

SunBravo

PM060MW4/PM060MB4/PM060MW5

Mono-Crystalline Photovoltaic Module



Power Range
315 ~ 335 Wp



Multi-Busbar Design
Enhanced module power output and reliability



Strong Wind Resistance
Dynamic mechanical loading 4 times higher than the IEC requirement



PID-Resistance
Certified high PID resistance passing 1000-hour tough environmental test



Superior Weak Light Performance
Improved absorption of long wavelength light



Enhanced Salt Mist and Humidity Resistance
12 times more salt-mist resistant and 40% more moisture exclusion



Ammonia Test
Reliable in ammonia rich environment



SunBravo PM060MW4/PM060MB4/PM060MW5 (315 ~ 335 Wp)

Electrical Data (STC)

| | | | | | |
|------------------------------------|---------|-------|-------|-------|-------|
| Nominal Power P_N | 315W | 320W | 325W | 330W | 335W |
| Module Efficiency | 18.2% | 18.5% | 18.8% | 19.1% | 19.3% |
| Nominal Voltage V_{mp} (V) | 32.33 | 32.61 | 32.78 | 33.00 | 33.21 |
| Nominal Current I_{mp} (A) | 9.74 | 9.83 | 9.92 | 10.00 | 10.09 |
| Open Circuit Voltage V_{oc} (V) | 39.71 | 39.89 | 40.08 | 40.26 | 40.45 |
| Short Circuit Current I_{sc} (A) | 10.26 | 10.35 | 10.44 | 10.53 | 10.62 |
| Maximum Tolerance of P_N | 0 / +3% | | | | |

* Above data are the effective measurement at Standard Test Conditions (STC)
 * STC: irradiance 1000 W/m², spectral distribution AM 1.5, temperature 25 ± 2 °C, in accordance with EN 60904-3
 * Measurement tolerances: STC ± 3 %

Electrical Data (NOCT)

| | | | | | |
|------------------------------------|-------|-------|-------|-------|-------|
| Nominal Power P_N | 228W | 231W | 235W | 238W | 242W |
| Nominal Voltage V_{mp} (V) | 28.83 | 29.04 | 29.24 | 29.43 | 29.62 |
| Nominal Current I_{mp} (A) | 7.89 | 7.96 | 8.03 | 8.10 | 8.17 |
| Open Circuit Voltage V_{oc} (V) | 36.25 | 36.41 | 36.58 | 36.75 | 36.92 |
| Short Circuit Current I_{sc} (A) | 8.37 | 8.44 | 8.51 | 8.59 | 8.66 |

* Above data are the effective measurement at Normal Operation Cell Temperature (NOCT)
 * NOCT: irradiance 800 W/m², AM 1.5, air temperature 20 °C, wind speed 1 m/s

Temperature Coefficient

| | |
|--|------------|
| NOCT | 46 ± 2 °C |
| Typ. Temperature Coefficient of P_N | -0.38% / K |
| Typ. Temperature Coefficient of V_{oc} | -0.30% / K |
| Temperature Coefficient of I_{sc} | 0.07% / K |

Mechanical Characteristics

| | |
|------------------------|---|
| Dimensions (L x W x H) | 1696 x 1022 x 40 mm (66.77 x 40.23 x 1.57 in)* |
| Weight | 19.6 kg (43.22 lbs) |
| Front Glass | High transparent solar glass (tempered), 3.2 mm (0.13 in) |
| Cell | 60 monocrystalline solar cells |
| Back Sheet | Composite film |
| Frame | Anodized aluminum frame |
| Junction Box | IP-68 rated with 3 bypass diodes |
| Connector Type | 1000V: MC4 KST4; KBT4-1 x 4 mm ² (0.04 x 0.16 in ²) 1500V: MC4 KST4-EVO2 / XY; KBT4-EVO2 / XY -1 x 4 mm ² (0.04 x 0.16 in ²) |

* Module Dimension (L x W) Tolerance: ± 2 mm (0.079 in)

Operating Conditions

| | |
|------------------------------|---|
| Operating Temperature | -40 ~ +85 °C |
| Ambient Temperature Range | -40 ~ +45 °C |
| Max. System Voltage | PM060MW4 / PM060MB4 (1000 V) PM060MW5 (1500 V) |
| Serial Fuse Rating | 20 A |
| Front / Rear Load | 6000 Pa / 5400 Pa |
| Max. Dynamic Mechanical Load | 4800 Pa |
| Safety Class | II |

Warranties and Certifications

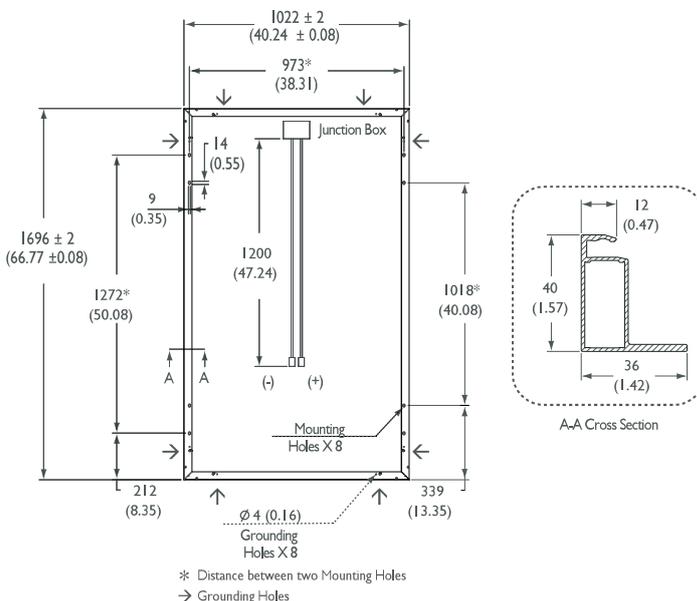
| | |
|-----------------------|---|
| Product Warranty | Maximum 15 years for material and workmanship |
| Performance Guarantee | Guaranteed linear degradation to 85% for 25 years*1 |
| Certifications | According to IEC/EN 61215 and IEC/EN 61730 guidelines*2 |

*1: Please refer to warranty letter for detail
 *2: Please confirm other certifications with official dealers

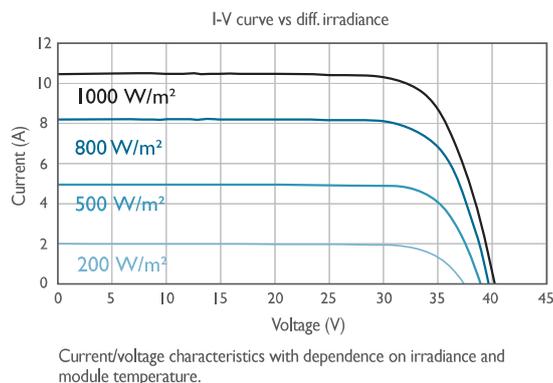
Packing Configuration

| | | | |
|-----------------------|--------|--------|--------|
| Container | 20' GP | 40' GP | 40' HQ |
| Pieces per Pallet | 26 | 26 | 26 |
| Pallets per Container | 6 | 13 | 26 |
| Pieces per Container | 156 | 338 | 676 |

Dimensions mm (inch)



I-V Curve



This datasheet complies with the EN 50380 requirements.



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About AU Optronics

AU Optronics (AUO) is one of the world's leading providers of optoelectronic solutions. In addition to its strengths in product and technological innovation, AUO stresses its commitment to going green and to utilizing manufacturing excellence to develop reliable and high quality energy solutions for residential, commercial, and utility segments.

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