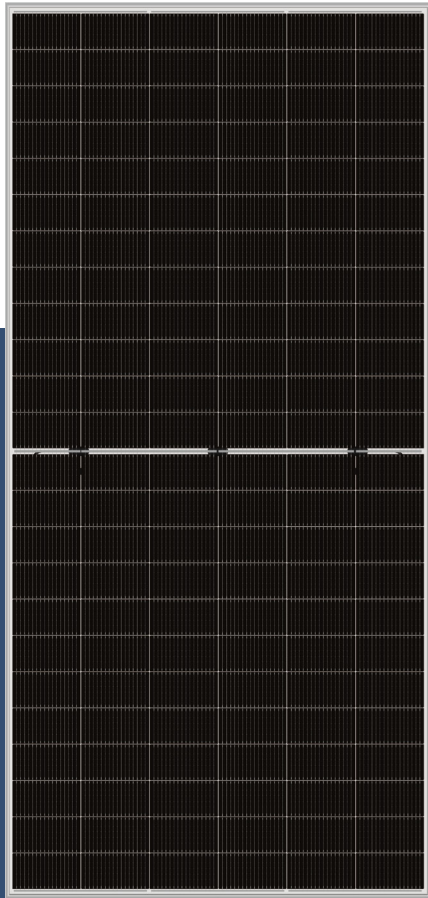


Bifacial Double Glass Module DAS-DH144ND

595W~620W



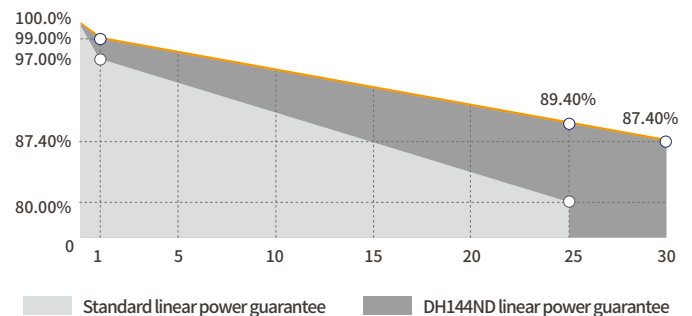
Key Features

- High Efficiency**
 Leading module efficiency in industry, up to 23.0%
- 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	Maximum Module Efficiency	Power Output Tolerance
620W	23.0%	0~+5W

Product and Quality Certifications

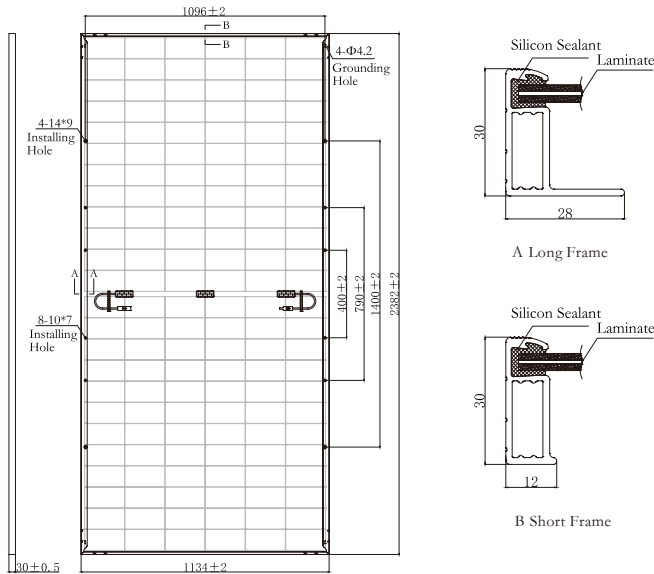
- IEC 61215, IEC 61730
- ISO 9001: Quality Management System
- ISO 14001: Environment Management System
- ISO 45001: Occupational Health and Safety Management System
- IEC 62716, IEC 61701: Ammonia, Salt mist corrosion test
- IEC TS 62804-1, IEC 60068-2-68: PID test, Dust and Sand test



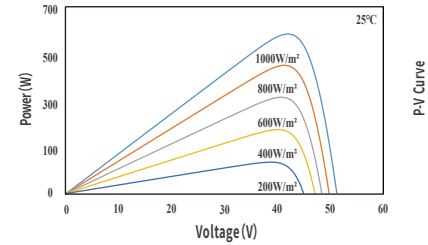
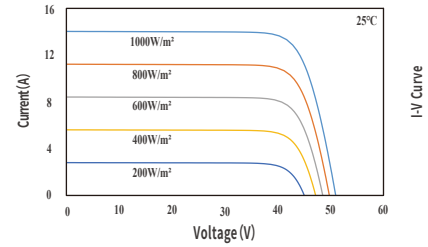
Leading product and power warranty

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

Engineering Drawing (mm)



Characteristic Curves(610W)



Electrical Parameters (STC *)

Nominal Max. Power(Pmax/W)	595	600	605	610	615	620
Open Circuit Voltage(Voc/V)	51.92	52.10	52.28	52.46	52.64	52.82
Short Circuit Current(Isc/A)	14.64	14.70	14.76	14.82	14.89	14.95
Operating Voltage(Vmp/V)	42.72	42.92	43.13	43.33	43.53	43.73
Operating Current(Imp/A)	13.93	13.98	14.03	14.08	14.13	14.18
Efficiency(%)	22.0	22.2	22.4	22.6	22.8	23.0

STC *: Irradiance = 1000 W/m², Cell Temperature = 25°C, AM = 1.5
Test condition is based on the front side

Mechanical Parameters

Cell Type	N Type
Module Size	2382×1134×30mm
Glass Thickness	2.0mm
Module Weight	33.5Kg
Output Cable	4mm ² , cable length +400mm/-200mm (can be customized)
Connector	MC4 compatible
Junction Box	IP68, 3 bypass diodes
Frame	Anodized aluminium alloy

Electrical Parameters (NMOT *)

Nominal Max. Power(Pmax/W)	453	457	461	465	469	472
Open Circuit Voltage(Voc/V)	49.71	49.89	50.06	50.23	50.40	50.58
Short Circuit Current(Isc/A)	11.80	11.85	11.90	11.95	12.00	12.05
Operating Voltage(Vmp/V)	40.37	40.57	40.76	40.95	41.14	41.33
Operating Current(Imp/A)	11.23	11.27	11.31	11.35	11.39	11.43

NMOT *: Irradiance = 800 W/m², 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 610W)

Power Gain	10%	15%	20%	25%	30%
Nominal Max. Power(Pmax/W)	671.0	701.5	732.0	762.5	793.0
Open Circuit Voltage(Voc/V)	52.46	52.46	52.56	52.56	52.56
Short Circuit Current(Isc/A)	16.30	17.04	17.78	18.53	19.27
Operating Voltage(Vmp/V)	43.33	43.33	43.43	43.43	43.43
Operating Current(Imp/A)	15.49	16.19	16.85	17.56	18.26

Operating Parameters

Max. System Voltage	DC1500V
Power Tolerance	0 ~ +5 W
Operating Temperature	-40°C ~ +85°C
Max. Fuse Rated Current	30A
Front Static Load	Snow load 5400Pa, Wind load 2400Pa
Packing Data	36 pcs/Pallet; 144(20GP); 720(40HQ)

