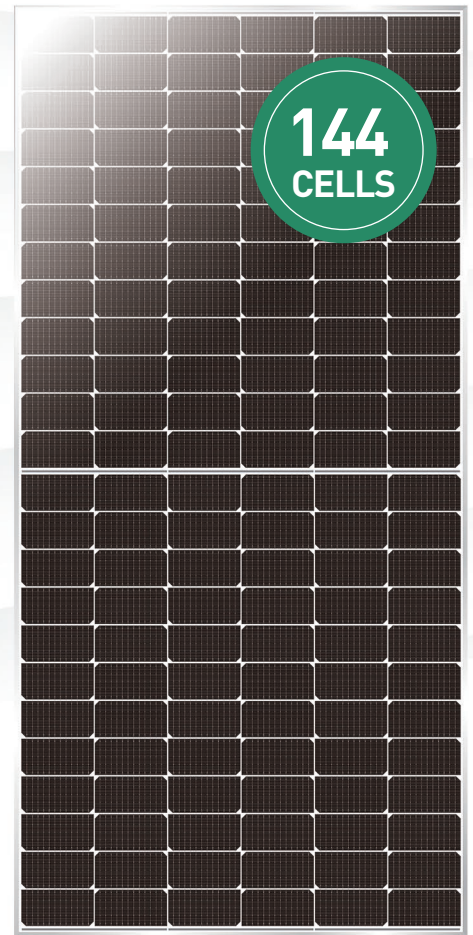


HELIOS MODULE SERIES

N-HJT HIGH EFFICIENCY MONO BM4-12B-G

460-480W



NEXT GENERATION OF MAINSTREAM MODULE EXCELLENT POWER GENERATION PERFORMANCE

- ◆ Up to 85% bifaciality and up to 30% additional power generation
- ◆ Competitive high-temperature performance with ameliorated temperature coefficient (-0.24%/°C)
- ◆ Better weak illumination response of HJT technology leads higher power generation

MORE ENVIRONMENTALLY FRIENDLY

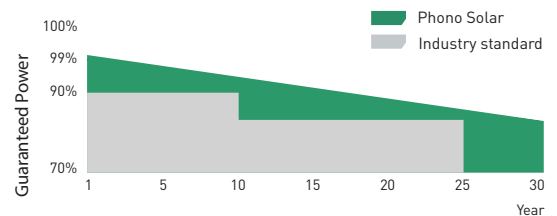
- ◆ Lower carbon emissions

CONSISTENT RELIABILITY

- ◆ Zero Light Induced Degradation
- ◆ Industry-leading cell technology of TCO thin film contributes to excellent anti-PID characteristic

SHORTER PAYBACK TIME

- ◆ Lower BoS cost ensure a better LCOE



15-year Product Warranty | 30-year Linear Performance Warranty

MANAGEMENT SYSTEM CERTIFICATES

IEC 61215, IEC 61730

ISO 9001:2015 / Quality management system

ISO 14001:2015 / Standards for environmental management system

ISO 45001:2018 / International standards for occupational health & safety



Bloomberg Tier¹
NEW ENERGY FINANCE



ELECTRICAL TYPICAL VALUES

| Model | PS460M5GFH-24/TSH | | PS465M5GFH-24/TSH | | PS470M5GFH-24/TSH | | PS475M5GFH-24/TSH | | PS480M5GFH-24/TSH | |
|-----------------------------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|
| Testing Condition | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT |
| Rated Power (Pmpp) | 460 | 350 | 465 | 354 | 470 | 358 | 475 | 362 | 480 | 366 |
| Rated Current (Imp) | 10.15 | 8.20 | 10.22 | 8.25 | 10.28 | 8.30 | 10.35 | 8.36 | 10.41 | 8.41 |
| Rated Voltage (Vmp) | 45.30 | 42.74 | 45.50 | 42.91 | 45.70 | 43.12 | 45.90 | 43.28 | 46.10 | 43.49 |
| Short Circuit Current (Isc) | 10.94 | 8.83 | 10.98 | 8.87 | 11.02 | 8.90 | 11.06 | 8.93 | 11.10 | 8.96 |
| Open Circuit Voltage (Voc) | 53.35 | 50.79 | 53.65 | 51.07 | 53.95 | 51.36 | 54.25 | 51.65 | 54.55 | 51.93 |
| Module Efficiency (%) | 21.16 | | 21.39 | | 21.62 | | 21.85 | | 22.08 | |

STC(Standard Testing Conditions):Irradiance 1000W/m², AM 1.5, Cell Temperature25°C

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

BIFACIAL ELECTRICAL VALUES

| | | | | | | |
|-----|-----------------------|-------|-------|-------|-------|-------|
| 5% | Maximum Power (W) | 478 | 484 | 489 | 494 | 499 |
| | Module Efficiency (%) | 22.01 | 22.25 | 22.49 | 22.73 | 22.97 |
| 15% | Maximum Power (W) | 515 | 521 | 526 | 532 | 538 |
| | Module Efficiency (%) | 23.70 | 23.96 | 24.22 | 24.48 | 24.73 |
| 25% | Maximum Power (W) | 552 | 558 | 564 | 570 | 576 |
| | Module Efficiency (%) | 25.40 | 25.67 | 25.95 | 26.22 | 26.50 |

MECHANICAL CHARACTERISTICS

| | |
|--------------------------------|---|
| Cell Type | Monocrystalline 166 x 83mm |
| Dimension (Lx W x H) | Length: 2094mm (82.44 inch) |
| | Width: 1038mm (40.87 inch) |
| | Height: 30mm (1.18 inch) |
| Weight | 27.5kg (60.63 lbs) |
| Glass | 2.0mm/2.0mm toughened glass |
| Frame | Anodized Aluminium Alloy |
| Cable (Including Connector) | 4mm ² (IEC), (+):450mm,(-):250mm or Customized Length |
| Junction Box | IP 68 Rated |

TEMPERATURE RATINGS

| | |
|---------------------------------|------------|
| Voltage Temperature Coefficient | -0.22%/°C |
| Current Temperature Coefficient | +0.047%/°C |
| Power Temperature Coefficient | -0.24%/°C |
| Tolerance | 0~+5w |
| NOCT | 45±2°C |
| Bifaciality | 80±5% |

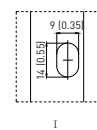
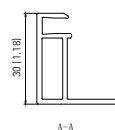
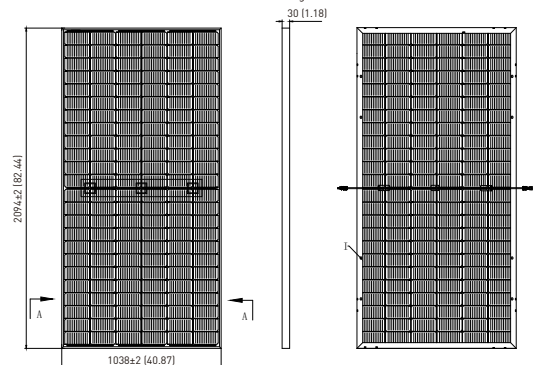
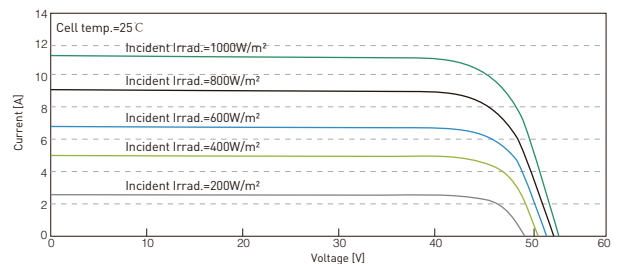
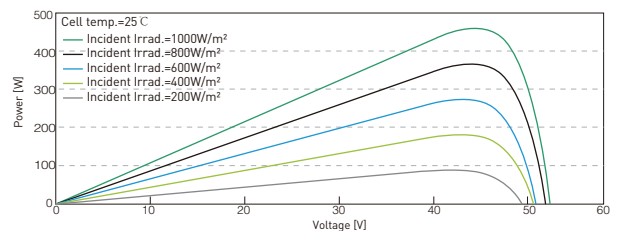
ABSOLUTE MAXIMUM RATING

| | |
|-----------------------------------|-------------------|
| Operating Temperature | From -40 to +85°C |
| Hail Diameter @ 80km/h | Up to 25mm |
| Front Side Maximum Static Loading | 5400Pa |
| Rear Side Maximum Static Loading | 2400Pa |
| Maximum Series Fuse Rating | 20A |
| PV Module Classification | Class II |
| Maximum System Voltage | DC 1500V |

PACKING CONFIGURATION

| | |
|------------------|--------|
| Container | 40' HQ |
| Pieces/Container | 792 |

ELECTRICAL CHARACTERISTICS



Note:mm (inch)