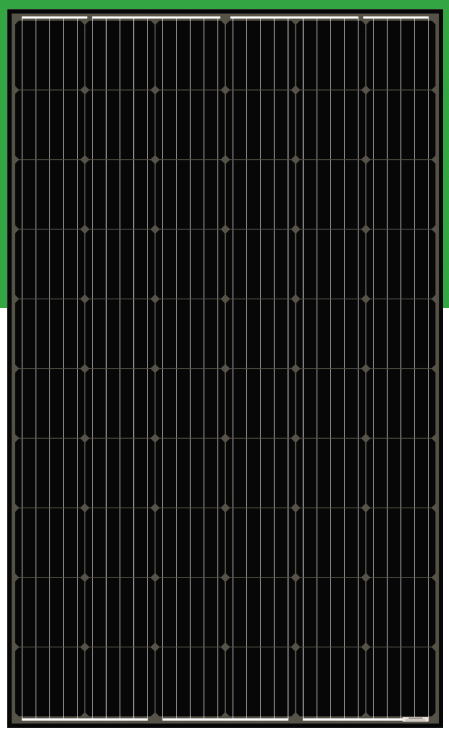
Amerisolar | New Energy New World®



# AS-6M30 BLACK
# 300W~330W

## MONOCRYSTALLINE MODULE

## ADVANCED PERFORMANCE & PROVEN ADVANTAGES

- High module conversion efficiency up to 19.84% by using Passivated Emmiter Rear Contact (PERC) technology.
- Low degradation and excellent performance under high temperature and low light conditions.
- Robust aluminum frame ensures the modules to withstand wind loads up to 3600Pa 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 %.
- Aesthetically appealing design with black backsheet and frame.

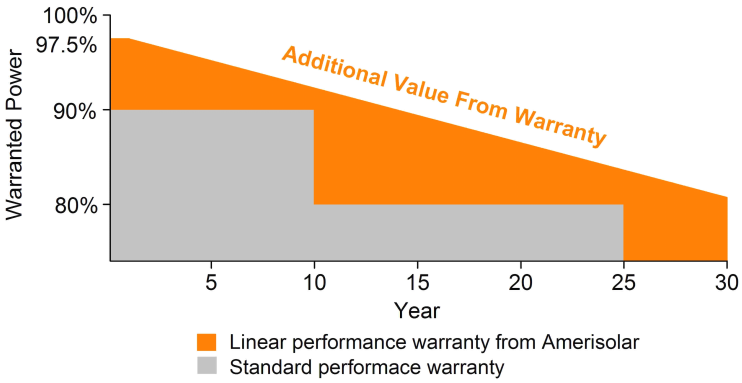
## CERTIFICATIONS

- 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), CSI Eligible(CA-USA), Israel Electric(Israel), InMetro(Brazil), TSE(Turkey)
- ISO9001:2015: Quality management system
- ISO14001:2015: Environmental management system
- ISO 45001:2018: Occupational health and safety management system

## SPECIAL WARRANTY

- 20 years product warranty
- 30 years linear power output warranty

**Passionately committed to delivering innovative energy solution**



## ELECTRICAL CHARACTERISTICS AT STC

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Maximum Power ($P_{max}$) | 300W | 305W | 310W | 315W | 320W | 325W | 330W |
| Open Circuit Voltage ($V_{OC}$) | 39.6V | 39.8V | 40.0V | 40.2V | 40.4V | 40.6V | 40.8V |
| Short Circuit Current ($I_{SC}$) | 9.70A | 9.79A | 9.88A | 9.97A | 10.06A | 10.15A | 10.25A |
| Voltage at Maximum Power ($V_{mp}$) | 32.4V | 32.6V | 32.8V | 33.0V | 33.2V | 33.4V | 33.6V |
| Current at Maximum Power ($I_{mp}$) | 9.26A | 9.36A | 9.46A | 9.55A | 9.64A | 9.74A | 9.83A |
| Module Efficiency (%) | 18.04 | 18.34 | 18.64 | 18.94 | 19.24 | 19.54 | 19.84 |
| 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 | 15A | | | | | | |

STC: Irradiance 1000W/m$^2$, Cell temperature 25°C, AM1.5

## ELECTRICAL CHARACTERISTICS AT NOCT

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Maximum Power ($P_{max}$) | 222W | 226W | 230W | 234W | 238W | 242W | 246W |
| Open Circuit Voltage ($V_{OC}$) | 36.5V | 36.7V | 36.9V | 37.1V | 37.3V | 37.5V | 37.7V |
| Short Circuit Current ($I_{SC}$) | 7.86A | 7.93A | 8.00A | 8.08A | 8.15A | 8.22A | 8.30A |
| Voltage at Maximum Power ($V_{mp}$) | 29.6V | 29.8V | 30.0V | 30.2V | 30.4V | 30.6V | 30.8V |
| Current at Maximum Power ($I_{mp}$) | 7.50A | 7.59A | 7.67A | 7.75A | 7.83A | 7.91A | 7.99A |

NOCT: Irradiance 800W/m$^2$, Ambient temperature 20°C, Wind Speed 1 m/s

## MECHANICAL CHARACTERISTICS

| | |
|---|---|
| Cell type | Monocrystalline 158.75x158.75mm |
| Number of cells | 60 (6x10) |
| Module dimensions | 1660x1002x35mm (65.35x39.45x1.38inches) |
| Weight | 18kg (39.7lbs) |
| Front cover | 3.2mm (0.13inches) tempered glass with AR coating |
| Frame | Anodized aluminum alloy |
| Junction box | IP67, 3 diodes |
| Cable | 4mm$^2$ (0.006inches$^2$), 900mm (35.43inches) |
| Connector | MC4 or MC4 compatible |

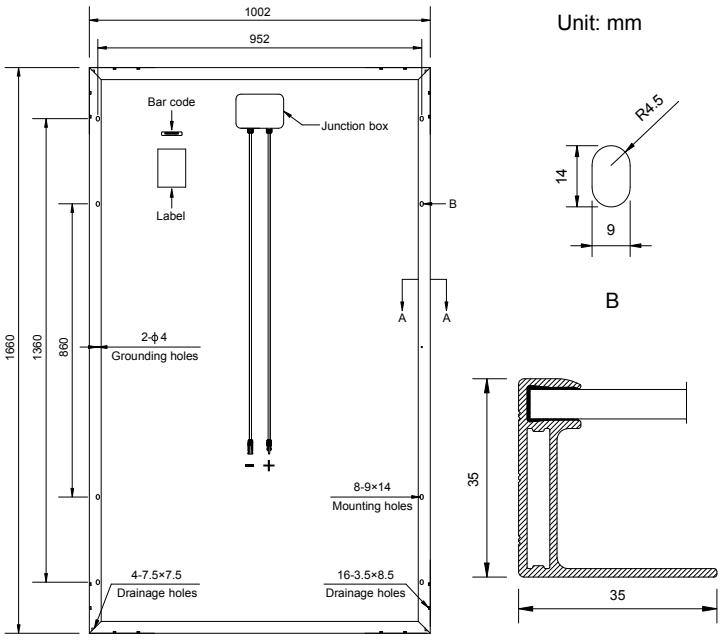
## TEMPERATURE CHARACTERISTICS

| | |
|---|---|
| Nominal Operating Cell Temperature (NOCT) | 45°C±2°C |
| Temperature Coefficients of $P_{max}$ | -0.38%/°C |
| Temperature Coefficients of $V_{OC}$ | -0.29%/°C |
| Temperature Coefficients of $I_{SC}$ | 0.052%/°C |

## PACKAGING

| | |
|---|---|
| Standard packaging | 31pcs/pallet |
| Module quantity per 20' container | 372pcs |
| Module quantity per 40' container | 868pcs(GP)/952pcs(HQ) |

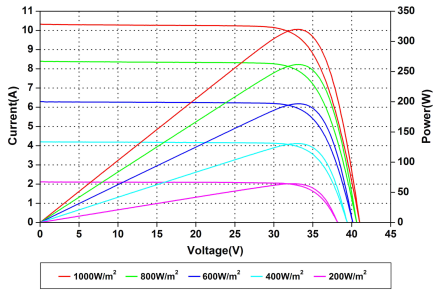
## ENGINEERING DRAWINGS



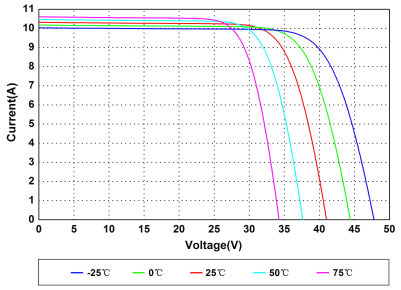

Rear View

Section A-A

## 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.

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