www.tsunrio.com

N-type

RIOxxxW-132BIF-2384

xxx=605-630 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

Bifacial Technology

Key Features

Multi Busbar Technology

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

Longer Life-time Power Yield

0.45% annual power degradation and 30 year linear power warranty.

PID Resistance

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

Enhanced Mechanical Load

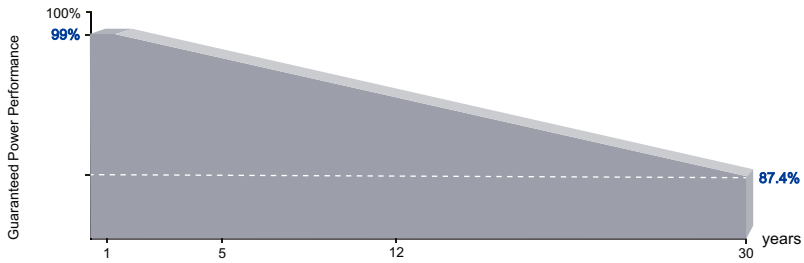
2400 Pa
5400 Pa

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

LINEAR PERFORMANCE WARRANTY

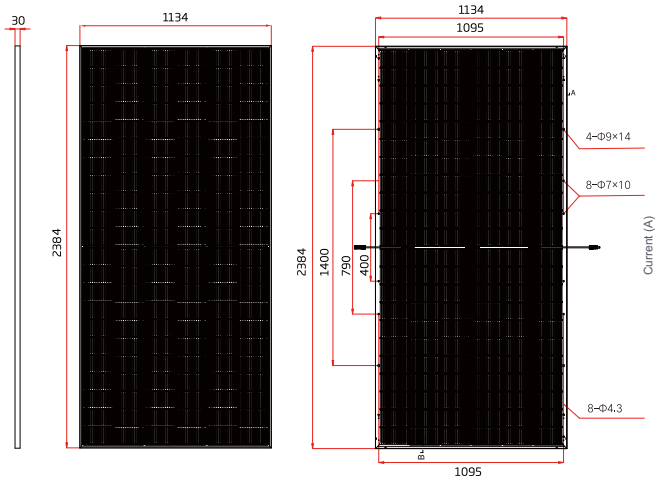


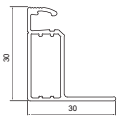
12 Year Product Warranty

30 Year Linear Power Warranty

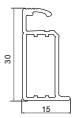
0.45% Annual Degradation Over 30 years

Engineering Drawings





A-A

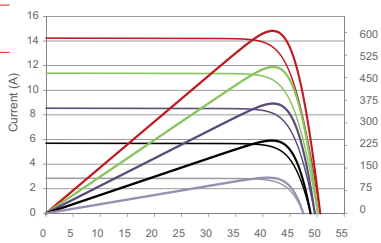


B-B

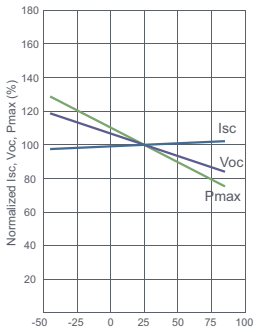
Length: ±2mm
Width: ±2mm
Height: ±1mm
Row Pitch: ±2mm

Electrical Performance & Temperature Dependence

Current-Voltage & Power-Voltage Curves (600W)



Temperature Dependence of Isc, Voc, Pmax



Mechanical Characteristics

Cell Type	N. type Mono-crystalline
No. of cells	132 (6×22)
Dimensions	2384×1134×30mm (93.86×44.65×1.18 inch)
Weight	33.3 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

Packaging Configuration

(Two pallets = One stack)

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

SPECIFICATIONS

Module Type	RIO605W-132BIF-2384		RIO610W-132BIF-2384		RIO615W-132BIF-2384		RIO620W-132BIF-2384		RIO625W-132BIF-2384		RIO630W-132BIF-2384	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	605W	457W	610W	461W	615W	464W	620W	468W	625W	472W	630W	476W
Maximum Power Voltage (Vmp)	40.31V	37.76V	40.46V	37.92V	40.60V	38.10V	40.74V	38.25V	40.88V	38.41V	41.02V	38.57V
Maximum Power Current (Imp)	15.01A	12.10A	15.08A	12.15A	15.15A	12.19A	15.22A	12.24A	15.29A	12.29A	15.36A	12.34A
Open-circuit Voltage (Voc)	48.48V	46.05V	48.60V	46.24V	48.88V	46.43V	49.08V	46.62V	49.28V	46.81V	49.48V	47.00V
Short-circuit Current (Isc)	15.90A	12.83A	15.96A	12.88A	16.02A	12.93A	16.08A	12.98A	16.14A	13.03A	16.20A	13.07A
Module Efficiency STC (%)	22.4%		22.6%		22.8%		23.0%		23.1%		23.3%	
Operating Temperature(℃)	-40℃~+85℃											
Maximum system voltage	1500VDC (IEC)											
Maximum series fuserating	35A											
Power tolerance	0~+3%											
Temperature coefficients of Pmax	-0.29%/℃											
Temperature coefficients of Voc	-0.25%/℃											
Temperature coefficients of Isc	0.045%/℃											
Nominal operating cell temperature (NOCT)	45±2℃											
Refer. Bifacial Factor	80±5%											

*STC Irradiance 1000W/m² Cell Temperature 25°C AM=1.5

NOCT: Irradiance 800W/m² Ambient Temperature 20°C AM=1.5 Wind Speed 1m/s

Speci cations included in this datasheet are subject to change without notice.