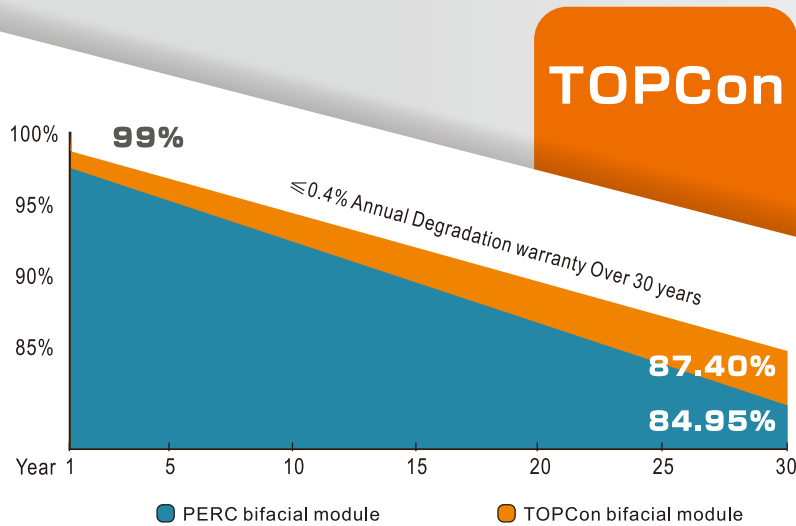


# DOUBLE-GLASS BIFACIAL N-TYPE 600~615 Watt



### 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



### Great Durability against extreme conditions

Passed salt mist corrosion test, ammonia corrosion test dust & sand test, fire test, all certified by TÜV



### Lower LCOE

Lower shading and resistive loss  
Lower temperature coefficient



### Outstanding mechanical load resistance

2400 Pa wind load, 5400 Pa snow load



15-year product warranty

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



# TOPCon(N TYPE) 600~615Watt



## ELECTRICAL SPECIFICATIONS

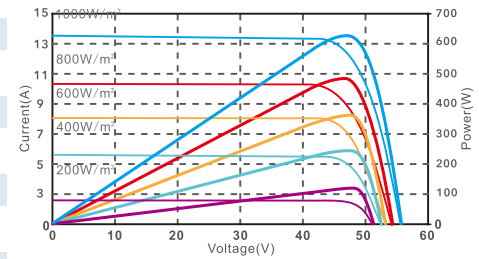
Module Type	UL-600M-156ADGN		UL-605M-156ADGN		UL-610M-156ADGN		UL-615M-156ADGN		
	STC*	NOCT*	STC*	NOCT*	STC*	NOCT*	STC*	NOCT*	
Maximum Power (Pmax)	W	600	455	605	458	610	462	615	466
Maximum Power Voltage (Vmp)	V	47.93	44.10	48.10	44.25	48.26	44.42	48.40	44.53
Maximum Power Current (Imp)	A	12.52	10.31	12.58	10.36	12.63	10.41	12.71	10.47
Open-circuit Voltage (Voc)	V	56.75	51.64	56.95	51.82	57.08	51.94	57.21	52.06
Short-circuit Current (Isc)	A	13.18	10.63	13.28	10.71	13.32	10.74	13.36	10.78
Module Efficiency STC	%	22.21		22.40		22.58		22.75	
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

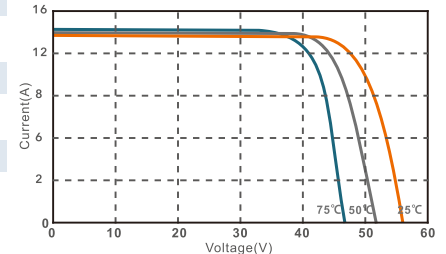
\*NOCT : Air temperature: 20°C, Irradiance: 800 W/m², Air mass: 1.5G, Wind speed: 1 m/s

## I-V CURVE[610W]

I-V characteristics at different irradiances

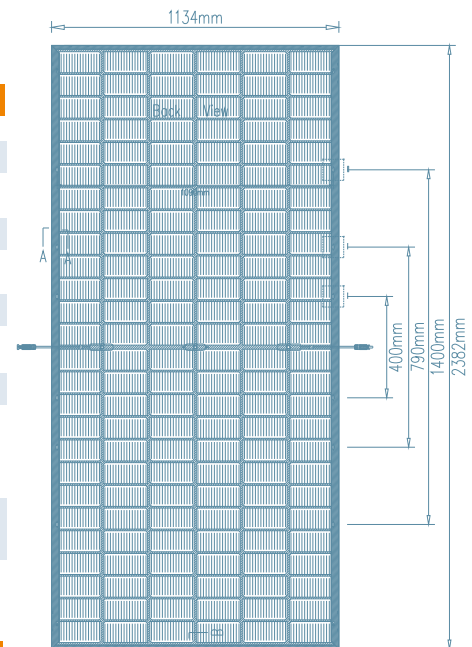


I-V characteristics at different temperature



## SPECIFICATIONS

Cell Type	N type Mono-crystalline
No. of cells	156(6×13×2)
Dimensions	2382*1134*30mm
Weight	32kg
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)	4m Portrait: (+)400/(-)200mm Landscape: (+)1400/(-)1400mm
Packaging Configuration	Two Box=One Pallet 36pcs/Box, 72pcs/Pallet, 720pcs/40HQ Container



## Electrical characteristics with different rear side power gain (reference to 610W front)

Pmax/W	Voc/V	Isc/A	Vmp/V	Imp/A	Pmax gain
610	57.08	13.54	46.28	13.18	0
641	57.08	14.22	46.28	13.84	5%
671	57.08	14.89	46.28	14.50	10%
702	57.08	15.57	46.28	15.16	15%
732	57.08	16.25	46.28	15.82	20%
763	57.08	16.93	46.28	16.48	25%
793	57.08	17.60	46.28	17.13	30%

