Dual Glass N-Type Panel

AUSGEM

Obsidian

Designed to last

Obsidian Series

AG-OS-144N-455/460/465/470

N-type High Efficiency Mono Black Silicon Half-Cell Double Glass Module

Electrical Properties | STC*

Testing Condition	Front Side	Front Side	Front Side	Front Side
Peak Power (Pmax) (W)	455	460	465	470
MPP Voltage (Vmp) (V)	41.8	42.0	42.2	42.4
MPP Current (Imp) (A)	10.89	10.96	11.02	11.09
Open Circuit Voltage (Voc) (V)	50.2	50.4	50.6	50.8
Short Circuit Current (Isc) (A)	11.50	11.56	11.62	11.69
Module Efficiency (%)	20.90	21.13	21.36	21.59

*STC: Irradiance 1000 W/m², Cell Temperature 25°C, AM1.5
The data above is for reference only and the actual data is in accordance with the pratical testing
Power Measurement Tolerance ±3%

Electrical Properties | NOCT*

Testing Condition	Front Side	Front Side	Front Side	Front Side
Peak Power (Pmax) (W)	344	348	352	356
MPP Voltage (Vmp) (V)	39.2	39.4	39.6	39.8
MPP Current (Imp) (A)	8.78	8.84	8.88	8.94
Open Circuit Voltage (Voc) (V)	48.0	48.2	48.4	48.6
Short Circuit Current (Isc) (A)	9.27	9.32	9.37	9.43

*NOCT: Irradiance at 800 W/m², Ambient Temperature 20°C, Wind Speed 1 m/s

Operating Properties

Operating Temperature (℃)	-40℃~+85℃
Maximum System Voltage (V)	1500V (IEC)
Maximum Series Fuse Rating(A)	25
Power Tolerance	0~+5W
Bifaciality*	75%
Fire class	A

*Bifaciality=Pmaxrear (STC) /Pmaxfront (STC) , Bifaciality tolerance:±5%

Temperature Coefficient

Temperature Coefficient of Pmax*	-0.320%/℃
Temperature Coefficient of Voc	-0.260%/℃
Temperature Coefficient of Isc	+0.046%/℃
Nominal Operating Cell Temperature (NOCT)	42±2℃

*Temperature Coefficient of Pmax±0.03%/

Mechanical Properties

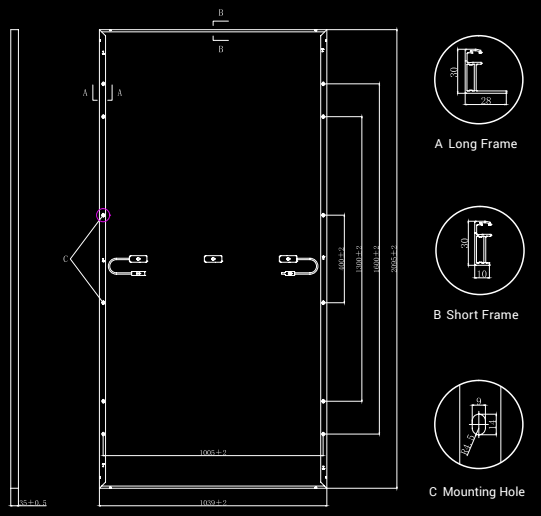
Cell Type	166.00mm*83.00mm
Number of Cells	144pcs(12*12)
Dimension	2095mm*1039mm*30mm
Weight	28kg
Front /Rear Glass*	2.0mm/2.0mm
Frame	Anodized Aluminium
Junction Box	IP68 (3 diodes)
Length of Cable*	4.0mm², 300mm
Connector	QC Solar QC4.10-cd / Staubli EVO2

*Heat strengthened glass
*Cable length can be cus tomized

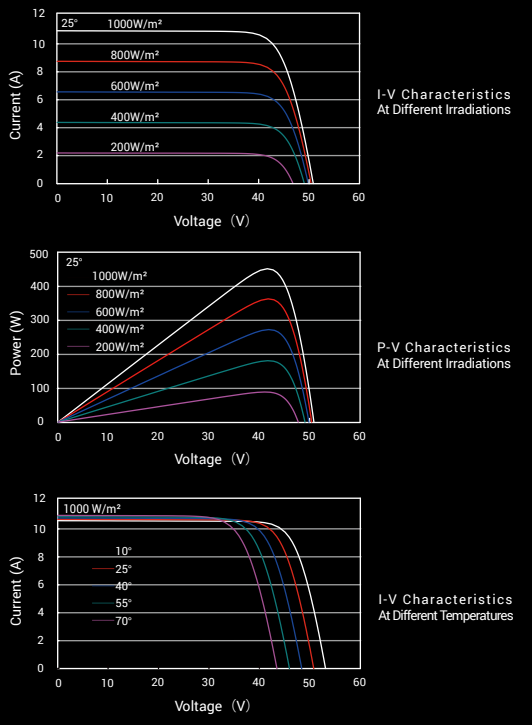
With Different Power Generation Gain (regarding 460W as an example)

Power Gain (%)	Peak Power (Pmax) (W)	MPP Voltage (Vmp) (V)	MPP Current (Imp) (A)	Open Circuit Voltage (Voc) (V)	Short Circuit Current (Isc) (A)
10	495	42.0	11.77	50.4	12.40
15	512	42.0	12.18	50.4	12.83
20	529	42.0	12.58	50.4	13.25
25	546	42.1	12.99	50.5	13.67
30	564	42.1	13.39	50.5	14.09

Engineering Drawing (unit：mm)



Characteristic Curves | HD144N-460



Packaging Configuration

Packing Type	20'GP	40'GP	40'HQ
Piece/Pallet		36	
Pallet/Container	5	11	22
Piece/Container	180	396	792

*The specification and key features described in this datasheet may deviate slightly and are not guaranteed. Due to ongoing innovation, R&D enhancement, Ausgem reserves the right to make any adjustment to the information described herein at any time without notice. Please always obtain the most recent version of the datasheet which shall be duly incorporated into the binding contract made by the parties governing all transactions related to the purchase and sale of the products described herein.

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