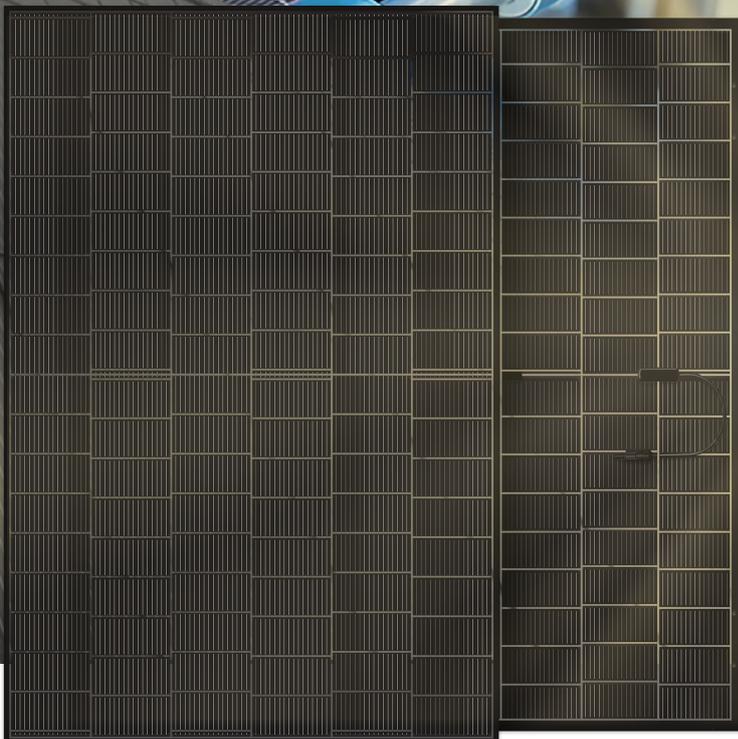


445-455W

NORD EcoSeries DAS-DH108ND

SEE-THROUGH

Bifacial module with double glass and transparent foil



Blackframe NORD EcoSeries SEE-THROUGH Module ▶



SEE-THROUGH TECHNOLOGY

The see-through technology of the PV module allows daylight to shine through the module thanks to transparent foil. This unique design element offers many possibilities, it can be used for residential applications, for example a terrace, or also in commercial applications such as hall roofing. Anywhere, with natural daylight.



N-TYPE TOPCON TECHNOLOGY FOR LOWER LCOE

The lower temperature coefficient and better low irradiance performance of Topcon technology can effectively reduce LCOE.



30-YEARS POWER WARRANTY

The longest lifespan with dual-glass technology, lasts through generations.



DOUBLE-SIDED POWER GENERATION, HIGHER INCOME

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



TIER 1 MANUFACTURER

PV modules are manufactured under strict control on the manufacturer's Tier 1 production lines DAS-Solar.

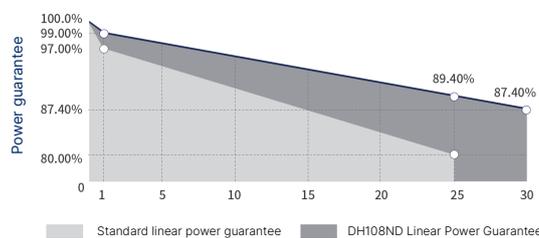
LINEAR PERFORMANCE WARRANTY

25 years

Product warranty on materials and workmanship

30 years

Linear power output warranty



CERTIFICATES

ISO 9001: 2015
Quality Management System

IEC EN 61215 / IEC EN 61730

ISO 14001: 2015
Environmental Management System





ELECTRICAL PARAMETERS AT STC

Max. Power Output Pmax (W)	445	450	455
Power Tolerance	0~+3%	0~+3%	0~+3%
Max. Power Voltage Vmp (V)	32.28	32.47	32.65
Max. Power Current Imp (A)	13.79	13.86	13.94
Open circuit Voltage Voc (V)	39.00	39.18	39.36
Short Circuit Current Isc (A)	14.63	14.68	14.73
Module Efficiency (%)	21.8	22.0	22.3

*STC (Standard Test Condition): Irradiance 1000W/m², Cell Temperature 25°C, Air Mass 1.5
 *Measurement Tolerance (±3.0%)

BACKSIDE POWER GAIN (For 450W)

Power Gains	10%	15%
Max. Power Output Pmax (W)	495	518
Max. Power Voltage Vmp (V)	39.18	39.18
Max. Power Current Imp (A)	15.24	15.94
Open circuit Voltage Voc (V)	32.47	32.47
Short Circuit Current Isc (A)	16.15	16.88

TEMPERATURE COEFFICIENTS

Temperature Coefficients of Pmp	-0.28%/°C
Temperature Coefficients of Voc	-0.25%/°C
Temperature Coefficients of Isc	+0.045%/°C

MECHANICAL PARAMETERS

Cell Type	N Type
Number of Cells	108pcs (6×18)
Dimensions (L*W*H)	1800×1134×30mm
Weight	21.7kg
Frame	Anodised Aluminum, blackframe
Junction Box	IP68, 3 bypass diodes
Cable / Length	Original MC4 connectors 4.0mm ² / 1200mm
Transparent Glass	2×1.6 mm, anti-reflective tempered

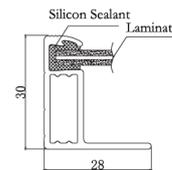
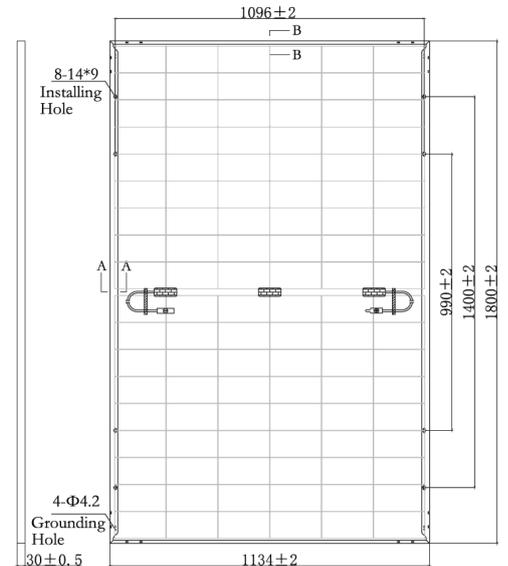
OPERATING CONDITION

Maximum System Voltage (V)	1500 (DC)
Operating Temperature (°C)	-40~+85
Max. Wind Load / Snow Load (Pa)	2400/5400
Max. Series Fuse Rating (A)	30
Fire Rating	Class C (according to UL790)
Bifaciality	80±5%
NOCT	45°C

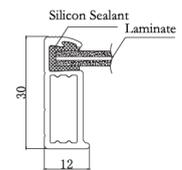
PACKAGE INFORMATION

Container 40'HQ	936pcs
Quantity / Pallet	36pcs
Package size / Net weight / Gross weight	1846×1125×1252mm / 882kg / 924kg

ASSEMBLY DRAWING (Unit: mm)



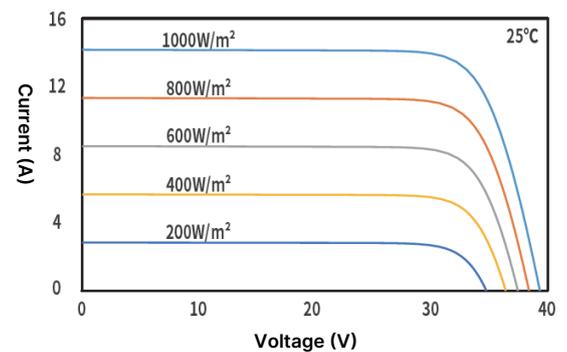
A Long Frame



B Short Frame

I-V CURVES

Test temperature 25 °C



Radiation intensity: AM 1.5, 1000W/m²

