## **SATURN 3**



#### MONO-FACIAL MODULE

# RS3-445~465M-E3

P-Type /Positive power tolerance of 0~+3%/Max module efficiency 21.39%

- 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

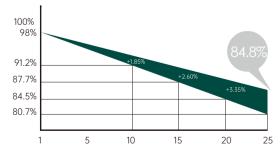
#### Complete System and IEC Product Certification

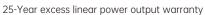
IEC 61215(2016),IEC 61730(2016) ISO9001: 2015: Quality Management System ISO14001: 2015:Environment Management System ISO45001:2018:Occupational Health and Safety Management System

Fire Rating:C

















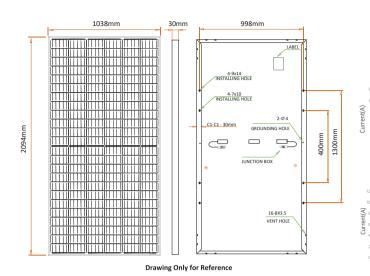




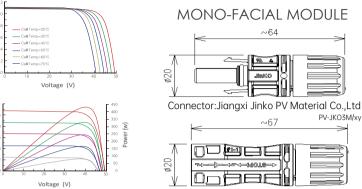




### **SATURN**



## RS3-445~465M-E3



Electrical Characteristics STC	RS3-445M-E3	RS3-450M-E3	RS3-455M-E3	RS3-460M-E3	RS3-465M-E3
Maximum Power (Pmax)	445W	450W	455W	460W	465W
Power Tolerance	0~+5W	0~+5W	0~+5W	0~+5W	0~+5W
Module Efficiency	20.47%	20.70%	20.93%	21.16%	21.39%
Maximum Power Current (Imp)	10.78A	10.85A	10.92A	10.98A	11.05A
Maximum Power Voltage (Vmp)	41.30V	41.50V	41.70V	41.90V	42.10V
Short Circuit Current (Isc)	11.38A	11.44A	11.52A	11.56A	11.61A
Open Circuit Voltage (Voc)	49.80V	50.00V	50.30V	50.70V	51.00V

Values at Standard Test Conditions STC(AM1.5, Irradiance 1000W/m², Cell Temperature 25°C)

Electerical Characteristics NMOT	RS3-445M-E3	RS3-450M-E3	RS3-455M-E3	RS3-460M-E3	RS3-465M-E3
Maximum Power (Pmax)	334.3W	338.0W	341.8W	345.5W	349.3W
Maximum Power Current (Imp)	8.70A	8.75A	8.81A	8.86A	8.91A
Maximum Power Voltage (Vmp)	38.40V	38.60V	38.80V	38.90V	39.20V
Short Circuit Current (Isc)	9.35A	9.41A	9.46A	9.51A	9.56A
Open Circuit Voltage (Voc)	46.20V	46.40V	46.50V	46.70V	46.90V

 $NMOT (Nominal\ module\ operating\ temperature)\ , Irradiance\ of\ 800W/m^2, AM1.5, Ambient\ Temperature\ 20\ ^{\circ}C, wind\ Speed\ 1m/s.$ 

Mechanical Characteristics		
Cell Type	MonoP-Type,166x166(±1)mm,144(6x24)Half-Cut cells	
Glass	3.2mm,High Transmission,Low Iron,Tempered Glass	
Frame	Anodized Aluminum Alloy	
Juction Box	IP68 Rated, With Bypass Diodes	
Dimension	2094×1038×30mm	
Output Cable	4 mm2 (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	792

Characteristics	
Temperature Coefficient of Voc	-0.27%/°C
Temperature Coefficient of Isc	+0.048%/°C
Temperature Coefficient of Pmax	-0.35%/℃
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

