

# **BIPRO**

тмз 6 6 6 м 132-cell

610 - 630W

Bifacial Dual Glass 16BB Half-cut N-type

# **SYSTEM & PRODUCT CERTIFICATES**



- ISO 9001: 2015 Quality Management System
- ISO 14001: 2015 Environment Management System
- ISO 45001: 2018 Occupational Health and Safety Management Systems



years





# PERFORMANCE WARRANTY



15

30

10





## 16BB Half-cut Cell Technology

Lower LID/LeTID degradation and better low light performance Attenuation  $\leqslant$  1% [1st year] /  $\leqslant$  0.4% (Linear)



## **Industry Leading High Yield**

Bifacial N-type cell technology, Dual-sided power generation gain from back side depending on albedo, significantly reduce LCOE



## **Excellent Anti-PID Performance**

192 hours Anti-PID test



## Wider Application

No water-permeability and high wear-resistance, can be widely used in high-humid, windy and dusty area



## **IP68 Junction Box**

High waterproof level

#### **ELECTRICAL CHARACTERISTICS**

Testing Condition	STC	NM0T	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power (Pmax/W)	610	466	615	470	620	473	625	476	630	479
Operating Voltage (Vmpp/V)	40.80	38.30	41.00	38.50	41.20	38.70	41.40	38.90	41.60	39.10
Operating Current (Impp/A)	14.96	12.16	15.00	12.21	15.05	12.23	15.10	12.24	15.15	12.25
Open-Circuit Voltage (Voc/V)	49.00	46.50	49.30	46.80	49.60	47.10	49.90	47.40	50.20	47.70
Short-Circuit Current (Isc/A)	15.86	12.78	15.90	12.81	15.94	12.84	15.98	12.87	16.02	12.90
Module Efficiency (%)	22.	60	22.	80	23.	00	23	.10	23	.30

STC: Irradiance 1000W/m², Spectra at AM1.5, Module Temperature 25 °C. Power output tolerance: 0~+5W, Test uncertainty for Pmax: ±3% NMOT: Irradiance 800W/m², Spectra at AM1.5, Ambient Temperature 20 °C, Wind speed 1m/s

#### REAR SIDE POWER GAIN(REFERENCE TO 615W FRONT)

Pmax gain	5%	10%	15%	20%	25%	
Pmax/W	641	677	707	732	763	
Vmpp/V	41.00	41.00	41.00	41.00	41.00	
Impp/A	15.75	16.50	17.25	18.00	18.75	
Voc/V	49.30	49.30	49.30	49.30	49.30	
Isc/A	16.70	17.49	18.29	19.08	19.88	

#### **MECHANICAL CHARACTERISTICS**

Cell Type	N-type Mono-Crystallin (16Busbar)		
No. of Cells	132pcs in series (6*22)		
Module Dimensions	2382*1134*30mm (93.78*44.65*1.18inches)		
Weight	33.7kg (74.29lbs.)		
Front Glass	2.0mm AR Coating Semi-tempered Glass		
Back Glass	2.0mm Glazed Semi-tempered Glass		
Frame	Anodized Aluminium Alloy		
Junction Box	IP68, 3 Bypass Diodes		
Output Cables	4mm² (IEC), 12AWG(UL) 350mm(+),250mm(-) or Customized Length		
Connectors	MC4/MC4-EV02A/Others		

## **APPLICATION CONDITIONS**

Maximum System Voltage	1500V/DC
Operating Temperature	-40°C~+85°C
Maximun Series Fuse	35A
Safety Protection Class	Class II
Mechanical Load*	Front side 5400Pa, Back side 2400Pa
Refer. Bifaciality Factor	80%±5%

<sup>\*</sup>Refer to the installation manual for details

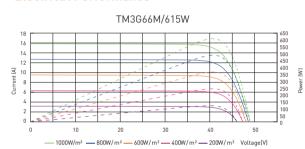
## **TEMPERATURE CHARACTERISTICS**

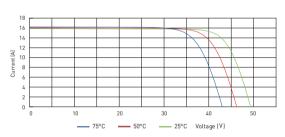
Temperature Coefficient of Pmax	-0.29%/°C
Temperature Coefficient of Voc	-0.24%/°C
Temperature Coefficient of Isc	+0.043%/°C
Nominal Module Operating Temperature(NMOT)	43±2°C

## **PACKING CONFIGURATION**

	Pieces Per Pallet	36	36(USA)			
	Pieces Per Container(40'HQ)	720	540			

## **Electrical Performance**





## **TECHNICAL DRAWINGS**

