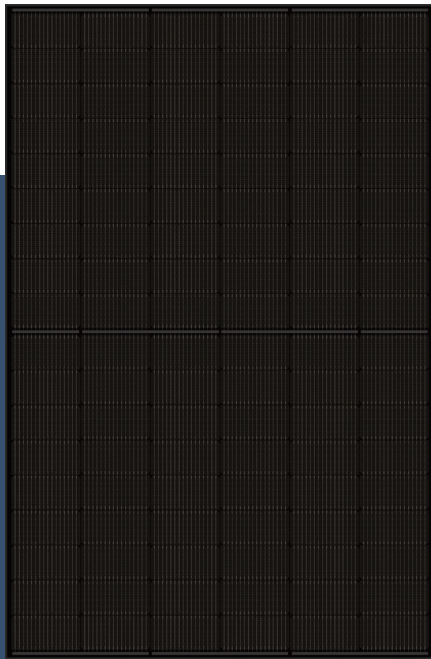


# Bifacial Double Glass Module (Black Pro)

DAS-DH108NA

# 440W



## Key Features



### High Efficiency

Leading module efficiency in industry, up to 22.5%



### Excellent Appearance and Performance

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



### High Reliability

25 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

**440W**

Maximum Module Efficiency

**22.5%**

Ultra-thin Glass

**1.6mm**

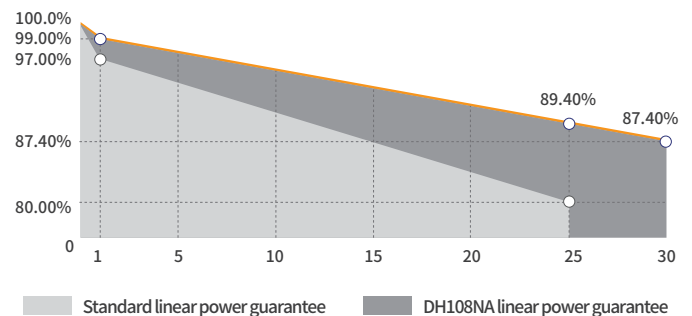
## Product and Quality Certifications

IEC 61215, IEC 61730

ISO 9001: Quality Management System

ISO 14001: Environment Management System

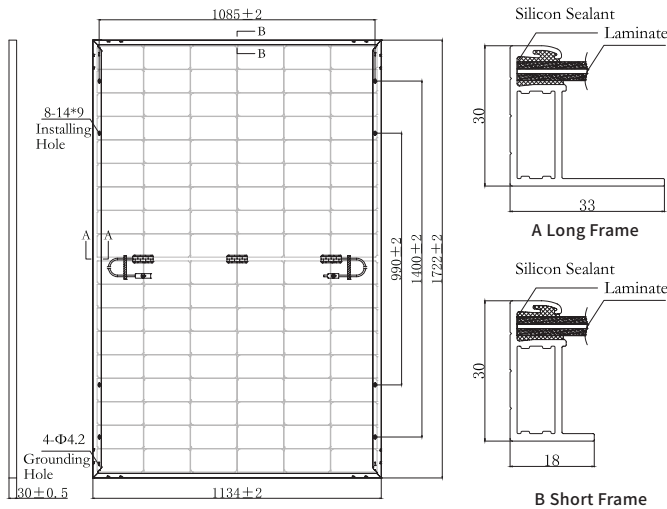
ISO 45001: Occupational Health and Safety Management System



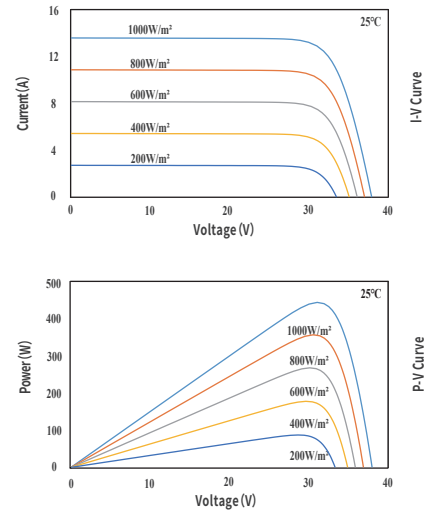
## Leading Product and Power Warranty

**-1.00%** 1st-year Degradation **-0.40%** Annual Degradation **25** Years materials and workmanship warranty **30** Years linear power warranty

## Engineering Drawing (MM)



## Characteristic Curves(440W)



## Electrical Parameters (STC \*)

Nominal Max. Power(Pmax/W)	440
Open Circuit Voltage(Voc/V)	38.88
Short Circuit Current(Isc/A)	13.98
Operating Voltage(Vmp/V)	33.26
Operating Current(Imp/A)	13.23
Efficiency(%)	22.5
Power measurement tolerance(%)	±3

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	1722×1134×30mm
Glass Thickness	1.6mm
Module Weight	20.5Kg
Output Cable	4mm <sup>2</sup> , cable length 1200mm(can be customized)
Connector	See note
Junction Box	IP68, 3 bypass diodes
Frame	Anodized aluminium alloy (Black)

Connector\*: 1.PV-DA01M2-XY 2.PV-ZH202B 3.PV-KST4-EVO2/xy\_UR,PV-KBT4-EVO2/xy\_UR  
4.PV-KST4-EVO2A/xy,PV-KBT4-EVO2A/xy  
5.PV-JK03M2/xy (Plug+Socket);PV-JK03M2/xy (Plug+Socket)

## Electrical Parameters (NMOT \*)

Nominal Max. Power(Pmax/W)	329.0
Open Circuit Voltage(Voc/V)	36.69
Short Circuit Current(Isc/A)	11.27
Operating Voltage(Vmp/V)	31.04
Operating Current(Imp/A)	10.60

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)	-0.300%/°C
NMOT	42±2°C

## Electrical Parameters (BNPI \*)

Nominal Max. Power(Pmax/W)	480
Open Circuit Voltage(Voc/V)	38.88
Short Circuit Current(Isc/A)	15.30
Operating Voltage(Vmp/V)	33.26
Operating Current(Imp/A)	14.49

BNPI \* : front irradiance=1000W/m<sup>2</sup>, rear irradiance=135W/m<sup>2</sup>,  
Cell Temperature = 25°C, AM = 1.5  
Pmax bifaciality coefficient 80±10%, Voc bifaciality coefficient 95±5%  
Isc bifaciality coefficient 80±10%

## Operating Parameters

Max. System Voltage	DC1500V
Power Output Tolerance	±5W
Operating Temperature	-40°C ~ +85°C
Max. Fuse Rated Current	30A
Fire Safety Class	Class C
Static Load	Front 5400Pa , Back 2400Pa
Packing Data	36 pcs/Pallet; 216(20GP); 936(40HQ)