

# SATURN 4

# ReneSola

## MONO-FACIAL MODULE

# RS4-440~460M-E1

P-Type /Positive power tolerance of 0~+3%/Max module efficiency 21.32%

- 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

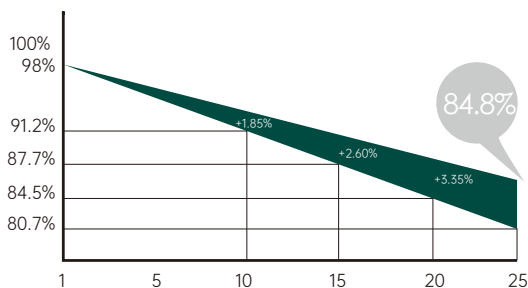


Complete System  
and IEC Product Certification

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

**12-year** ◀◀  
Material  
& Workmanship

**25-year** ◀◀  
Linear Power  
Output

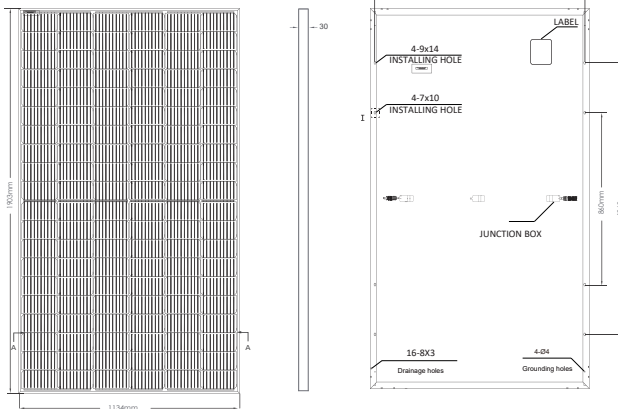


25-Year excess linear power output warranty

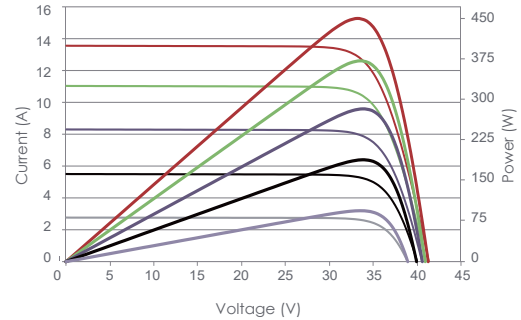


## RS4-440~460M-E1

MONO-FACIAL MODULE



Drawing Only for Reference



Electrical Characteristics STC	RS4-440M-E1	RS4-445M-E1	RS4-450M-E1	RS4-455M-E1	RS4-460M-E1
Maximum Power (Pmax)	440W	445W	450W	455W	460W
Power Tolerance	0~+5W	0~+5W	0~+5W	0~+5W	0~+5W
Module Efficiency	20.39%	20.62%	20.85%	21.08%	21.32%
Maximum Power Current (Imp)	13.05A	13.16A	13.27A	13.36A	13.45A
Maximum Power Voltage (Vmp)	33.72V	33.82V	33.91V	34.06V	34.20V
Short Circuit Current (Isc)	13.73A	13.79A	13.86A	13.93A	14.01A
Open Circuit Voltage (Voc)	41.02V	41.10V	41.18V	41.33V	41.48V

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

Electrical Characteristics NOCT	RS4-440M-E1	RS4-445M-E1	RS4-450M-E1	RS4-455M-E1	RS4-460M-E1
Maximum Power (Pmax)	327W	331W	335W	339W	342W
Maximum Power Current (Imp)	10.43A	10.49A	10.55A	10.61A	10.67A
Maximum Power Voltage (Vmp)	31.39V	31.56V	31.73V	31.91V	32.07V
Short Circuit Current (Isc)	11.09A	11.14A	11.19A	11.25A	11.32A
Open Circuit Voltage (Voc)	38.72V	38.79V	38.87V	39.01V	39.15V

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

### Mechanical Characteristics

Cell Type	MonoP-Type, 182x182(±1)mm, 120(6x20)Half-Cut cells
Glass	3.2mm,High Transmission,Low Iron,Tempered Glass
Frame	Anodized Aluminum Alloy
Junction Box	IP68 Rated, With Bypass Diodes
Dimension	1903×1134×30mm
Output Cable	4 mm <sup>2</sup> (EU),300 mm,length can be customized
Weight	24.2kg
Installation Hole Location	See Drawing Above

### Packing Information

Container	40' HQ
Pallets per Container	24
Pieces per Container	864

### Characteristics

Temperature Coefficient of Voc	-0.27%/°C
Temperature Coefficient of Isc	+0.04%/°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	25A

