



# RAYTECH DOUBLE-GLASS TRANSMITTANCE MODULE

40%TRANSMITTANCE MONO MODULES

180-190W POWER OUTPUT

11.5%
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 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**

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



# **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;



# Unique Layout design to match the adhesive installation

• Unique design can meet the sunroom' s requirements with excellent light transmittance and waterproof.



# **Working Condition Compatibility & Safety**

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

# **CERTIFICATION**















#### **CONTACT US**

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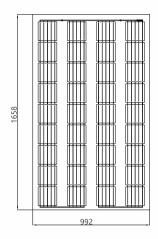


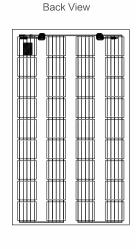
# 40%transmittance Mono Modules: 180-190W

# **ENGINEERING DRAWING**

# **MECHANICAL SPECIFICATIONS**

Front View





CHT	NA
Cell Type	Mono crystalline
Solar Cells	36(4*9)
Module Dimension [mm]	1658*992*6mm
Weight [Kg]	23.0
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	No Frame
Maximum Load Capacity [Pa]	2400(wind load)/2400(snow load)

			DM36(S)-180	DM36(S)-185	DM36(S)-190
STC: Air Mass AM1.5,Ir- radiance 1000W/m Cell temperature 25°C	Maximum Power at STC [Pmax]	[W]	180	185	190
	Open Circuit Voltage [Voc]	[V]	23.91	24.16	24.42
	Short Circuit Current [Isc]	[A]	9.58	9.76	9.92
	Voltage at Maximum Power point[Vm]	[V]	19.59	19.83	20.05
	Current at Maximum Power point[Im]	[A]	9.19	9.33	9.48
	Power Tolerance	[%]	0~+3%		
	Module Efficiency	[%]	10.9%	11.2%	11.5%
NMOT: Air Mass AM1.5, Irradiance 800W/m² Ambient temperature 20°C, wind	Maximum Power at NMOT [Pmax]	[W]	133	137	141
	Open Circuit Voltage [Voc]	[V]	22.1	22.3	22.6
	Short Circuit Current [Isc]	[A]	7.73	7.87	8.00
	Voltage at Maximum Power point[Vm]	[V]	17.8	18.0	18.2
	Current at Maximum Power point[Im]	[A]	7.48	7.60	7.72
	Power Tolerance	[%]	0~+3%		

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

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

**TEMPERATURE COEFFICIENTS** 

# PACKAGE CONFIGURATION Per box 38 pieces 40" HQ 988 pieces

# **ELECTRICAL CURVES**

# LINEAR PERFORMANCE WARRANTY

