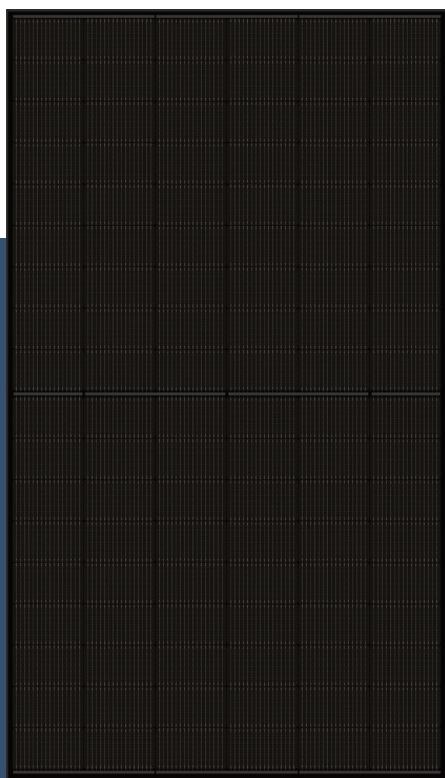


## Bifacial Double Glass Module (Black Pro)

DAS-DH108NE

# 490W~515W



## Key Features



### High Efficiency

Leading module efficiency in industry, up to 23.2%



### Excellent Appearance and Performance

Bifacial solar cell, symmetrical design, low risk of micro-crack



### High Reliability

Passed 3\*IEC standard test, 15 years materials warranty, 30 years power warranty



### Excellent Rear Side Power Generation

Bifaciality is up to 80%, up to 30% more energy yield than conventional modules



### Better low irradiance performance

Higher power output even under low irradiance environments like on cloudy or foggy days



### Extensive Application Scenes

More extensive application scenes, such as BIPV, snow field, vertical installation, high humidity, strong wind and desert region

Maximum  
Power Output

## 515W

Maximum  
Module Efficiency

## 23.2%

Power Output  
Tolerance

## 0~+5W

## Product and Quality Certifications

IEC 61215, IEC 61730

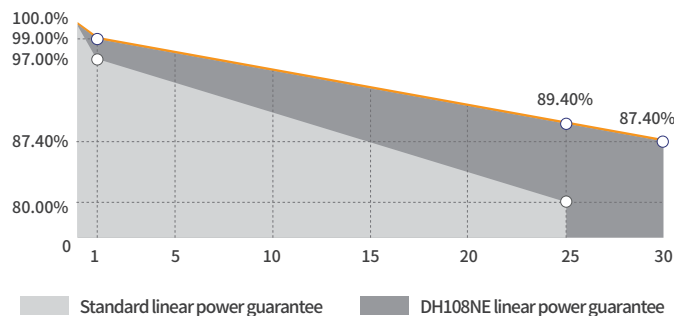
ISO 9001: Quality Management System

ISO 14001: Environment Management System

ISO 45001: Occupational Health and Safety Management System

IEC 62716, IEC 61701: Ammonia, Salt mist corrosion test

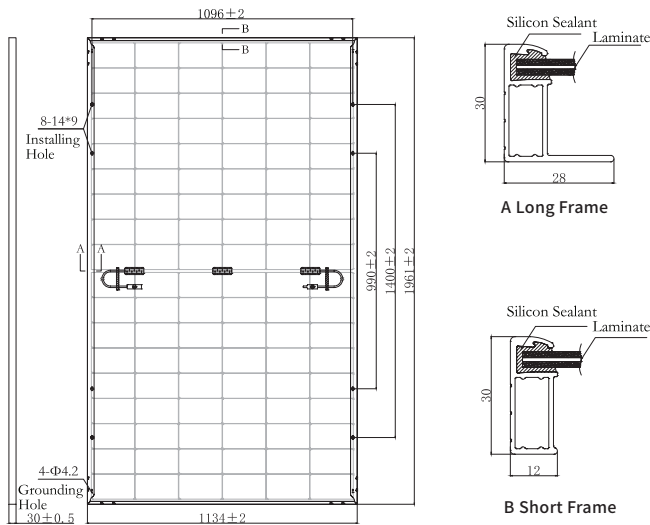
IEC TS 62804-1, IEC 60068-2-68: PID test, Dust and Sand test



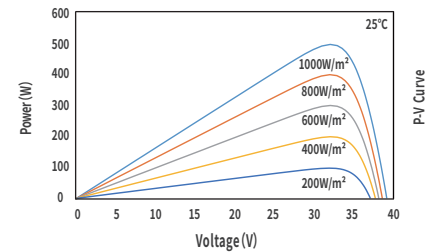
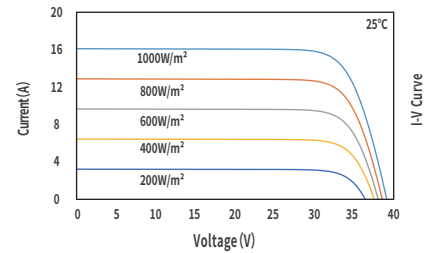
## Leading product and power warranty

-1.00% 1st-year Degradation -0.40% Annual Degradation 15 Materials and workmanship warranty 30 Linear power warranty

## Engineering Drawing (mm )



## Characteristic Curves(500W)



## Electrical Parameters (STC \* )

| Nominal Max. Power(Pmax/W)   | 490   | 495   | 500   | 505   | 510   | 515   |
|------------------------------|-------|-------|-------|-------|-------|-------|
| Open Circuit Voltage(Voc/V)  | 39.33 | 39.52 | 39.70 | 39.88 | 40.08 | 40.26 |
| Short Circuit Current(Isc/A) | 15.91 | 15.98 | 16.05 | 16.11 | 16.17 | 16.22 |
| Operating Voltage(Vmp/V)     | 33.14 | 33.32 | 33.50 | 33.67 | 33.87 | 34.07 |
| Operating Current(Imp/A)     | 14.79 | 14.86 | 14.93 | 15.00 | 15.06 | 15.12 |
| Efficiency(%)                | 22.0  | 22.3  | 22.5  | 22.7  | 22.9  | 23.2  |

STC \* : Irradiance = 1000 W/m<sup>2</sup>, Cell Temperature = 25°C, AM = 1.5  
Test condition is based on the front side

## Mechanical Parameters

| Cell Type       | N Type                                                     |
|-----------------|------------------------------------------------------------|
| Module Size     | 1961×1134×30mm                                             |
| Glass Thickness | 2.0mm + 2.0mm                                              |
| Module Weight   | 27.1Kg                                                     |
| Output Cable    | 4mm <sup>2</sup> , cable length 1200mm (can be customized) |
| Connector       | Original MC4 Series                                        |
| Junction Box    | IP68, 3 bypass diodes                                      |
| Frame           | Anodized aluminium alloy (Black)                           |

## Electrical Parameters (NMOT \* )

| Nominal Max. Power(Pmax/W)   | 373   | 377   | 381   | 385   | 389   | 392   |
|------------------------------|-------|-------|-------|-------|-------|-------|
| Open Circuit Voltage(Voc/V)  | 37.66 | 37.84 | 38.01 | 38.19 | 38.38 | 38.55 |
| Short Circuit Current(Isc/A) | 12.83 | 12.88 | 12.94 | 12.99 | 13.03 | 13.08 |
| Operating Voltage(Vmp/V)     | 31.31 | 31.48 | 31.65 | 31.82 | 32.01 | 32.19 |
| Operating Current(Imp/A)     | 11.92 | 11.98 | 12.04 | 12.09 | 12.14 | 12.19 |

NMOT \*: Irradiance = 800 W/m<sup>2</sup>, Ambient Temperature = 20°C, AM = 1.5,  
Wind Speed = 1 m/s  
Test condition is based on the front side

## Temperature Coefficients

| Short Circuit Current(Isc) | +0.045%/°C |
|----------------------------|------------|
| Open Circuit Voltage(Voc)  | -0.250%/°C |
| Nominal Max. Power(Pmax)   | -0.280%/°C |
| NMOT                       | 42±2°C     |

## Backside Power Gain (For 500W)

| Power Gain                   | 10%   | 15%   | 20%   | 25%   | 30%   |
|------------------------------|-------|-------|-------|-------|-------|
| Nominal Max. Power(Pmax/W)   | 550.0 | 575.0 | 600.0 | 625.0 | 650.0 |
| Open Circuit Voltage(Voc/V)  | 39.70 | 39.70 | 39.80 | 39.80 | 39.80 |
| Short Circuit Current(Isc/A) | 17.66 | 18.46 | 19.26 | 20.06 | 20.87 |
| Operating Voltage(Vmp/V)     | 33.50 | 33.50 | 33.60 | 33.60 | 33.60 |
| Operating Current(Imp/A)     | 16.42 | 17.16 | 17.86 | 18.60 | 19.35 |

## Operating Parameters

| Max. System Voltage     | DC1500V                             |
|-------------------------|-------------------------------------|
| Power Tolerance         | 0 ~ +5 W                            |
| Operating Temperature   | -40°C ~ +85°C                       |
| Max. Fuse Rated Current | 30A                                 |
| Bifaciality             | 80%±5%                              |
| Static Load             | Front 5400Pa, Back 2400Pa           |
| Packing Data            | 36 pcs/Pallet; 180(20GP); 864(40HQ) |