



FJF\_BMF / 96 cells  
 445 W - 470 W  
 Mono-Crystalline Bifacial PV Module

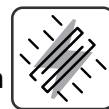
United Renewable Energy Co., Ltd. (a company from Taiwan where the sun shines) Glory TOPCon module uses URECO TOPCon monocrystalline bifacial solar cells, and URECO advanced double glass(G2G) module manufacturing technology.



## Key Features



**Multi-Bus bar/ TLS technology**  
 Increase the stability of outdoor power generation



**Better bifaciality**  
 High bifacial rate



**PID resistance**  
 Excellent PID resistance performance



**Enhanced performance warranty**  
 Zero light induced degradation effect/  
 Excellent low light performance



**30-Year**  
 Power output warranty



**Superior temperature coefficient**  
 Better performance in high temperature



## Electrical Data

Model		Bifacial Gain			Bifacial Gain			Bifacial Gain		
		FJF445BMF	5%	10%	FJF450BMF	5%	10%	FJF455BMF	5%	10%
Maximum Rating Power (Pmax)	[W]	445	467	490	450	473	495	455	478	501
Module Efficiency	[%]	22.77	23.38	24.50	22.52	23.65	24.77	22.77	23.91	25.05
Open Circuit Voltage (Voc)	[V]	34.71	34.71	34.71	34.91	34.91	34.91	35.11	35.11	35.11
Maximum Power Voltage	[V]	29.80	29.80	29.80	29.98	29.98	29.98	30.16	30.16	30.16
Short Circuit Current (Isc)	[A]	15.79	16.58	17.37	15.86	16.65	17.45	15.93	16.73	17.52
Maximum Power Current	[A]	14.93	15.68	16.42	15.01	15.76	16.51	15.09	15.84	16.60
Model		FJF460BMF	5%	10%	FJF465BMF	5%	10%	FJF470BMF	5%	10%
Maximum Rating Power (Pmax)	[W]	460	483	506	465	488	512	470	494	517
Module Efficiency	[%]	23.02	24.17	25.32	23.27	24.43	25.60	23.52	24.70	25.87
Open Circuit Voltage (Voc)	[V]	35.31	35.31	35.31	35.51	35.51	35.51	35.71	35.71	35.71
Maximum Power Voltage	[V]	30.34	30.34	30.34	30.52	30.52	30.52	30.70	30.70	30.70
Short Circuit Current (Isc)	[A]	16.00	16.80	17.60	16.07	16.87	17.68	16.14	16.95	17.75
Maximum Power Current	[A]	15.16	15.92	16.68	15.24	16.00	16.76	15.31	16.08	16.84

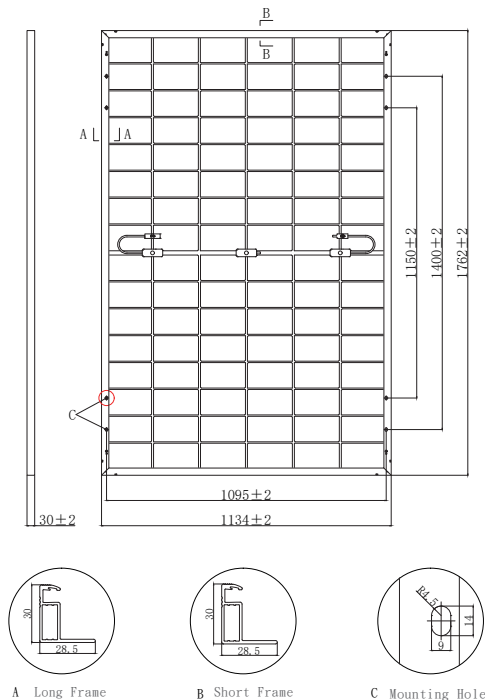
\*Standard Test Condition (STC): Cell Temperature 25 °C, Irradiance 1000 W/m<sup>2</sup>, AM 1.5  
 \*Values without tolerance are typical numbers. Measurement tolerance: ±3%

## Mechanical Data

Item	Specification
Dimensions	1762 mm (L) <sup>1</sup> x 1134 mm (W) <sup>1</sup> x 30 mm (D) <sup>2</sup> / 69.37" (L) <sup>1</sup> x 44.65" (W) <sup>1</sup> x 1.18" (D) <sup>2</sup>
Weight	24.60 kg / 54.23 lbs
Solar Cell	N-type Mono/ 182mm x 105mm, 96 monocrystalline cells
Front Glass	Heat strengthened glass, 2.0mm thickness
Rear Glass	Heat strengthened glass, 2.0mm thickness
Frame	Anodized aluminum alloy
Junction Box	IP68 (3 diodes)
Connector Type	MC4 Compatible
Length of Cable	4mm <sup>2</sup> , Portrait: (+)1200mm/ (-)1200mm Cable length can be customized
Package Configuration	37 pcs Per Pallet, 962 pcs per 40' HQ container

<sup>1</sup> : With assembly tolerance of ± 2 mm [ ± 0.08" ]  
<sup>2</sup> : With assembly tolerance of ± 0.8 mm [ ± 0.03" ]

## Engineering Drawing (mm)



## Operating Conditions

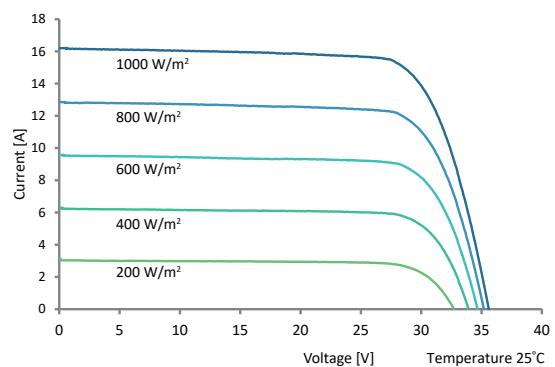
Item	Specification
Mechanical Load	5400 Pa
Maximum System Voltage	1500 VDC
Series Fuse Rating	35A
Operating Temperature	-40 to 85 °C

## Temperature Characteristics

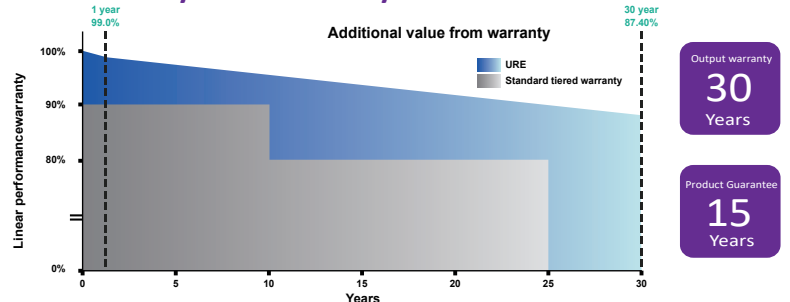
Item	Specification
Nominal Module Operating Temperature	45°C ± 2°C
Temperature Coefficient of Isc	0.045 % / °C
Temperature Coefficient of Voc	-0.250 % / °C
Temperature Coefficient of Pmax	-0.280 % / °C

\*Nominal module operating temperature (NMOT): Air mass AM 1.5, irradiance 800W/m<sup>2</sup>, temperature 20°C, windspeed 1 m/s.

## Dependence on Irradiance



## Reliability with Warranty



Output warranty  
**30**  
Years

Product Guarantee  
**15**  
Years

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