

N-type

RIOxxxW-120BIF-2278

xxx=580-600 in step of 5W

BIFACIAL MODULE WITH DUAL GLASS

N-Type Black Frame

Positive power tolerance of 0~+3%

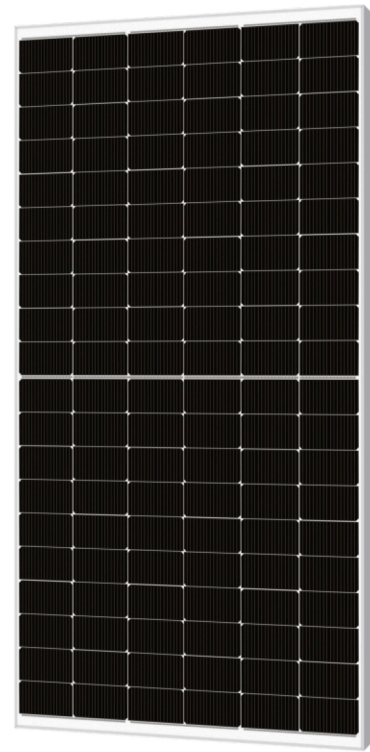
IEC61215(2016), IEC61730(2016)

ISO9001:2015: Quality Management System

ISO14001:2015: Environment Management System

ISO45001:2018

Occupational health and safety management systems



Key Features



SMBB Technology

Better light trapping and current collection to improve module power output and reliability.



Hot 2.0 Technology

The N-type module with Hot 2.0 technology has better reliability and lower LID/LETID.



PID Resistance

Excellent Anti-PID performance guarantee via optimized mass-production process and materials control.



Enhanced Mechanical Load

Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).



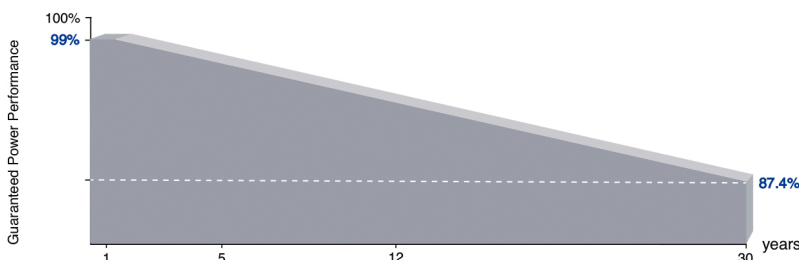
Higher Power Output

Module power increases 5-25% generally, bringing significantly lower LCOE and higher IRR



Continuous Quality Assurance

LINEAR PERFORMANCE WARRANTY

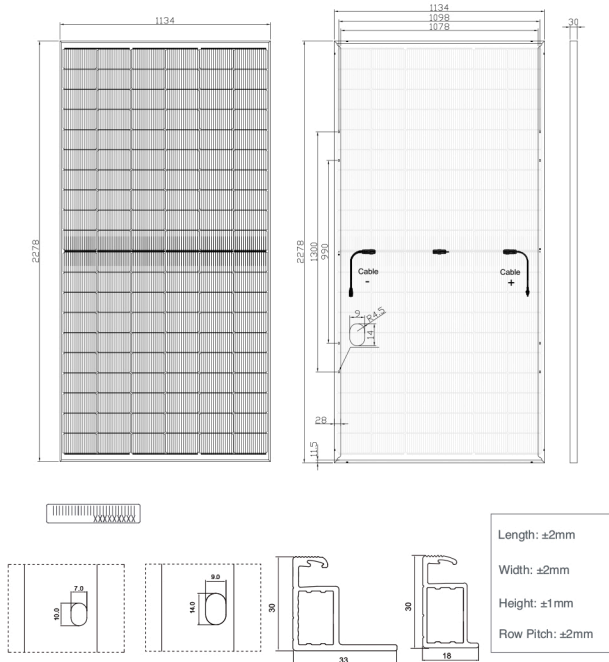


12 Year Product Warranty

30 Year Linear Power Warranty

0.40% Annual Degradation Over 30 years

Engineering Drawings

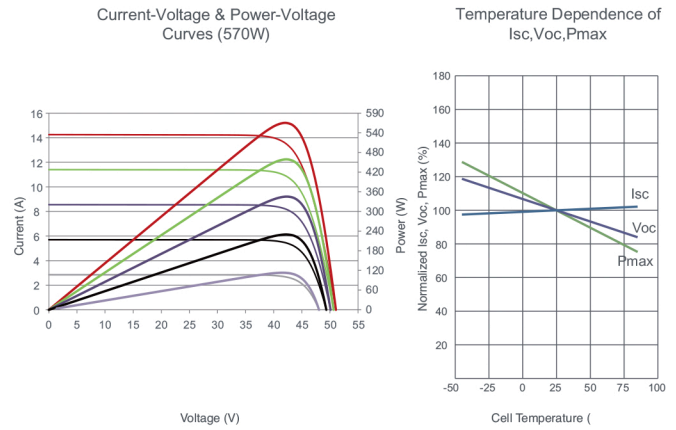


Packaging Configuration

(Two pallets = One stack)

37pcs/pallets, 74pcs/stack, 740pcs/ 40'HQ Container

Electrical Performance & Temperature Dependence



Mechanical Characteristics

Cell Type	N type Mono-crystalline
No. of cells	120 (6×20)
Dimensions	2278×1134×30mm (89.69×44.65×1.18 inch)
Weight	32 kg
Front Glass	2.0mm, Anti-Reflection Coating
Back Glass	2.0mm, Heat Strengthened Glass
Frame	Polyurethane Frame
Junction Box	IP68 Rated
Output Cables	TUV 1×4.0mm (+): 400mm , (-): 200mm or Customized Length

SPECIFICATIONS

Module Type	RIO580W-120BIF-2278		RIO585W-120BIF-2278		RIO590W-120BIF-2278		RIO595W-120BIF-2278		RIO600W-120BIF-2278	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	580Wp	441Wp	585Wp	445Wp	590Wp	448Wp	595Wp	452Wp	600Wp	456Wp
Maximum Power Voltage (Vmp)	38.39V	36.16V	48.62V	36.38V	38.85V	36.60V	39.08V	36.80V	39.31V	37.00V
Maximum Power Current (Imp)	15.11A	12.19A	15.15A	12.22A	15.19A	12.25A	15.23A	12.28A	15.27A	12.31A
Open-circuit Voltage (Voc)	45.71V	43.24V	45.94V	43.46V	46.17V	43.68V	46.40V	43.90V	46.63V	44.12V
Short-circuit Current (Isc)	15.86A	12.86A	15.91A	12.89A	15.95A	12.93A	15.99A	12.97A	16.03A	13.01A
Module Efficiency STC (%)	22.45%		22.65%		22.84%		23.03%		23.23%	
Operating Temperature (°C)	-40°C~+85°C									
Maximum system voltage	1500VDC (IEC)									
Maximum series fuse rating	30A									
Power tolerance	0~+3%									
Temperature coefficients of Pmax	-0.29%/°C									
Temperature coefficients of Voc	-0.25%/°C									
Temperature coefficients of Isc	0.045%/°C									
Nominal operating cell temperature (NOCT)	45±2°C									
Refer. Bifacial Factor	80±5%									

*STG Irradiance 1000W/m² Cell Temperature 25°C

NOCT: Irradiance 800W/m² Ambient Temperature 20°C

AM=1.5

AM=1.5

Wind Speed 1m/s

Specifications included in this datasheet are subject to change without notice.