

# SATURN 3

# ReneSola

## MONO-FACIAL MODULE

# RS3-445~460MX-E3

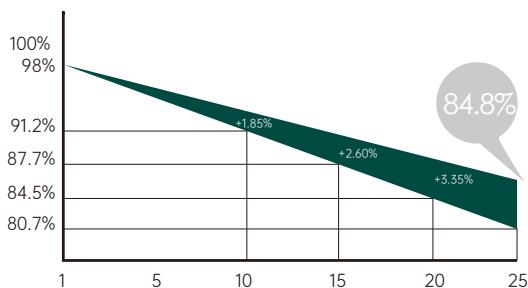
P-Type /Positive power tolerance of 0~+3%/Max module efficiency 21.16%

- Suitable for ground power plants and distributed projects
- Advanced module technology delivers superior module efficiency
  - Gallium-doped Wafer · Non destructive cutting · MBB half-cut
- Excellent power generation performance
  - Excellent IAM and Weak light response · Low temperature ratings
  - 0.55% linear Power decline
- High module quality ensures long-term reliability
  - Strict selected material · Advanced technology · Leading standard
- Ultra-hydrophilic self-cleaning coating techniques



Complete System  
and IEC Product Certification

IEC 61215(2016), IEC 61730(2016) ISO9001:  
2015:Quality Management System ISO14001:  
2015:Environment Management System  
ISO45001:2018:Occupational Health  
and Safety Management System

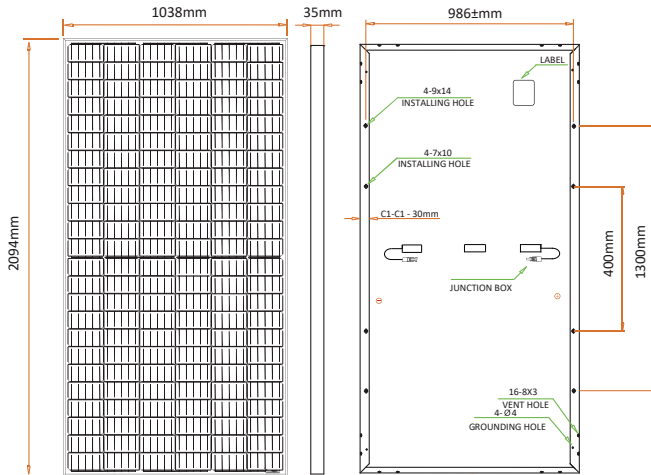


25-Year excess linear power output warranty

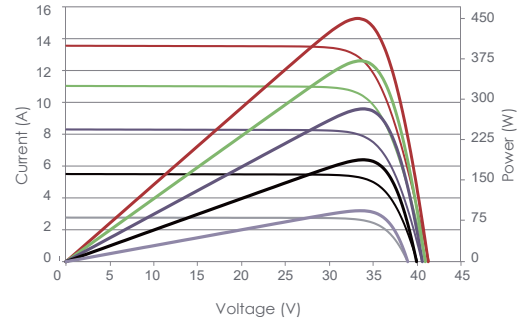


## RS3-445~460MX-E3

MONO-FACIAL MODULE



Drawing Only for Reference



Electrical Characteristics STC	RS3-445MX-E3	RS3-450MX-E3	RS3-455MX-E3	RS4-460MX-E3
Maximum Power (Pmax)	445W	450W	455W	460W
Power Tolerance	0~+5W	0~+5W	0~+5W	0~+5W
Module Efficiency	20.47%	20.70%	20.93%	21.16%
Maximum Power Current (Imp)	10.71A	10.78A	10.85A	10.92A
Maximum Power Voltage (Vmp)	41.55V	41.74V	41.94V	42.12V
Short Circuit Current (Isc)	11.47A	11.53A	11.60A	11.66A
Open Circuit Voltage (Voc)	49.30V	49.50V	49.70V	49.90V

Values at Standard Test Conditions STC(AM1.5, Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C)

Electrical Characteristics NOCT	RS3-445MX-E3	RS3-450MX-E3	RS4-460MX-E3	RS4-460MX-E3
Maximum Power (Pmax)	334.3W	338.0W	341.8W	345.6W
Maximum Power Current (Imp)	8.65A	8.71A	8.76A	8.82A
Maximum Power Voltage (Vmp)	38.64V	38.82V	39.00V	39.18V
Short Circuit Current (Isc)	9.29A	9.35A	9.41A	9.46A
Open Circuit Voltage (Voc)	46.34V	46.53V	46.72V	46.91V

NOCT, Irradiance of 800W/m<sup>2</sup>, AM1.5, Ambient Temperature 20 °C, wind Speed 1m/s.

### Mechanical Characteristics

Cell Type	MonoP-Type,166×166(±1)mm,144 (6×24)Half-Cut cells
Glass	3.2mm,High Transmission,Low Iron,Tempered Glass
Frame	Anodized Aluminum Alloy
Juction Box	IP68 Rated, With Bypass Diodes
Dimension	2094×1038×35mm
Output Cable	4 mm <sup>2</sup> (EU),300 mm,length can be customized
Weight	23.5kg
Installation Hole Location	See Drawing Above

### Packing Information

Container	40' HQ
Pallets per Container	22
Pieces per Container	682

### Characteristics

Temperature Coefficient of Voc	-0.27%/°C
Temperature Coefficient of Isc	+0.048%/°C
Temperature Coefficient of Pmax	-0.35%/°C
Nominal Operating Cell Temperature (NOCT)	45°C ±2°C

Remark:Electrical data in this catalog do not refer to a single module and they are not part of the offer.They only serve for comparison among different module types.

### Maximum Ratings

Operating Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Maximum Series Fuse Rating	20A

