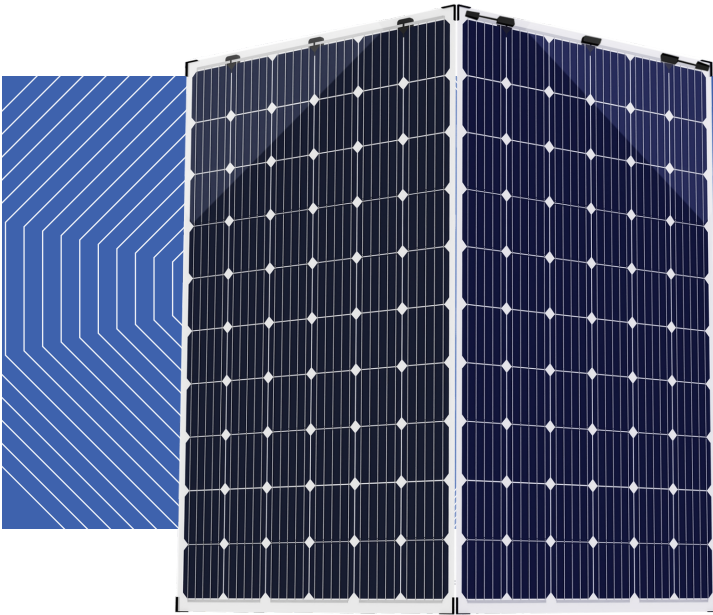


RAYSOLAR
DOUBLE-GLASS BIFACIAL MODULE

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

305-315W
POWER OUTPUT

19.1%
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;

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;

Optimized Power Gain

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

Higher-Than-Ever ROI

- 1500V System Voltage, Lower BOS Cost;
- Annual Degradation < 0.5%, 30-year Linear Performance Warranty;
- Frameless Design, Easier Surface Cleaning, Lower O&M Cost;

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

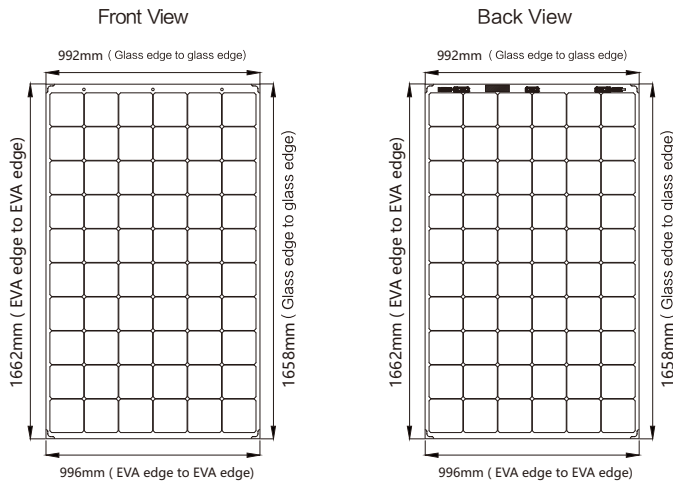


Wechat Public Account

P-type Bifacial Double-Glass Module (60 Cells): 305-315W

ENGINEERING DRAWING

MECHANICAL SPECIFICATIONS



Cell Type	Mono crystalline (156.75mm*156.75mm)
Solar Cells	60(6*10)
Module Dimension [mm]	1658*992*6 (1662*996*6with edge banding)
Weight [Kg]	23.0
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

		BPDM60(S)-305		BPDM60(S)-310		BPDM60(S)-315	
		STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power at STC [Pmax]	[W]	305	226	310	229	315	235
Open Circuit Voltage [Voc]	[V]	39.62	36.64	39.87	36.87	40.1	37.08
Short Circuit Current [Isc]	[A]	9.80	7.90	9.85	7.94	9.95	8.02
Voltage at Maximum Power point[Vm]	[V]	32.66	29.68	32.95	29.95	33.01	30.20
Current at Maximum Power point[Im]	[A]	9.34		9.41	7.66	9.54	7.77
Power Tolerance	[%]	0~+3%					
Module Efficiency	[%]	18.5		18.8		19.1	

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%		
Maximum Power [Pmax]	316	321	326	326	332	337	337	343	348
Module Efficiency	19.2	19.5	19.8	19.8	20.1	20.4	20.4	20.8	21.1

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

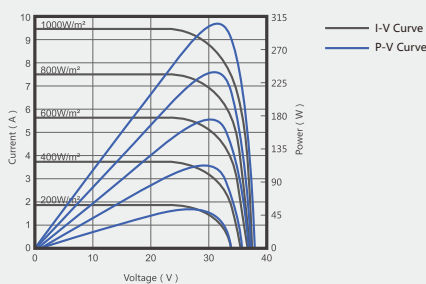
TEMPERATURE COEFFICIENTS

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 38 pieces	40" HQ 988 pieces
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ELECTRICAL CURVES



LINEAR PERFORMANCE WARRANTY

NO MORE THAN 0.5% ANNUAL DEGRADATION OVER 30 YEARS

