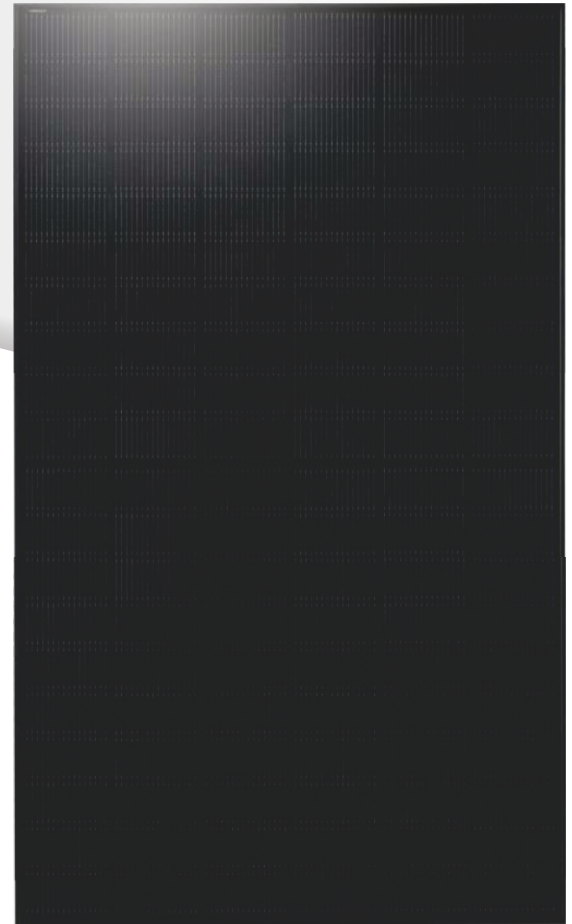
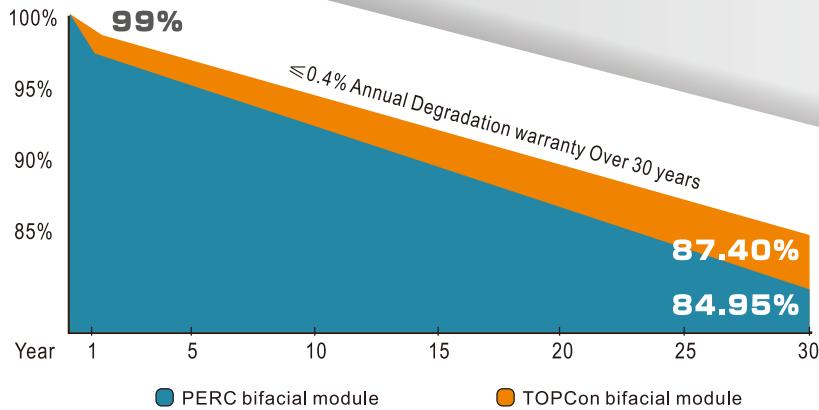


# Black Jade Series

## DOUBLE-GLASS BIFACIAL N-TYPE MODULE

### 490~500 W



**Cutting Free Technology**  
Minimized micro-crack



**Bifacial Mono Module**  
Capable of generating power at back side, at least 80% efficiency of the front side



**Anti-PID (potential induced degradation)**  
Passed anti-PID test under 85% damp heat 85% relative humidity for 192 hours



**Higher Power Output**  
Lower shading and resistive loss



**Outstanding mechanical load resistance**  
2400 Pa wind load, 5400 Pa snow load



**15** 15-year product warranty  
**30** 30-year linear power output



CEC Listed



IEC 61215, IEC 61730

ISO 9001: 2015 (Quality management systems)

ISO 14001: 2015 (Environmental management systems)

ISO 45001: 2018 (Occupational health and safety)

UNI 9177 Ia CLASSE DI REAZIONE AL FUOCO:1

Add: No.238 Yunlin Middle Road, Wangchun Industrial District, Ningbo, China

Tel: +86-574-28828939

Email: sales@ulsolar.com.cn

Fax: +86-574-28828997

Web: www.ulicasolar.com



# TOPCon(N TYPE) 490~500Watt



## ELECTRICAL SPECIFICATIONS

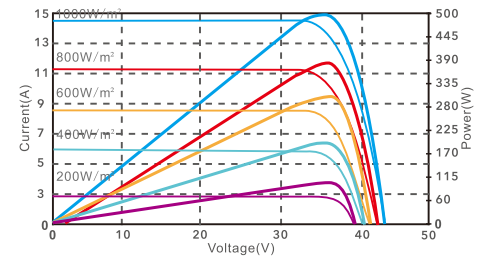
Module Type	UL-490M-120BDGN		UL-495M-120BDGN		UL-500M-120BDGN		
	STC*	NOCT*	STC*	NOCT*	STC*	NOCT*	
Maximum Power (Pmax)	W	490	371	495	375	500	379
Maximum Power Voltage (Vmp)	V	36.68	33.75	36.85	33.90	37.02	34.06
Maximum Power Current (Imp)	A	13.36	11.00	13.43	11.06	13.51	11.13
Open-circuit Voltage (Voc)	V	43.35	39.45	43.52	39.60	43.78	39.84
Short-circuit Current (Isc)	A	14.35	11.58	14.43	11.64	14.48	11.68
Module Efficiency STC	%	22.14		22.36		22.59	
Operating Temperature	-40°C~85°C						
Maximum system voltage	DC1500V(IEC)						
Maximum series fuse rating	30A						
Power tolerance	0~+5Watt						
Temperature coefficients of Pmax	-0.29%/°C						
Temperature coefficients of Voc	-0.25%/°C						
Temperature coefficients of Isc	0.046%/°C						
Nominal operating cell temperature (NOCT)	43±2°C						

\*STC : Cell temperature: 25°C, Irradiance: 1000 W/m², Air mass: 1.5G

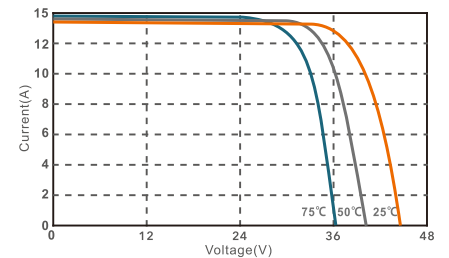
\*NOCT : Air temperature: 20°C, Irradiance: 800 W/m², Air mass: 1.5G, Wind speed: 1 m/s

## I-V CURVE[500W]

I-V characteristics at different irradiances

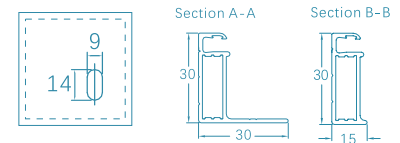
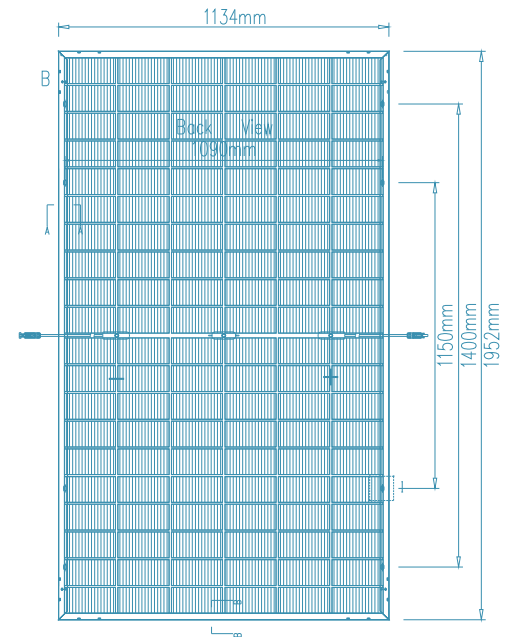


I-V characteristics at different temperature



## SPECIFICATIONS

Cell Type	N type Mono-crystalline
No. of cells	120(6×10×2)
Dimensions	1952*1134*30mm
Weight	26.5kg
Glass	2.0mm+2.0mm, Anti-Reflection Coating, High Transmission, Low Iron, Tempered Glass
Junction Box	IP68, 3 diodes
Connector	MC4 Compatible
Cable Length (Including Connector)	Portrait: (+)400/(-)200mm Landscape: (+)1200/(-)1200mm
Packaging Configuration	Two Box=One Pallet 36pcs/Box, 72pcs/Pallet, 864pcs/40HQ Container



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

### Electrical characteristics with different rear side power gain (reference to 500 W front)

Pmax/W	Voc/V	Isc/A	Vmp/V	Imp/A	Pmax gain
500	43.78	14.48	37.02	13.51	0
525	43.78	15.20	37.02	14.18	5%
550	43.78	15.93	37.02	14.86	10%
575	43.78	16.65	37.02	15.53	15%
600	43.78	17.38	37.02	16.21	20%
625	43.78	18.10	37.02	16.88	25%
650	43.78	18.82	37.02	17.56	30%

