

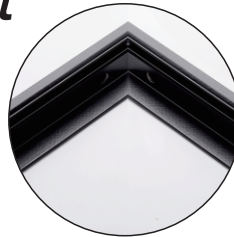
Black Jade^{Flow} series

Double Glass BiFacial N-Type TOPCon Solar Module

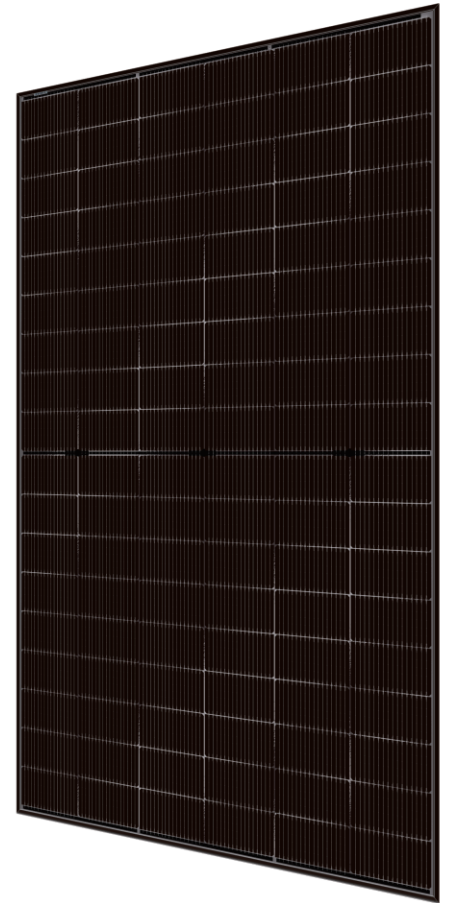
480~505Watt

Model: UL-***M-108DDGN

Maximum Efficiency: **22.71%**



Polyurethane Frame
The color can be customized



Widely Applied To Various Scenarios

It has a wide range of applicable scenarios. Its excellent salt spray resistance and chemical corrosion resistance make it more suitable for offshore and chemical plants, Such as highly corrosive environments



No PID-s

The module frame does not need to be grounded, No PID-s influence



Lower LCOE

No grounding required, low frame cost, Lower BOS costs



Longer Term Reliability

Passed the IEC63209-1:2021 standard test (With testing standards 2 to 3 times stricter than regular IEC requirements)



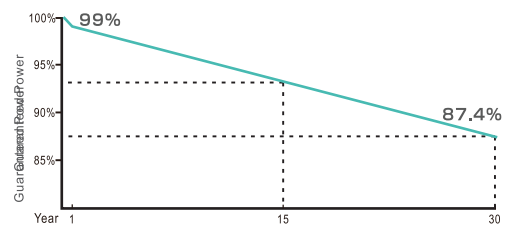
Outstanding Mechanical load Resistance

2mm+2mm front and back sides tempered glass, sturdy and durable, resistant to hail impact, with a snow load of 5400Pa and a wind load of 2400Pa



Bifacial Mono Module

Capable of generating power at back side, 80±5% efficiency of the front side



15 Year Product Warranty **1%** Power Degradation In The First Year

30 Year Linear Power Warranty **0.4%** Linear Power Degradation

IEC 61215, IEC 61730

ISO 9001: 2015(Quality management systems)

ISO 14001: 2015 (Environmental management systems)

ISO45001: 2018 (Occupational health and safety)

UNI 9177 Fire Test: Class 1



CEC Listed



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ELECTRICAL SPECIFICATIONS

Module Type	UL-480M-108DDGN		UL-485M-108DDGN		UL-490M-108DDGN		UL-495M-108DDGN		UL-500M-108DDGN		UL-505M-108DDGN		
	STC*	NOCT*	STC*	NOCT*	STC*	NOCT*	STC*	NOCT*	STC*	NOCT*	STC*	NOCT*	
Maximum Power(Pmax)	W	480	364	485	368	490	371	495	375	500	379	505	383
Maximum Power Voltage(Vmp)	V	32.64	30.03	32.72	30.10	32.87	30.24	33.02	30.38	33.17	30.52	33.32	30.65
Maximum Power Current(Imp)	A	14.71	12.11	14.83	11.21	14.91	12.28	14.99	12.35	15.08	12.42	15.16	12.48
Open-circuit Current(Voc)	V	39.17	35.64	39.34	35.80	39.50	35.95	39.67	36.10	39.83	36.25	39.99	36.39
Short-circuit Current(Isc)	A	15.72	12.68	15.78	12.73	15.84	12.78	15.90	12.83	15.96	12.87	16.02	12.92
Module Efficiency STC	%	21.58		21.81		22.03		22.26		22.48		22.71	

*STC:Cell temperature:25°C,Irradiance:1000W/m²,Ari mass:1.5G,Power measurement tolerance: ±3%
 *NOCT:Air temperature:20°C,Irradiance:1000W/m²,Ari mass:1.5G,Wind speed:1m/s

OPERATING PARAMETERS

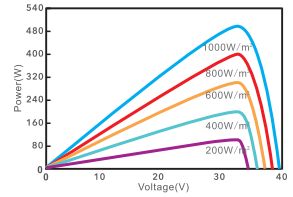
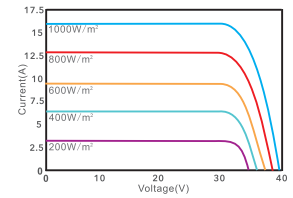
Operating Temperature	-40°C~85°C
Maximum system voltage	DC1500V(IEC)
Maximum series fuse rating	30A
Nominal operating cell temperature	43±2°C
Power tolerance	0~+5Watt

TEMPERATURE RATINGS

Temperature coefficients of Pmax	-0.29%/°C
Temperature coefficients of Voc	-0.25%/°C
Temperature coefficients of Isc	0.046%/°C

I-V CURVE

I-V characteristics at different irradiances (reference to 500 W)

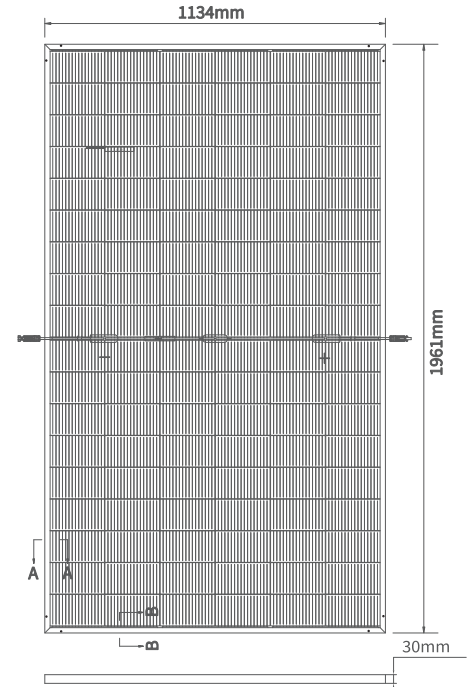


REAR SIDE POWER GAIN(REFERENCE TO 500W FRONT SIDE)

Pmax/W	500	525	550	575	600	625	650
Pmax gain	0%	5%	10%	15%	20%	25%	30%
Voc/V	39.83	39.83	39.83	39.83	39.83	39.83	39.83
Isc/A	15.96	16.76	17.56	18.35	19.15	19.95	20.75
Vmp/V	33.17	33.17	33.17	33.17	33.17	33.17	33.17
Imp/A	15.08	15.83	16.59	17.34	18.10	18.85	19.60

SPECIFICATIONS

Cell Type	N-type TOPCon Mono Half Cell	
No.of cells	108(6×9×2)	
Dimensions	1961*1134*30mm	
Weight	27.0kg	
Front Glass	2.0mm,Anti-Reflection Coating,High Transmission,Low Iron,Tempered Glass	
Back Glass	2.0mm,High Transmission,Low Iron,Tempered Glass	
Frame	Polyurethane Frame	
Junction Box	IP68,3diodes	
Connector	MC4 Compatible:PV-UL608 or others _____	Original:MC4-EVO2
Cable Length (Including Connector)	4mm² Short Cable:(+)400/(-)200mm or Long Cable:(+)1200/(-)1200mm or Customized Length _____	



PACKAGING INFORMATION



37 Pcs/Pallet



74 Pcs/Stack



Length:1975mm



Width:1140mm



Height:2550mm



Weight:2066kg/Stack



12 Stack/40HQ
888Pcs/40HQ



A-A



B-B

Length:±2mm
Width:±2mm
Height:±1mm
Row Pitch:±2mm



Specifications included in this datasheet are subject to change without notice.

Ulica Solar reserves the right of final interpretation.

Version number: FH-UL-1961-108DDGNTH-30-EN-V1.0