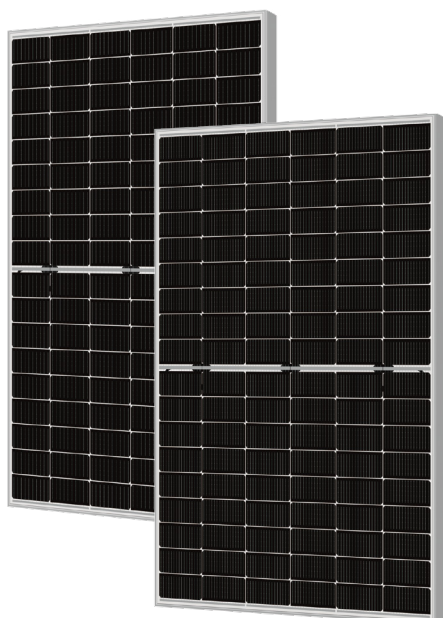


N Type

P Type



## P Type Bifacial Double Glass Module

Module Type: DAS-DH108PA    Module Power: 400W~420W

**420W**

Maximum Power Output

**21.5%**

Maximum Module Efficiency

**0~+5W**

Power Output Tolerance

**-2.00%**

1st-year Degradation

**-0.45%**

Annual Degradation

**15  
YEAR**

Materials and  
workmanship warranty

**30  
YEAR**

Linear power  
warranty

### Product and Quality Certifications

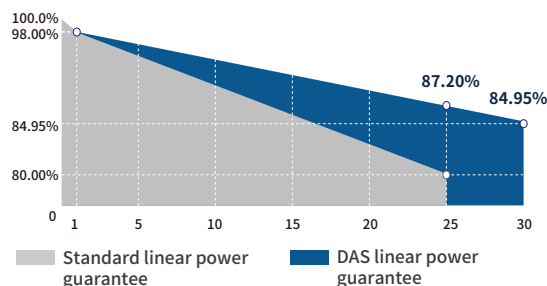
IEC 61215, IEC 61730

ISO 9001: 2015 Quality Management System

ISO 14001: 2015 Environment 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



### Key Features



#### High Efficiency

Module efficiency leading in industry, up to 21.5%



#### Double Sided Power Generation

Bifaciality is up to 70%, up to 25% more energy yield than conventional modules



#### Excellent Appearance and Performance

Both side cell, symmetrical design, low risk of micro-crack



#### Reduce Mismatch Loss

Half-cut cell technology provides optimized energy production under inter-row shading conditions



#### High Reliability

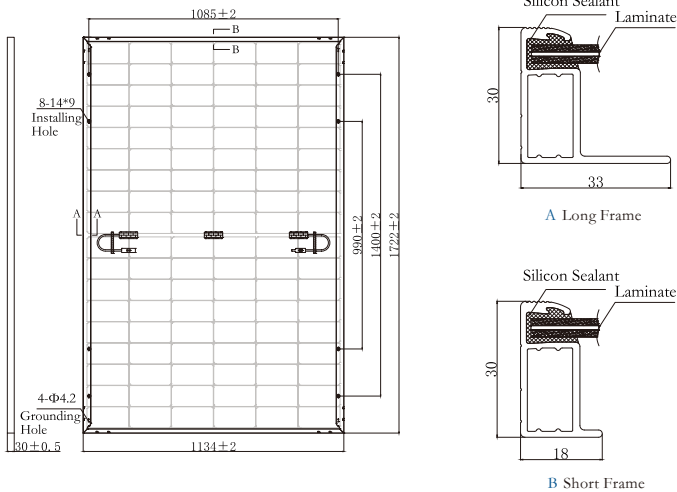
15 years materials warranty, 30 years power warranty



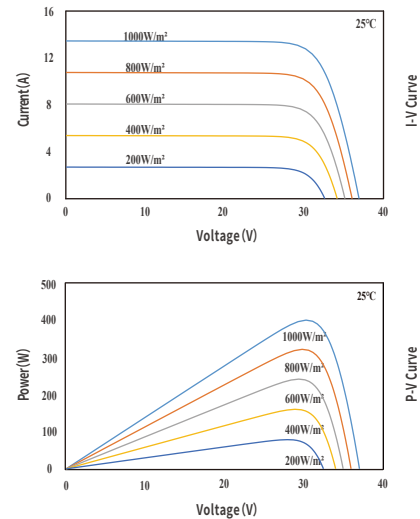
#### Extensive Application Scenes

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

## Engineering Drawing (MM )



## Characteristic Curves(405W)



## Electrical Properties (STC \* )

| Testing Condition            | Front | Front | Front | Front | Front |
|------------------------------|-------|-------|-------|-------|-------|
| Nominal Max. Power(Pmax/W)   | 400   | 405   | 410   | 415   | 420   |
| Open Circuit Voltage(Voc/V)  | 37.21 | 37.38 | 37.55 | 37.71 | 37.87 |
| Short Circuit Current(Isc/A) | 13.67 | 13.76 | 13.85 | 13.94 | 14.03 |
| Operating Voltage(Vmp/V)     | 31.18 | 31.35 | 31.52 | 31.68 | 31.84 |
| Operating Current(Imp/A)     | 12.83 | 12.92 | 13.01 | 13.10 | 13.20 |
| Efficiency(%)                | 20.5  | 20.7  | 21.0  | 21.3  | 21.5  |

STC \* : Irradiance = 1000 W/m<sup>2</sup>, Cell Temperature = 25°C, AM = 1.5

## Electrical Properties (NMOT \* )

| Testing Condition            | Front | Front | Front | Front | Front |
|------------------------------|-------|-------|-------|-------|-------|
| Nominal Max. Power(Pmax/W)   | 294.0 | 297.7 | 301.4 | 305.0 | 308.7 |
| Open Circuit Voltage(Voc/V)  | 34.42 | 34.58 | 34.73 | 34.88 | 35.03 |
| Short Circuit Current(Isc/A) | 11.02 | 11.09 | 11.16 | 11.24 | 11.31 |
| Operating Voltage(Vmp/V)     | 28.65 | 28.79 | 28.95 | 29.10 | 29.23 |
| Operating Current(Imp/A)     | 10.26 | 10.34 | 10.41 | 10.48 | 10.56 |

NMOT \*: Irradiance = 800 W/m<sup>2</sup>, Ambient Temperature = 20°C, AM = 1.5, Wind Speed = 1 m/s

## Back Power Gain (For 400W)

| Power Gain                   | 10%   | 15%   | 20%   | 25%   | 30%   |
|------------------------------|-------|-------|-------|-------|-------|
| Nominal Max. Power(Pmax/W)   | 440.0 | 460.0 | 480.0 | 500.0 | 520.0 |
| Open Circuit Voltage(Voc/V)  | 37.21 | 37.31 | 37.31 | 37.31 | 37.31 |
| Short Circuit Current(Isc/A) | 15.04 | 15.72 | 16.40 | 17.09 | 17.77 |
| Operating Voltage(Vmp/V)     | 31.18 | 31.28 | 31.28 | 31.28 | 31.28 |
| Operating Current(Imp/A)     | 14.11 | 14.71 | 15.35 | 15.98 | 16.62 |

## Mechanical Parameters

|                 |                                                           |
|-----------------|-----------------------------------------------------------|
| Cell Type       | P Type                                                    |
| Module Size     | 1722×1134×30mm                                            |
| Glass Thickness | 2.0mm                                                     |
| Module Weight   | 24.3Kg                                                    |
| Output Cable    | 4mm <sup>2</sup> , cable length 300mm (can be customized) |
| Connector       | MC4 compatible                                            |
| Junction Box    | IP68, 3 bypass diodes                                     |
| Frame           | Anodized aluminium alloy                                  |

## Temperature Coefficients

|                            |            |
|----------------------------|------------|
| Short Circuit Current(Isc) | +0.048%/°C |
| Open Circuit Voltage(Voc)  | -0.260%/°C |
| Nominal Max. Power(Pmax)   | -0.340%/°C |
| NMOT                       | 42±2°C     |

## Operating Parameters

|                         |                                     |
|-------------------------|-------------------------------------|
| Max. System Voltage     | DC1500V                             |
| Power Tolerance         | 0 ~ +5 W                            |
| Operating Temperatue    | -40°C ~ +85°C                       |
| Max. Fuse Rated Current | 30A                                 |
| Front Static Load       | Snow load 5400Pa, Wind load 2400Pa  |
| Packing Data            | 36 pcs/Pallet; 216(20GP); 936(40HQ) |

