

Dual Glass N-Type Panel

# AUSGEM



## Obsidian

Designed to last



# Obsidian Series

AG-OS-144N-550/560/570

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	Front Side
Peak Power (Pmax) (W)	550	555	560	565	570
MPP Voltage (Vmp) (V)	42.0	42.2	42.4	42.6	42.8
MPP Current (Imp) (A)	13.10	13.16	13.21	13.27	13.32
Open Circuit Voltage (Voc) (V)	50.2	50.4	50.6	50.8	51.0
Short Circuit Current (Isc) (A)	13.87	13.93	13.99	14.05	14.11
Module Efficiency (%)	21.23	21.42	21.61	21.80	22.00

\*STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, AM1.5  
The data above is for reference only and the actual data is in accordance with the practical testing  
Power Measurement Tolerance ±3%

Electrical Properties	NOCT*				
Testing Condition	Front Side	Front Side	Front Side	Front Side	Front Side
Peak Power (Pmax) (W)	416	420	424	427	431
MPP Voltage (Vmp) (V)	39.4	39.6	39.8	39.9	40.2
MPP Current (Imp) (A)	10.56	10.61	10.65	10.70	10.74
Open Circuit Voltage (Voc) (V)	48.0	48.2	48.4	48.6	48.7
Short Circuit Current (Isc) (A)	11.18	11.23	11.28	11.33	11.38

\*NOCT: Irradiance at 800 W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1 m/s

Operating Properties	
Operating Temperature (°C)	-40°C~+85°C
Maximum System Voltage (V)	1500V (IEC)
Maximum Series Fuse Rating(A)	30
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%/°C
Temperature Coefficient of Voc	-0.260%/°C
Temperature Coefficient of Isc	+0.046%/°C
Nominal Operating Cell Temperature (NOCT)	42±2°C

\*Temperature Coefficient of Pmax:0.03%/

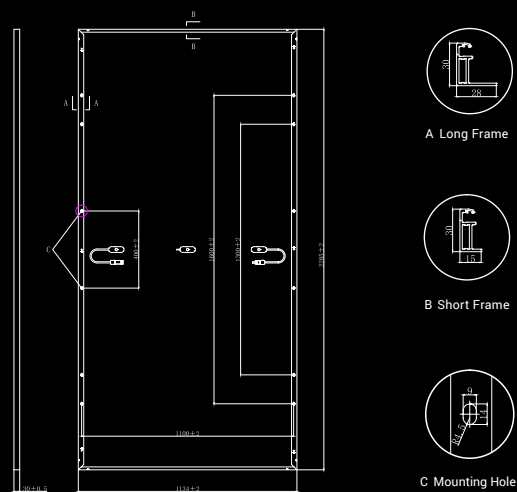
Mechanical Properties	
Cell Type	182.00mm*91.00mm
Number of Cells	144pcs(12*12)
Dimension	2285mm*1134mm*30mm
Weight	32.5kg
Front /Rear Glass*	2.0mm/2.0mm
Frame	Anodized Aluminium
Junction Box	IP68 (3 diodes)
Length of Cable*	4.0mm <sup>2</sup> , 300mm

Connector QC Solar QC4.10-cd / Staubli EVO2

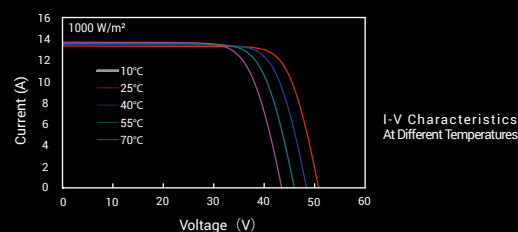
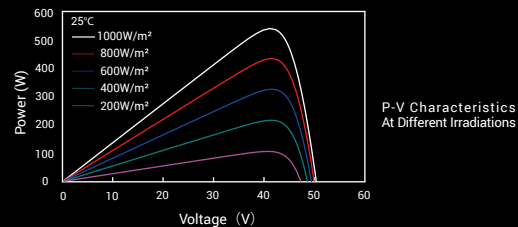
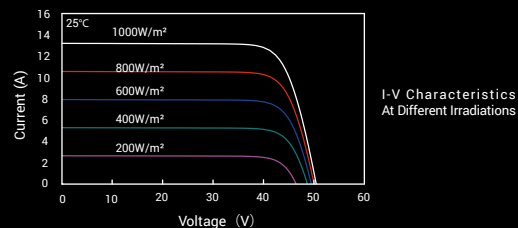
\*Heat strengthened glass  
\*Cable length can be customized

With Different Power Generation Gain (regarding 545W 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	589	41.8	14.07	50.0	14.90
15	610	41.9	14.59	50.1	15.45
20	632	41.9	15.10	50.1	15.99
25	654	41.9	15.62	50.1	16.54
30	676	41.9	16.13	50.1	17.08

## Engineering Drawing (unit : mm)



## Characteristic Curves | HD1 44N-545



## Packaging Configuration

Packing Type	20'GP	40'GP	40'HQ
Piece/Pallet	35		
Pallet/Container	5	10	20
Piece/Container	175	350	700

\*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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Manufactured in China

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