

RAYTECH DOUBLE-GLASS BIFACIAL MODULE

72LAYOUT
P-TYPE/MONO/BIFACIAL

430-455W
POWER OUTPUT

20.9%
MAX. EFFICIENCY



10% WHITE
TRANSPARENCY OPAQUE



COMPANY PROFILE

Ningbo Raytech New Energy Materials Co., Ltd. (referred to as Raytech) is a national high-tech enterprise focusing on "new energy and new materials", integrating R&D, design, manufacturing sales and service. The company's main team has been focusing on the R&D and manufacturing of double-glass solar panels since 2009. its production bases are located in Zhejiang, Jiangsu, and Shandong. The company has an independent technology R&D team, a national key laboratory, and a fully automatic productionline for intelligent manufacturing. The product and quality control standards have reached the industry-leading level.

The company's products have obtained: TuV certification, UL certification, Australian CEC accreditation, Brazil INMETRO certification, the first batch of "Double Glass Leader Certification" in China, ISO9001 international quality system certification, 3C certification and many other authoritative certifications.

Raytech adheres to the business philosophy of "centering on user value and oriented to win-win cooperation", adheres to the principle of "pragmatic, inclusive, refined, and innovative", and carries the vision of "let the golden sunshine restore its natural color" to serve and contribute to the promotion of diversified applications of clean energy.

PRODUCT FEATURES



Optimized Power Gain

- 25% Max. Rear-side Power Gain;
- Half-Cell Cutting Technology to Lower the Output Power Losses Brought by Shading;
- Integrates Multiple-Busbar(MBB) Tech, Higher Power Output



Higher-Than-Ever ROI

- 1500V System Voltage, Lower BOS Cost;
- Annual Degradation < 0.45%, 30-year Linear Performance Warranty;



Working Condition Compatibility & Safety

- High Resistance to High Temp., High Humidity, Sand, Acid
- and Alkali Environment;
- 5400Pa Snow Loading, 2400Pa Wind Loading;
- Frames with Light Double Glass to meet customer' s Requirements of Lightness and Safety

CERTIFICATION



CONTACT US

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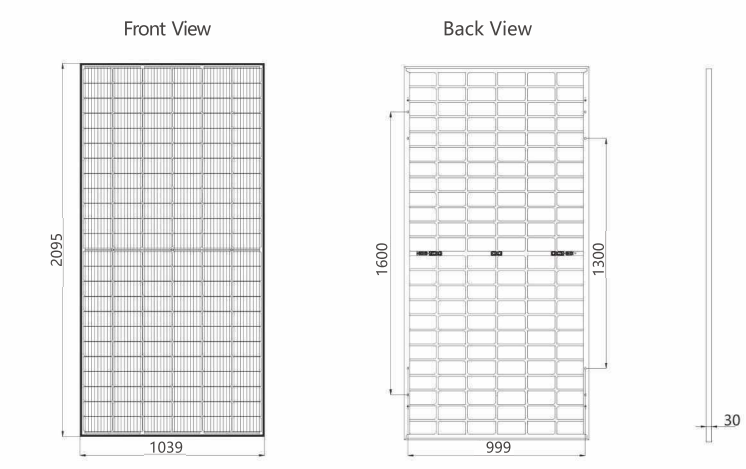


Wechat Public Account

P-type Bifacial Double-Glass Module: 430-455W

ENGINEERING DRAWING

MECHANICAL SPECIFICATIONS



Cell Type	Mono crystalline
Solar Cells	144(6*24)
Module Dimension [mm]	2095*1039*30mm
Weight [Kg]	26.5
Front Glass [mm]	2.0 Semi tempered coated glass
Interlayer	EVA/POE/PVB
Back Glass [mm]	2.0 Semi tempered glass
Junction Box	Ip67 Rated, 3 by-pass diodes
Connector	Multi-Contact MC4(or equivalent)
Frame	30mm Aluminum Frame
Maximum Load Capacity [Pa]	2400(wind load)/5400(snow load)

ELECTRICAL CHARACTERISTICS

		BPD MJ72H(S)-430		BPD MJ72H(S)-435		BPD MJ72H(S)-440		BPD MJ72H(S)-445		BPD MJ72H(S)-450		BPD MJ72H(S)-455	
		STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power at STC [Pmax]	[W]	430	321	435	325	440	329	445	333	450	336	455	340
Open Circuit Voltage [Voc]	[V]	48.79	45.6	49.01	45.8	49.29	46.0	49.54	46.3	49.75	46.5	49.95	46.7
Short Circuit Current [Isc]	[A]	11.30	9.11	11.34	9.14	11.38	9.18	11.42	9.21	11.46	9.24	11.52	9.29
Voltage at Maximum Power point[Vm]	[V]	40.47	37.2	40.76	37.4	41.06	37.7	41.33	37.9	41.55	38.1	41.76	38.3
Current at Maximum Power point[Im]	[A]	10.63	8.65	10.67	8.69	10.72	8.73	10.77	8.77	10.83	8.82	10.90	8.87
Power Tolerance	[%]	0~+3%											
Module Efficiency	[%]	19.7		19.9		20.2		20.4		20.6		20.9	

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

DOUBLE SIDES POWER OUTPUT (BACK GAIN)

5%	Maximum Power	[W]	452	457	462	467	473	478
10%	Maximum Power	[W]	473	479	484	490	495	501
15%	Maximum Power	[W]	495	500	506	512	518	523
20%	Maximum Power	[W]	516	522	528	534	540	546

Bifaciality=70±5%

WORKING CONDITIONS

TEMPERATURE COEFFICIENTS

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]	20

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 35 pieces	40" HQ 770 pieces

ELECTRICAL CURVES

LINEAR PERFORMANCE WARRANTY

