

RAYTECH SINGLE-GLASS MODULE

72LAYOUT
MONOCRYSTALLINE MODULES

430-450W
POWER OUTPUT

20.5%
MAX. EFFICIENCY



COMPANY PROFILE

Ningbo Raytech New Energy Materials Co., Ltd. (hereinafter referred to as Raytech) is a comprehensive manufacturing enterprise integrating R&D, design, manufacturing, sales and services based on "new energy and new materials". Headquartered in Hangzhou Bay New Zone, Ningbo City, Zhejiang Province, China, Raytech is specialized in "photovoltaic power generation equipment manufacturing and system integration" and "smart home panel materials", and it is equipped with independent technology R&D team, national key laboratory and full-automatic production line in intelligent manufacturing. Its production scale, product types and product standards all take the lead in the industry.

Raytech's manufacturing capacity of photovoltaic power generation equipment is 1.2GW, producing single-sided and two-sided power generation equipment with the brand of Raytech. Its manufacturing capacity of intelligent panel materials is 1 million square meters, flexibly supporting diverse functions such as spatial separation, intelligent control, and light and temperature regulations, with the brand of Rayshine. Its production bases are located in Zhejiang, Jiangsu and Shandong, and its products have obtained German TÜV certification, North America UL certification, Australia CEC certification, Brazil INMETRO certification, the first batch of front runner certification of double-glass modules in China, ISO9001 international quality system certification, national 3C compulsory certification in the construction industry, and other certifications of authorities.

By adhering to its development philosophy of centering on customer value and focusing on service, Raytech takes the responsibility of new energy business to "let the golden sunshine return to its natural color" and chases the dream on intelligent material business to "let modern science and technology perfectly integrate with the nature". Raytech forges ahead based on its own cultural concept of "pragmatism, inclusiveness, craftsmanship and innovation".

PRODUCT FEATURES



Optimized Power Gain

- Half-Cell Cutting Technology to Lower the Output Power Losses Brought by Shading;
- Integrates Multiple-Busbar(MBB) Tech, Higher Power Output



Working Condition Compatibility & Safety

- High Resistance to High Temp., High Humidity, Sand, Acid and Alkali Environment;
- 5400Pa Snow Loading, 2400Pa Wind Loading;



Higher-Than-Ever ROI

- 1500V System Voltage, Lower BOS Cost;
- Annual Degradation < 0.7%, 25-year Linear Performance Warranty;

CERTIFICATION



CONTACT US

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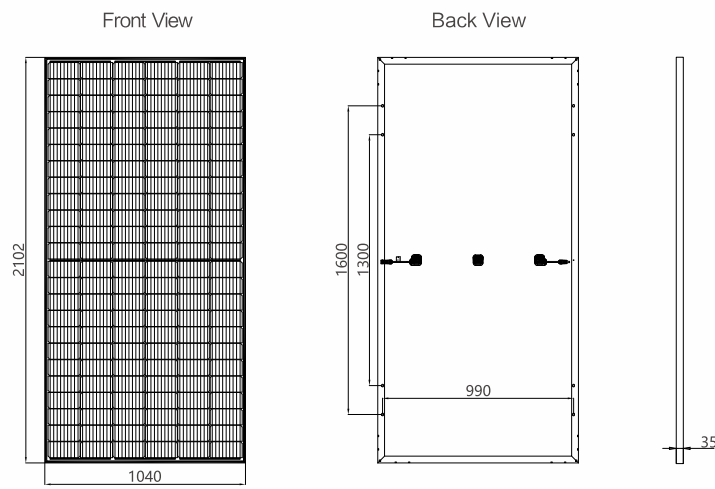


Wechat Public Account

Single-Glass Mono Modules : 430-450W

ENGINEERING DRAWING

MECHANICAL SPECIFICATIONS



Cell Type	Mono crystalline
Solar Cells	144(6*24)
Module Dimension [mm]	2102*1040*35mm
Weight [Kg]	24.0
Front Glass [mm]	3.2 Low iron tempered coated glass
Interlayer	EVA
Backsheet	Composite sheet
Junction Box	Ip67 Rated, by-pass diodes
Connector	Multi-Contact MC4(or equivalent)
Transmittance[%]	0
Maximum Load Capacity [Pa]	2400(wind load)/5400(snow load)

ELECTRICAL CHARACTERISTICS

			SMJ72H(S)-430	SMJ72H(S)-435	SMJ72H(S)-440	SMJ72H(S)-445	MJ72H(S)-450
STC: Air Mass AM1.5, Ir-radiance 1000W/m ² Cell temperature 25°C	Maximum Power at STC [Pmax]	[W]	430	435	440	445	450
	Open Circuit Voltage [Voc]	[V]	48.79	49.01	49.29	49.54	49.75
	Short Circuit Current [Isc]	[A]	11.30	11.34	11.38	11.42	11.46
	Voltage at Maximum Power point[Vm]	[V]	40.47	40.76	41.06	41.33	41.55
	Current at Maximum Power point[Im]	[A]	10.63	10.67	10.72	10.77	10.83
	Power Tolerance	[%]	0~+3%				
	Module Efficiency	[%]	19.6%	19.8%	20.1%	20.3%	20.5%
NMOT: Air Mass AM1.5, Ir-radiance 800W/m ² Ambient temperature 20°C, wind speed 1m/s.	Maximum Power at NMOT [Pmax]	[W]	321	325	329	333	336
	Open Circuit Voltage [Voc]	[V]	45.6	45.8	46.0	46.3	46.5
	Short Circuit Current [Isc]	[A]	9.11	9.14	9.18	9.21	9.24
	Voltage at Maximum Power point[Vm]	[V]	37.2	37.4	37.7	37.9	38.1
	Current at Maximum Power point[Im]	[A]	8.65	8.69	8.73	8.77	8.82
	Power Tolerance	[%]	0~+3%				

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 30 pieces	40" HQ 660 pieces

ELECTRICAL CURVES

LINEAR PERFORMANCE WARRANTY

