

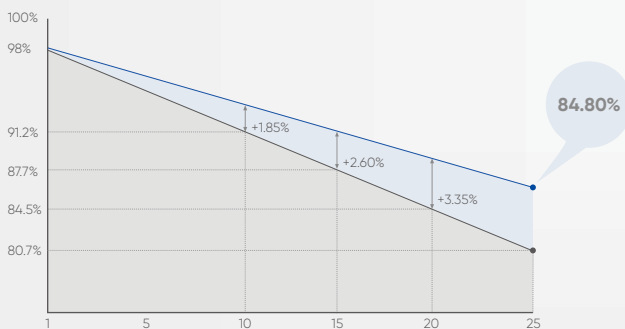
# EVO5

## 400-415W

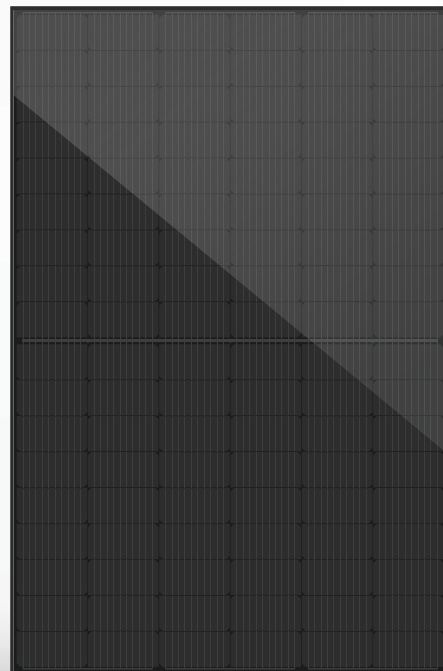
### Ultra Black MBB Half Cell Monocrystalline Module

#### Quality Guarantee

12-Year Warranty for Materials and Processing  
25-Year Warranty for Extra Linear Power Output



\* Please refer to SunEvo standard warranty for details



SE5-54H

#### High Efficiency up to 21.3%

Large area cells based on 182mm silicon wafers,  
High module efficiency with high density interconnect technology

#### High Energy Yield

Excellent low irradiation performance,  
Lower temperature coefficient and operating temperature

#### High Reliability

Resistant to harsh environments such as salt, ammonia, sand,  
high temperature and high humidity areas

#### High Customer Value

Lowest guaranteed first year and annual degradation,  
Compatible with existing mainstream system components

#### Complete System and Product Certifications

IEC 61215, IEC 61730, UL 61730

ISO 9001: 2015: ISO Quality Management System

ISO 14001: 2015: ISO Environment Management System

ISO 45001: 2018: Occupational Health and Safety

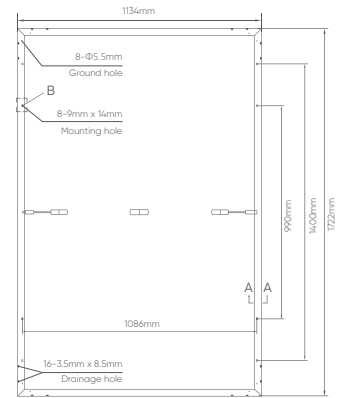


## Mechanical Data

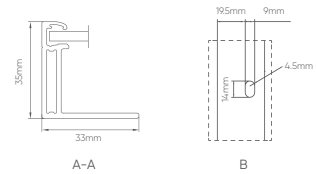
|                            |  |
|----------------------------|--|
| Number of Cells            | 108 Cells (6x18)   |
| Dimensions of Module L*W*H | 1722 x 1134 x 35mm                                       |
| Weight                     | 20.8kg   |
| Front Side Glass           | High transparency solar glass 3.2mm                      |
| Backsheet                  | Black  |
| Frame                      | Black, anodized aluminium alloy                          |
| Junction Box               | IP68 Rated, 3 Diodes                                     |
| Cable                      | 4.0mm <sup>2</sup> , Portrait: 300mm / Landscape: 1200mm |
| Wind/Snow Load             | 2400Pa/5400Pa*   |
| Connector                  | MC Compatible  |

\* Please check the installation manual for more details

## Module Dimension



Back View



A-A

B

## Electrical Specification (STC\*)

|                               |       |       |       |       |
|-------------------------------|-------|-------|-------|-------|
| Maximum Power (Pmax/W)        | 400   | 405   | 410   | 415   |
| Maximum Power Voltage (Vmp/V) | 31.09 | 31.26 | 31.43 | 31.60 |
| Maximum Power Current (Imp/A) | 12.86 | 12.96 | 13.05 | 13.13 |
| Open Circuit Voltage (Voc/V)  | 37.00 | 37.20 | 37.40 | 37.60 |
| Short Circuit Current (Isc/A) | 13.65 | 13.76 | 13.88 | 13.99 |
| Module Efficiency (%)         | 20.5  | 20.7  | 21.0  | 21.3  |
| Power Output Tolerance (W)    | 0~+5  |       |       |       |

\* Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass 1.5

## Electrical Specification (NMOT\*)

|                                 |       |       |       |       |
|---------------------------------|-------|-------|-------|-------|
| Maximum Power (Pmax / W)        | 298.9 | 302.7 | 306.4 | 310.1 |
| Maximum Power Voltage (Vmp / V) | 28.98 | 29.13 | 29.29 | 29.45 |
| Maximum Power Current (Imp / A) | 10.32 | 10.39 | 10.46 | 10.53 |
| Open Circuit Voltage (VOC / V)  | 34.97 | 35.15 | 35.34 | 35.53 |
| Short Circuit Current (Isc / A) | 11.07 | 11.17 | 11.26 | 11.35 |

\* Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1m/s

## Maximum Ratings

|                         |           |
|-------------------------|-----------|
| Operational Temperature | -40~+85°C |
| Maximum System Voltage  | 1500V DC  |
| Max Series Fuse Rating  | 25A       |

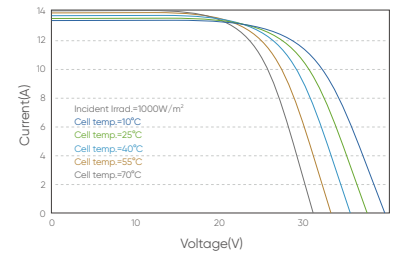
## Packaging Configuration

|                          |            |
|--------------------------|------------|
| Module per Box           | 31 pieces  |
| Module per 40' Container | 806 pieces |

## Temperature Ratings

|   |            |
|---|------------|
| NMOT (Nominal Module Operating Temperature) | 41±2°C     |
| Temperature Coefficient of Isc              | +0.045%/°C |
| Temperature Coefficient of Voc              | -0.27%/°C  |
| Temperature Coefficient of Pmax             | -0.35%/°C  |

I-V Curve at Different Temperature (415W)



I-V/P-V Curve at Different Temperature (415W)

