

RAYTECH SINGLE-GLASS MODULE

54 LAYOUT

MONO CRYSTALLINE MODULES

395-420W

POWER OUTPUT

21.5%

MAX. EFFICIENCY



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

- 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 < 0.55%, 25-year Linear Performance Warranty;

CERTIFICATION



CONTACT US

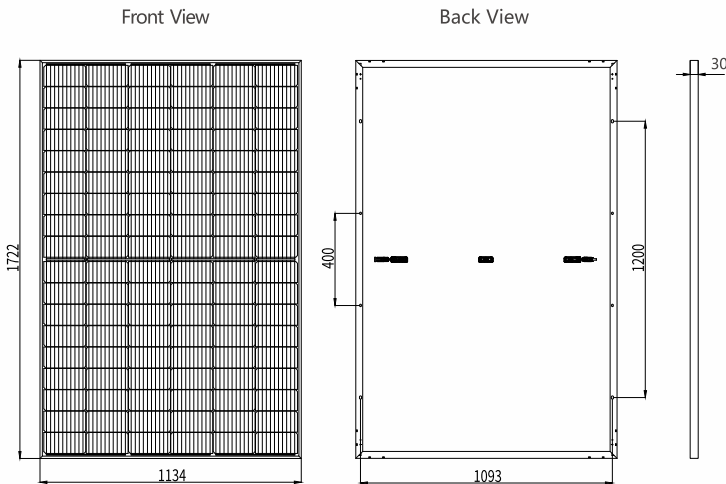
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P-type Single-Glass Mono Modules : 395-420W

ENGINEERING DRAWING



MECHANICAL SPECIFICATIONS

Cell Type	Mono crystalline
Solar Cells	108(6*18)
Module Dimension [mm]	1722*1134*30
Weight [Kg]	22.0
Front Glass [mm]	3.2 Low iron tempered coated glass
Interlayer	EVA
Backsheet	Composite sheet
Junction Box	Ip68 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

Product model		SMN54H(S)-395	SMN54H(S)-400	SMN54H(S)-405	SMN54H(S)-410	SMN54H(S)-415	SMN54H(S)-420	
STC	Maximum Power at STC [Pmax]	[W]	395	400	405	410	415	420
	Open Circuit Voltage [Voc]	[V]	36.85	37.04	37.17	37.34	37.56	37.73
	Short Circuit Current [Isc]	[A]	13.64	13.73	13.83	13.93	14.01	14.08
	Voltage at Maximum Power point[Vm]	[V]	30.94	31.12	31.30	31.48	31.67	31.87
	Current at Maximum Power point[Im]	[A]	12.77	12.85	12.94	13.02	13.10	13.18
	Power Tolerance	[%]	20.2	20.5	20.7	21.0	21.3	21.5
	Module Efficiency	[W]	0~+5					
NMOT	Maximum Power at NMOT [Pmax]	[W]	295	299	302	306	310	314
	Open Circuit Voltage [Voc]	[V]	34.79	34.96	35.09	35.25	35.46	35.62
	Short Circuit Current [Isc]	[A]	11.01	11.09	11.17	11.25	11.31	11.37
	Voltage at Maximum Power point[Vm]	[V]	28.59	28.76	28.92	29.09	29.26	29.45
	Current at Maximum Power point[Im]	[A]	10.31	10.38	10.45	10.52	10.59	10.65
	Power Tolerance	[W]	0~+5					

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. Power Tolerance : ±3%

WORKING CONDITIONS

Maximum System Voltage	[V]	1000 / 1500 DC(IEC)
Operating Temperature	[°C]	-40~+85
Nominal Operating Cell Temperature	[°C]	45±3
Maximum rated current	[A]	25
Fire rating	-	Class C

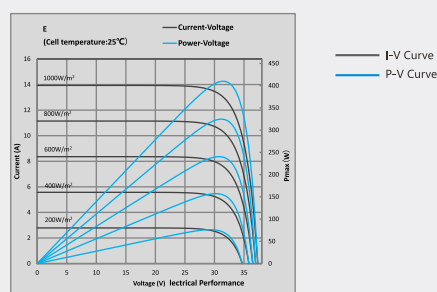
TEMPERATURE COEFFICIENTS

Temperature Coefficient of Pmax	[%/°C]	-0.35
Temperature Coefficient of Voc	[%/°C]	-0.28
Temperature Coefficient of Isc	[%/°C]	0.046

PACKAGE CONFIGURATION

Per box 36 pieces 40" HQ936 pieces

ELECTRICAL CURVES



LINEAR PERFORMANCE WARRANTY

NO MORE THAN 0.55% ANNUAL DEGRADATION OVER 25 YEARS

