 308W  |
| Open Circuit Voltage ( $V_{OC}$ )     | 44.9V | 45.1V | 45.3V | 45.5V | 45.7V | 45.9V | 46.1V |
| Short Circuit Current ( $I_{SC}$ )    | 8.08A | 8.13A | 8.19A | 8.25A | 8.30A | 8.36A | 8.42A |
| Voltage at Maximum Power ( $V_{mp}$ ) | 36.8V | 37.0V | 37.2V | 37.4V | 37.6V | 37.8V | 38.0V |
| Current at Maximum Power ( $I_{mp}$ ) | 7.75A | 7.82A | 7.88A | 7.92A | 7.98A | 8.05A | 8.11A |

NOCT: Irradiance 800W/m<sup>2</sup>, Ambient temperature 20°C, Wind Speed 1 m/s

## MECHANICAL CHARACTERISTICS

|                   |   |
|-------------------|---|
| Cell type         | Monocrystalline   |
| Number of cells   | 144 (6x24)  |
| Module dimensions | 2010x1002x40mm (79.13x39.45x1.57inches)                           |
| Weight            | 22kg (48.5lbs)  |
| Front cover       | 3.2mm (0.13inches) tempered glass with AR coating                 |
| Frame             | Anodized aluminum alloy   |
| Junction box      | IP68, 3 diodes  |
| Cable             | 4mm <sup>2</sup> (0.006inches <sup>2</sup> ), 300mm (11.81inches) |
| Connector         | MC4 or MC4 compatible   |

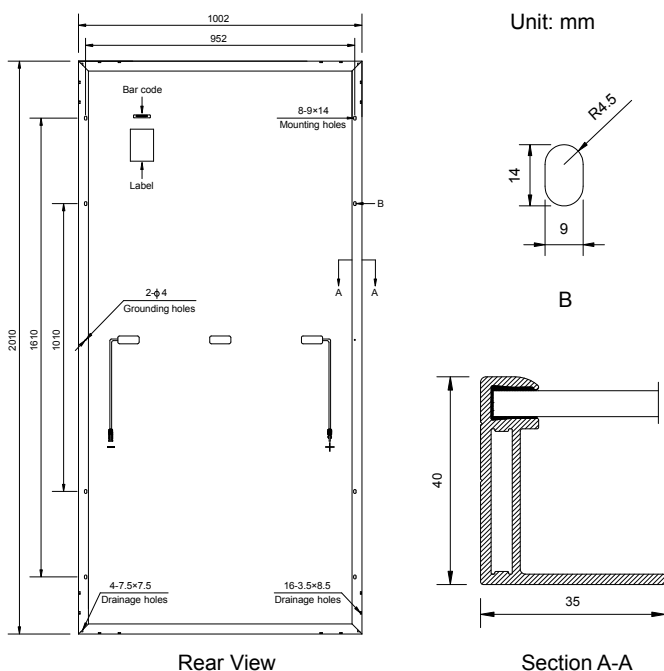
## TEMPERATURE CHARACTERISTICS

|   |           |
|---|-----------|
| Nominal Operating Cell Temperature (NOCT) | 43°C±2°C  |
| Temperature Coefficients of $P_{max}$     | -0.36%/°C |
| Temperature Coefficients of $V_{OC}$      | -0.28%/°C |
| Temperature Coefficients of $I_{SC}$      | 0.05%/°C  |

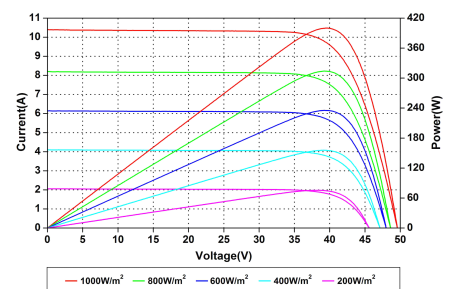
## PACKAGING

|                                   |                       |
|-----------------------------------|-----------------------|
| Standard packaging                | 27pcs/pallet          |
| Module quantity per 20' container | 270pcs                |
| Module quantity per 40' container | 594pcs(GP)/649pcs(HQ) |

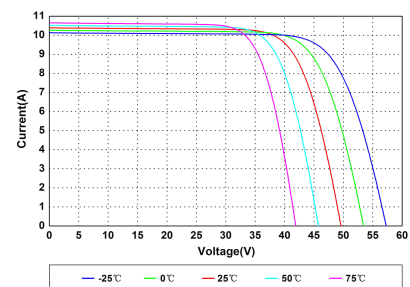
## ENGINEERING DRAWINGS



## IV CURVES



Current-Voltage and Power-Voltage Curves at Different Irradiances



Current-Voltage Curves at Different Temperatures

Specifications in this datasheet are subject to change without prior notice.