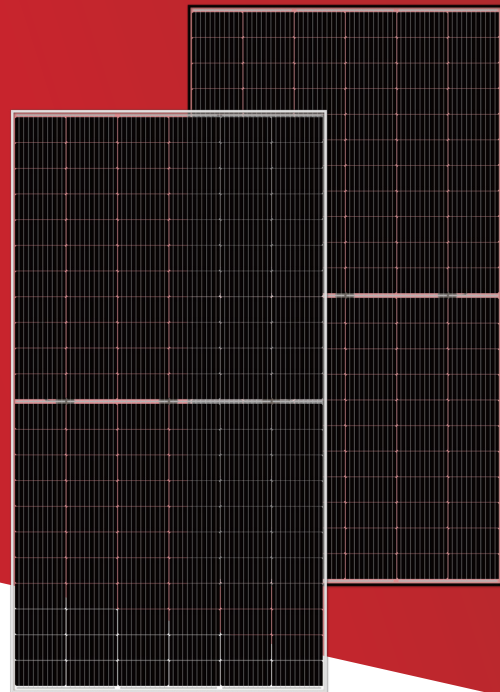


Zosma™ M Pro

490-510W

High Efficiency Bifacial Dual Glass Mono Module



Bifacial technology enables additional energy harvesting from rear side (up to 30%)



Excellent low irradiance performance



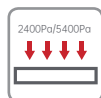
Better light trapping and current collection to improve module power output and reliability



Industry-leading, lowest thermal coefficient



Optimized electrical design and lower operating current for reduced hot spot loss and better temperature



2400Pa/5400Pa

Certified to withstand 2400 Pa of wind load and 5400 Pa of snow load



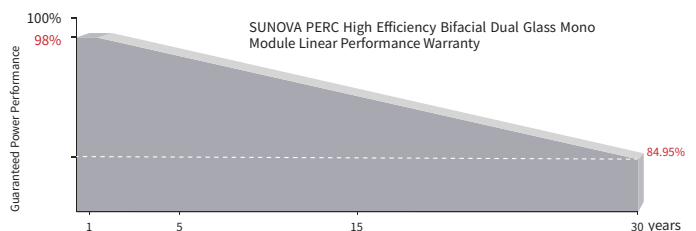
100% triple EL test, which greatly reduces the hidden cracks rate

PERFORMANCE INSURANCE



* Optional performance warranty insurance. Please contact our local sales representatives for more information.

LINEAR PERFORMANCE WARRANTY



15 years

Product quality & process guarantee

30 years

Linear power guarantee

0.45 %

Annual degradation over 30 years

COMPREHENSIVE CERTIFICATES



IEC61215/IEC61730/IEC61701/IEC62716/
IEC62804/IEC60068/UL61730

ISO 9001: Quality Management System

ISO 14001: Environmental Management System Standard

ISO 45001: International Occupational Health and Safety Assessment System Standard

SA 8000: 2014 Social Accountability Management System

* Different markets have different certification requirements. Also, the products are under rapid innovation. Please confirm the certification status with regional sales representatives.

ELECTRICAL CHARACTERISTICS

| Model of modules | SS-BG490-66MDH | | SS-BG495-66MDH | | SS-BG500-66MDH | | SS-BG505-66MDH | | SS-BG510-66MDH | |
|--------------------------------------|----------------|-------|----------------|-------|----------------|-------|----------------|-------|----------------|-------|
| | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT |
| Maximum power — P_{mp} (W) | 490 | 365 | 495 | 369 | 500 | 373 | 505 | 376 | 510 | 380 |
| Open-circuit voltage — V_{oc} (V) | 45.25 | 42.71 | 45.34 | 42.80 | 45.43 | 42.88 | 45.54 | 42.99 | 45.61 | 43.05 |
| Short-circuit current — I_{sc} (A) | 13.71 | 11.08 | 13.78 | 11.13 | 13.85 | 11.19 | 13.95 | 11.27 | 14.06 | 11.36 |
| Maximum power voltage — V_{mp} (V) | 37.27 | 34.89 | 37.34 | 34.96 | 37.41 | 35.02 | 37.53 | 35.13 | 37.62 | 35.22 |
| Maximum power current — I_{mp} (A) | 13.15 | 10.46 | 13.26 | 10.55 | 13.37 | 10.64 | 13.46 | 10.71 | 13.56 | 10.79 |
| Module efficiency — η_m (%) | 20.64 | | 20.85 | | 21.06 | | 21.27 | | 21.48 | |

STC (Standard Testing Conditions): Irradiance 1000W/m², Cell Temperature 25 °C, Spectra at AM1.5

NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m², Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/s

ELECTRICAL CHARACTERISTICS WITH DIFFERENT POWER BIN (REFERENCE TO 13.5% IRRADIANCE RATIO)

| | | | | | |
|--------------------------------------|-------|-------|-------|-------|-------|
| Maximum power — P_{mp} (W) | 536 | 542 | 547 | 553 | 558 |
| Open-circuit voltage — V_{oc} (V) | 45.25 | 45.34 | 45.43 | 45.54 | 45.63 |
| Short-circuit current — I_{sc} (A) | 15.01 | 15.08 | 15.16 | 15.27 | 15.34 |
| Maximum power voltage — V_{mp} (V) | 37.27 | 37.34 | 37.41 | 37.53 | 37.60 |
| Maximum power current — I_{mp} (A) | 14.39 | 14.51 | 14.63 | 14.73 | 14.85 |

STRUCTURAL CHARACTERISTICS

| | |
|-----------------------|--|
| Module size (L*W*H) | 2094 x 1134 x 35 mm |
| Weight | 28.5 kg |
| Cell | 132 cells, PERC Monocrystalline |
| Front Glass | 2.0mm, Anti-Reflection Coating |
| Back Glass | 2.0mm, Heat Strengthened Glass |
| Frame | Anodized aluminum alloy (Silver/Black) |
| Junction box | IP68, 3 bypass diodes |
| Output wire | 4.0 mm ² |
| Wire length | 300mm/1200mm/customized |
| Connector | MC4 Compatible |
| Packing Specification | 31 pcs/Pallet; 682 pcs/40'HQ |

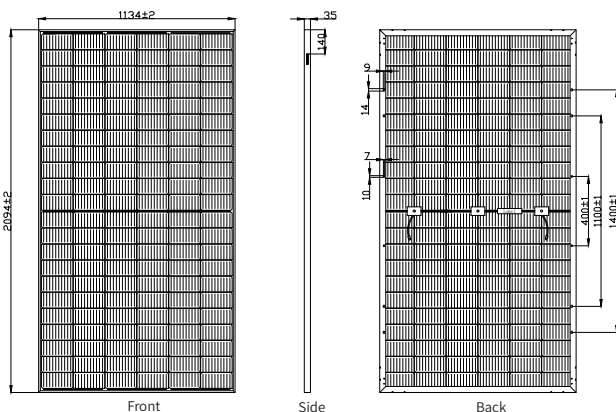
OPERATING PARAMETERS

| | |
|------------------------------------|-------------------|
| Power tolerance (W) | (0,+5) |
| Maximum system voltage (V) | 1500 |
| Maximum rated fuse current (A) | 30 |
| Current operating temperature (°C) | -40~+85 °C |
| Mechanical load | 5400 Pa / 2400 Pa |

TEMPERATURE RATINGS

| | |
|---------------------------------------|------------|
| Temperature coefficient (P_{max}) | -0.33%/°C |
| Temperature coefficient (V_{oc}) | -0.26 %/°C |
| Temperature coefficient (I_{sc}) | +0.06 %/°C |
| Nominal operating cell temperature | 43±2 °C |

MODULE DIMENSIONS (MM)



* The unmarked tolerance is ±1 mm
Length shown in mm

