

RAYSOLAR
DOUBLE-GLASS BIFACIAL MODULE

72 CELLS/5BB
P-TYPE/MONO/BIFACIAL

380-395W
POWER OUTPUT

19.7%
MAX. EFFICIENCY



COMPANY PROFILE

Ningbo RayTech New Energy Materials Co., Ltd. (RayTech) focuses on New Energy & New Materials manufacturing, and integrates Product R&D, Designing, Manufacturing, Sales, After-sale Service as a "One-stop Product & Service Solution Provider" enterprises. The company's headquarter is based in Hangzhou Bay New District, Ningbo City, Zhejiang Province, China. RayTech's main focus is in two sectors: "solar modules manufacturing & solar system integration" and "smart glass panel materials". The company has a sophisticated Research & Development team, a State Key Laboratory, and an AI-integrated fully-automated factory.

The company has an annual solar module production capacity of 1.2GW, producing both single-glass and double-glass solar modules. The company's smart glass panel material annual manufacturing capacity is 1 million square meters. The smart glass panels support multiple functions such as spatial separation, remote AI control, light brightness and temperature control. The company's factories are located in Zhejiang, Jiangsu and Shandong.

RayTech is dedicated to providing products that can bring optimized values to the customers. The company's sustainable development concept are "Solar makes life better" and "Let modern science and technology perfectly integrate with the nature". Core corporate culture is "Be Pragmatic, Inclusive, Refined and Innovative".

PRODUCT FEATURES



Exceptional Product Durability

- High Resistance to PID;
- Low Risk of Micro-cracks; Zero Snail Trails Probability;



Optimized Power Gain

- 25% Max. Rear-side Power Gain;
- Better Low-Light Performance;



Working Condition Compatibility & Safety

- High Resistance to High Temp., High Humidity, Sand, Acid and Alkali Environment;
- 5400Pa Snow Loading, 2400Pa Wind Loading;
- Passed Hail Test (35mm Diameter, 97km/h);
- Class-A Fireproofing;



Higher-Than-Ever ROI

- 158.75mm Large Cells, Better Power Gain;
- 1500V System Voltage, Lower BOS Cost;
- Annual Degradation < 0.5%, 30-year Linear Performance Warranty; Lower LCOE, Higher IRR;

CERTIFICATION



CONTACT US

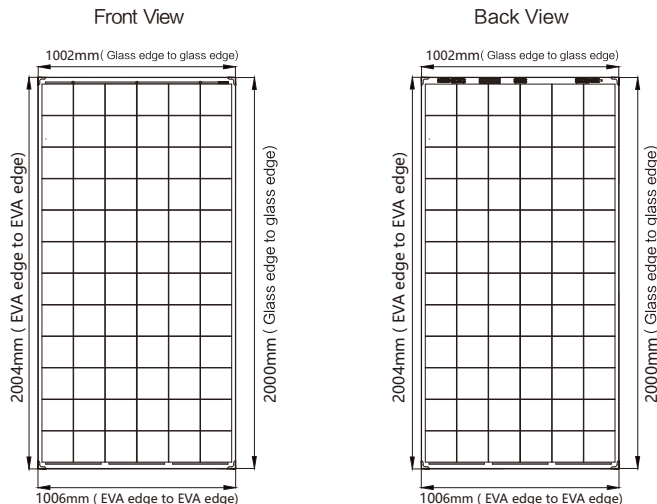
Ningbo Raytech New Energy Materials Co.,Ltd
Address: Huyong Industry Park, 18 Qiyuan Road, Hangzhou Bay New District, Ningbo City, Zhejiang, China
Tel: +86-400-155-9909
Website: www.raytm.com.cn
Email: sales@raytm.cn



Wechat Public Account

P-type Bifacial Double-Glass Module (72 Cells): 380-395W

ENGINEERING DRAWING



MECHANICAL SPECIFICATIONS

Cell Type	Mono crystalline (158.75mm*158.75mm)
Solar Cells	72(6*12)
Module Dimension [mm]	2000*1002*6 (2004*1006*6with edge banding)
Weight [Kg]	28.0
Front Glass [mm]	2.5 Semi tempered coated glass
Interlayer	EVA/POE/PVB
Back Glass [mm]	2.5 Semi tempered glass
Junction Box	Ip67 Rated, 3 by-pass diodes
Connector	Multi-Contact MC4(or equivalent)
Frame	No frame
Maximum Load Capacity [Pa]	2400(wind load)/5400(snow load)

ELECTRICAL CHARACTERISTICS

		BPDM72(S)-380		BPDM72(S)-385		BPDM72(S)-390		BPDM72(S)-395	
		STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power at STC [Pmax]	[W]	380	281	385	285	390	289	395	292
Open Circuit Voltage [Voc]	[V]	48.47	44.82	48.79	45.11	49.04	45.35	49.34	45.62
Short Circuit Current [Isc]	[A]	9.98	8.05	10.06	8.11	10.13	8.17	10.20	8.23
Voltage at Maximum Power point[Vm]	[V]	39.92	36.28	40.22	36.55	40.48	36.79	40.76	37.04
Current at Maximum Power point[Im]	[A]	9.52	7.75	9.57	7.79	9.63	7.84	9.69	7.89
Power Tolerance	[%]								
Module Efficiency	[%]	18.9		19.2		19.4		19.7	

STC: Air Mass AM1.5, Ir-radiance 1000W/m² Cell temperature 25°C. NMOT: Air Mass AM1.5, Ir-radiance 800W/m² Ambient temperature 20°C, wind speed 1m/s.

DOUBLE SIDES POWER OUTPUT (REAR-SIDE GAIN)

	5%				10%				15%			
	394	399	405	410	409	414	419	425	423	428	434	439
Maximum Power [Pmax]	394	399	405	410	409	414	419	425	423	428	434	439
Module Efficiency	19.6%	19.9%	20.2%	20.4%	20.4%	20.6%	20.9%	21.2%	21.1%	21.3%	21.6%	21.9%

WORKING CONDITIONS

Maximum System Voltage(With S)	[V]	1000 DC(IEC)
Maximum System Voltage(Without S)	[V]	1500 DC(IEC)
Operating Temperature	[°C]	-40~+85
Nominal Operating Cell Temperature	[°C]	45±3
Maximum rated current	[A]	15

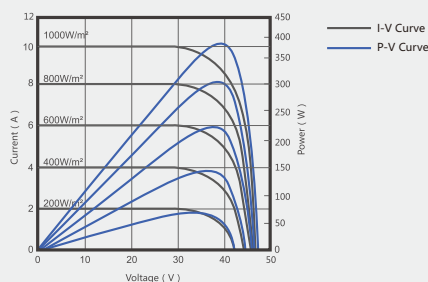
TEMPERATURE COEFFICIENTS

Temperature Coefficient of Pmax	[%/°C]	-0.42
Temperature Coefficient of Voc	[%/°C]	-0.33
Temperature Coefficient of Isc	[%/°C]	0.04

PACKAGE CONFIGURATION

Per box 30 pieces 40" HQ 660 pieces

ELECTRICAL CURVES



LINEAR PERFORMANCE WARRANTY

NO MORE THAN 0.5% ANNUAL DEGRADATION OVER 30 YEARS

