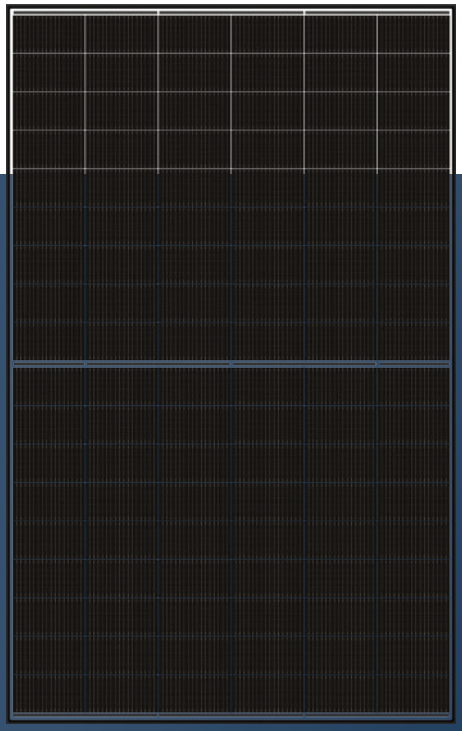
DASOLAR

TIER 1 Bloomberg NEW ENERGY FINANCE

N Type

Bifacial Double Glass Module (Black Thru)
Made In China
DAS-DH108ND

440W~460W



Maximum Power Output	Maximum Module Efficiency	Power Output Tolerance
460W	22.3%	0~+5W

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

Product and Quality Certifications

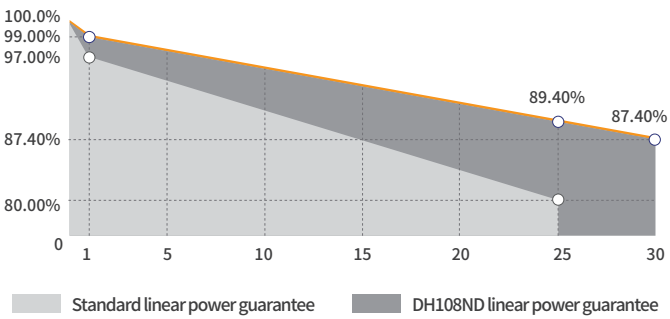
IEC 61215, IEC 61730

ISO 9001：Quality Management System

ISO 14001：Environment Management System

ISO 45001：Occupational Health and Safety Management System

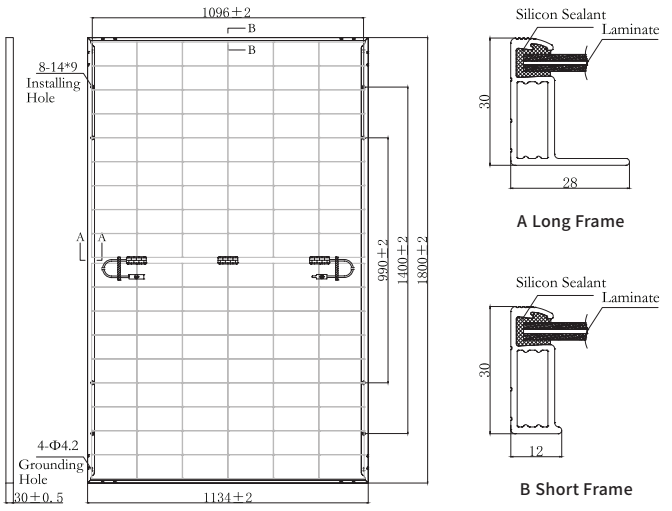
CE



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

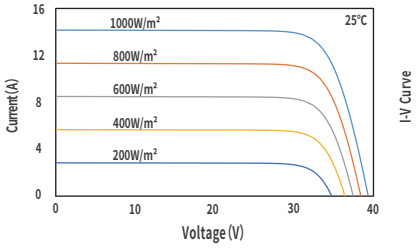
Engineering Drawing (MM)

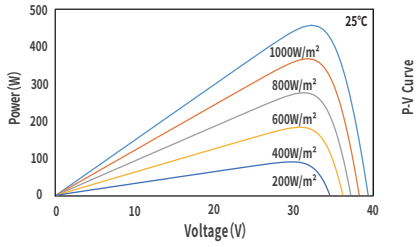


A Long Frame

B Short Frame

Characteristic Curves(455W)





Electrical Parameters (STC *)

Nominal Max. Power(Pmax/W)	440	445	450	455	460
Open Circuit Voltage(Voc/V)	38.82	39.00	39.18	39.36	39.54
Short Circuit Current(Isc/A)	14.58	14.63	14.68	14.73	14.79
Operating Voltage(Vmp/V)	32.10	32.28	32.47	32.65	32.84
Operating Current(Imp/A)	13.71	13.79	13.86	13.94	14.01
Efficiency(%)	21.6	21.8	22.0	22.3	22.5

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	1800×1134×30mm
Glass Thickness	1.6mm
Module Weight	21.7Kg
Output Cable	4mm², cable length 1200mm
Connector	See note
Junction Box	IP68, 3 bypass diodes
Frame	Anodized aluminium alloy（Black）

Connector*: 1.QC4.10-cd ,2.PV-KST4-EVO2/xy_UR (male),PV-KBT4-EVO2/xy_UR(female)
3.PV-ZH202B,4.YC4,5.QC4.10-cds,6.PV-TT02,7.PV-JK03M2/xy(Plug+Socket)
8.PV2e,9.PV-DA01M2-XY,10.UTXCFabcde/ UTXCMabcde,
11.PV-KST4-EVO2A/xy,PV-KBT4-EVO2A/xy.

Electrical Parameters (NMOT *)

Nominal Max. Power(Pmax/W)	335	339	343	347	350
Open Circuit Voltage(Voc/V)	37.17	37.34	37.51	37.69	37.86
Short Circuit Current(Isc/A)	11.75	11.79	11.83	11.87	11.92
Operating Voltage(Vmp/V)	30.33	30.50	30.69	30.85	31.03
Operating Current(Imp/A)	11.05	11.12	11.17	11.24	11.29

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

Fire Safety Class：Class C

Backside Power Gain（For 455W）

Power Gain	10%	15%	20%	25%	30%
Nominal Max. Power(Pmax/W)	501	523	546	569	592
Open Circuit Voltage(Voc/V)	39.36	39.36	39.46	39.46	39.46
Short Circuit Current(Isc/A)	16.20	16.94	17.68	18.41	19.15
Operating Voltage(Vmp/V)	32.65	32.65	32.75	32.75	32.75
Operating Current(Imp/A)	15.33	16.03	16.67	17.37	18.06

Operating Parameters

Max. System Voltage	DC1500V
Power Measurement Tolerance	±3%
Operating Temperature	-40°C ~ +85°C
Max. Fuse Rated Current	30A
Designed Mechanical Load	Positive 3600Pa , Negative 1600Pa
Packing Data	36 pcs/Pallet；216(20GP)；936(40HQ)

Version number:2024.01.09

das solar