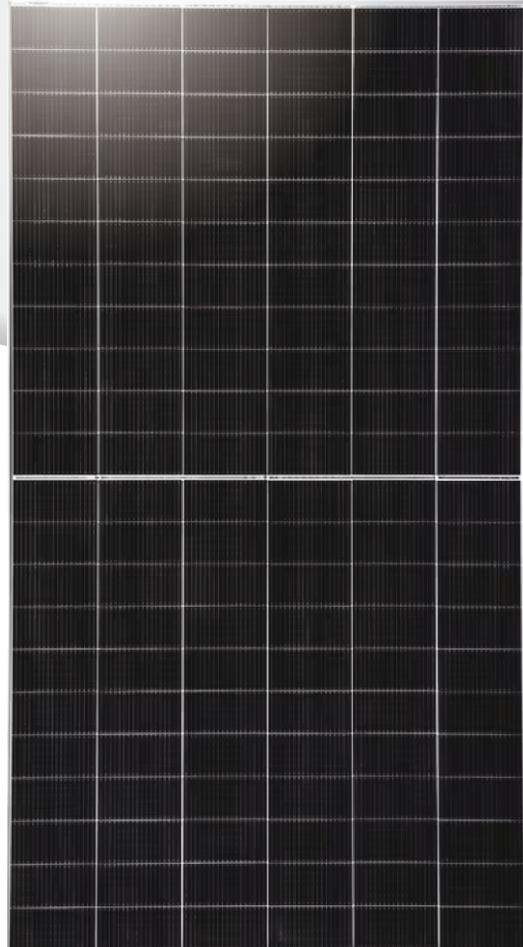
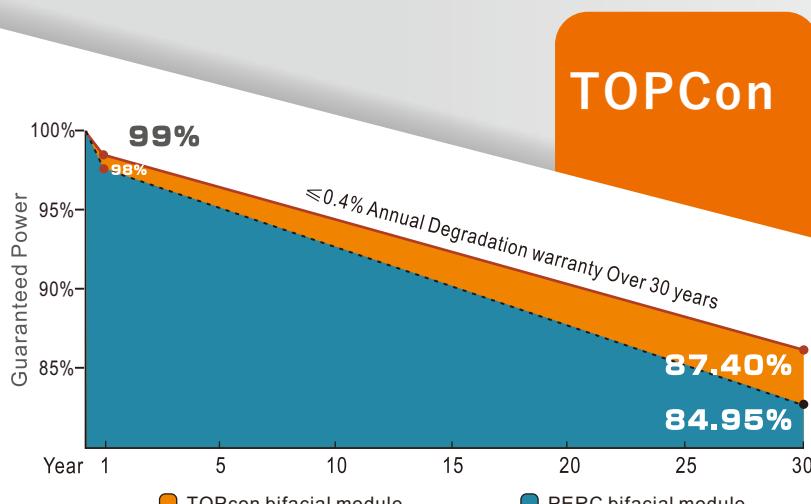


DOUBLE-GLASS BIFACIAL N-TYPE 610~625 Watt



Cutting Free Technology
Minimized micro-crack



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



PID FREE
Passed anti-PID test under 85°C damp heat 85% relative humidity for 192 hours



Lower LCOE
Lower shading and resistive loss
Lower temperature coefficient



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



15-year product warranty
30-year linear power output



ISO 90001:2016 - Quality management systems
ISO 14001:2016 - Environmental management systems
ISO 45001:2019 - Occupational health and safety
ISO 50001:2019 - Energy management system
Certificate of Origin



TOPCon(N TYPE) 610~625Watt

ELECTRICAL SPECIFICATIONS

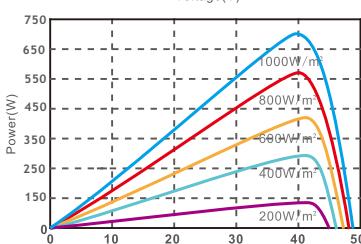
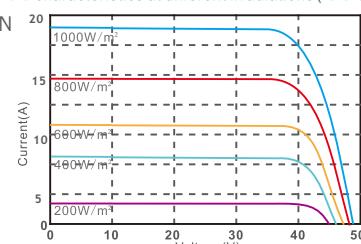
Module Type	MS-610M-132DGN		MS-615M-132DGN		MS-620M-132DGN		MS-625M-132DGN		
	STC*	NOCT*	STC*	NOCT*	STC*	NOCT*	STC*	NOCT*	
Maximum Power (Pmax)	W	610	462	615	466	620	470	625	474
Maximum Power Voltage (Vmp)	V	40.54	37.29	40.72	37.46	40.90	37.63	40.98	37.70
Maximum Power Current (Imp)	A	15.05	12.40	15.10	12.44	15.16	12.49	15.25	12.56
Open-circuit Voltage (Voc)	V	48.68	44.30	48.88	44.48	49.08	44.66	49.12	44.70
Short-circuit Current (Isc)	A	15.96	12.87	16.02	12.92	16.08	12.97	16.10	12.99
Module Efficiency STC	%	22.58		22.70		22.86		23.12	
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

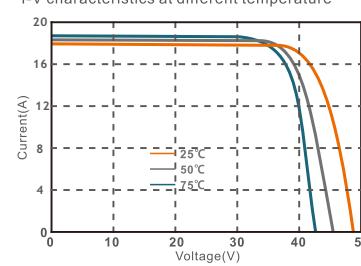
*NOCT: Air temperature: 20°C, Irradiance: 800 W/m², Air mass: 1.5G, Wind speed: 1 m/s

I-V CURVE

I-V characteristics at different irradiations (reference to 700 W)

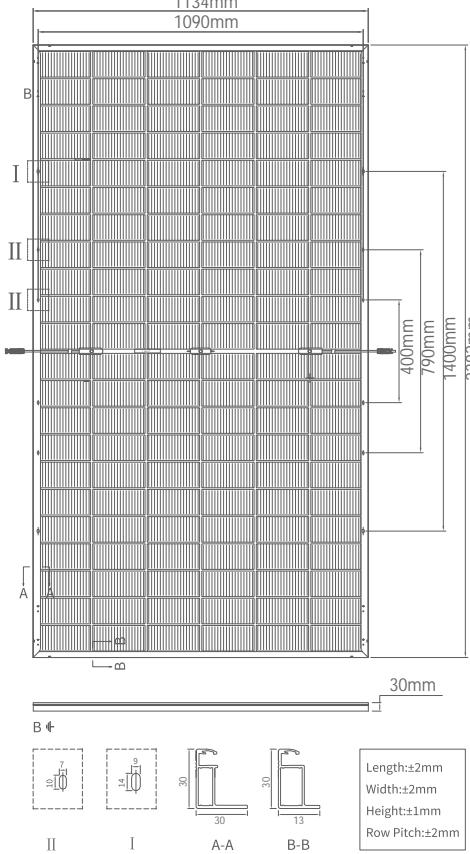


I-V characteristics at different temperature



SPECIFICATIONS

Cell Type	N type Mono-crystalline	
No. of cells	132(6×11×2)	
Dimensions	2382*1134*30mm	
Weight	31.7kg	
Glass	2.0mm+2.0mm, Anti-Reflection Coating, High Transmission, Low Iron, Tempered Glass	
Junction Box	IP68, 3diodes	
Connector	MC4 Compatible	
Cable Length (Including Connector)	4mm ² Portrait:(+)400mm/(-)200mm or Customized Length	
Packaging Configuration	36pcs/Pallet, 720pcs/40HQ Container	



Electrical characteristics with different rear side power gain(reference to 615W front)

Pmax/W	Voc/V	Isc/A	Vmp/V	Imp/A	Pmax gain
615	48.88	16.02	40.72	15.10	0%
646	48.88	16.82	40.72	15.86	5%
677	48.88	17.62	40.72	16.61	10%
707	48.88	18.42	40.72	17.37	15%
738	48.88	19.22	40.72	18.12	20%
769	48.88	20.03	40.72	18.88	25%
800	48.88	20.83	40.72	19.63	30%

