

FBF_BFO / 108 cells

410 W - 430 W

Mono-Crystalline Bifacial PV Module

URECO Glory TOPCon module uses URECO own TOPCon monocrystalline bifacial solar cells, and URECO advanced double glass(G2G) module manufacturing technology.



Key Features



SMBB cell design
Half-cut cell technology



Better bifaciality
Up to 85% bifaciality



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		
		FBF410BFO-BB	5%	10%	FBF415BFO-BB	5%	10%	FBF420BFO-BB	5%	10%
Maximum Rating Power (Pmax)	[W]	410	431	451	415	436	457	420	441	462
Module Efficiency	[%]	21.00	22.05	23.10	21.25	22.31	23.38	21.51	22.59	23.66
Open Circuit Voltage (Voc)	[V]	37.73	37.73	37.73	37.92	37.92	37.92	38.11	38.11	38.11
Maximum Power Voltage	[V]	31.13	31.13	31.13	31.32	31.32	31.32	31.51	31.51	31.51
Short Circuit Current (Isc)	[A]	13.91	14.61	15.30	13.99	14.69	15.39	14.07	14.77	15.48
Maximum Power Current	[A]	13.17	13.83	14.49	13.25	13.91	14.58	13.33	14.00	14.66
Model		FBF425BFO-BB	5%	10%	FBF430BFO-BB	5%	10%			
Maximum Rating Power (Pmax)	[W]	425	446	468	430	452	473			
Module Efficiency	[%]	21.76	22.85	23.94	22.02	23.12	24.22			
Open Circuit Voltage (Voc)	[V]	38.30	38.30	38.30	38.49	38.49	38.49			
Maximum Power Voltage	[V]	31.70	31.70	31.70	31.88	31.88	31.88			
Short Circuit Current (Isc)	[A]	14.15	14.86	15.57	14.23	14.94	15.65			
Maximum Power Current	[A]	13.41	14.08	14.75	13.49	14.16	14.84			

*Standard Test Condition (STC): Cell Temperature 25 °C, Irradiance 1000 W/m², AM 1.5
 *Values without tolerance are typical numbers.Measurement tolerance: ±3%

Mechanical Data

Item	Specification
Dimensions	1722mm (L) ¹ x 1134 mm (W) ¹ x 30 mm (D) ² / 67.80" (L) ¹ x 44.65" (W) ¹ x 1.18" (D) ²
Weight	24.2 kg / 53.35 lbs
Solar Cell	N-type Mono / 182mm x 91mm, 108 monocrystalline cells
Front Glass	2.0mm thickness
Rear Glass	2.0mm thickness
Frame	Black anodized aluminum alloy
Junction Box	IP68
Connector Type	MC4 connector
Length of Cable	4mm ² , 1200mm
Package Configuration	36 pcs Per Pallet, 936 pcs per 40' HQ container

1 : With assembly tolerance of ± 2 mm [± 0.08 "]
 2 : With assembly tolerance of ± 0.8 mm [± 0.03 "]

Operating Conditions

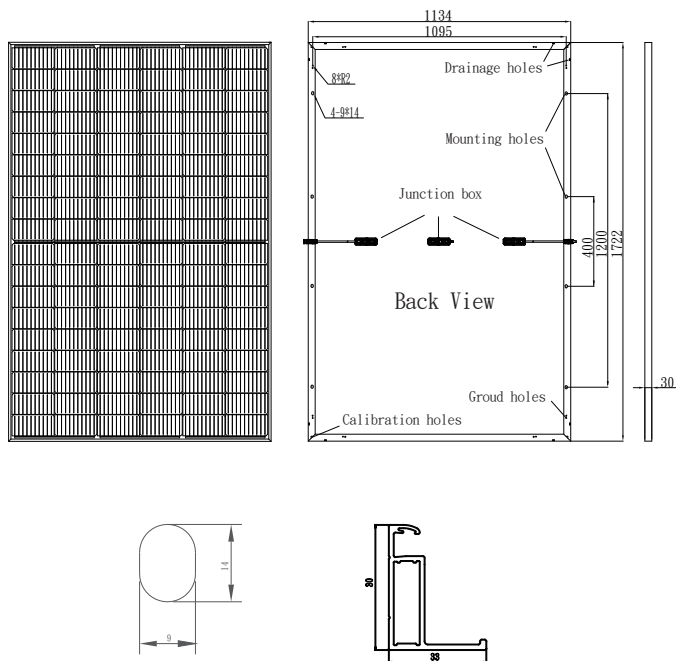
Item	Specification
Mechanical Load	5400 Pa
Maximum System Voltage	1500 VDC
Series Fuse Rating	25 A
Operating Temperature	-40 to 85 °C

Temperature Characteristics

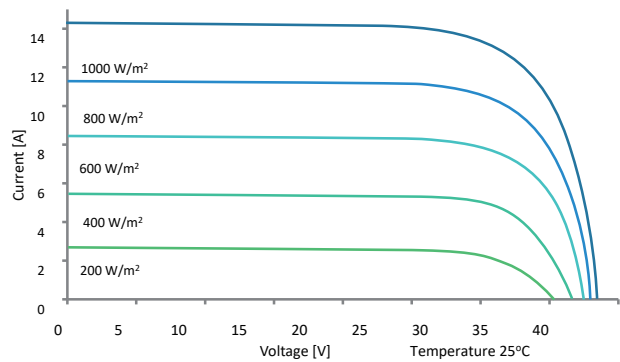
Item	Specification
Nominal Module Operating Temperature	44 °C ± 2 °C
Temperature Coefficient of Isc	0.046 % / °C
Temperature Coefficient of Voc	-0.25 % / °C
Temperature Coefficient of Pmax	-0.30 % / °C

*Nominal module operating temperature (NMOT): Air mass AM 1.5, irradiance 800W/m², temperature 20°C, windspeed 1 m/s.
 *Reduction in efficiency from 1000W/m² to 200W/m² at 25°C: 3.5 ± 2%.

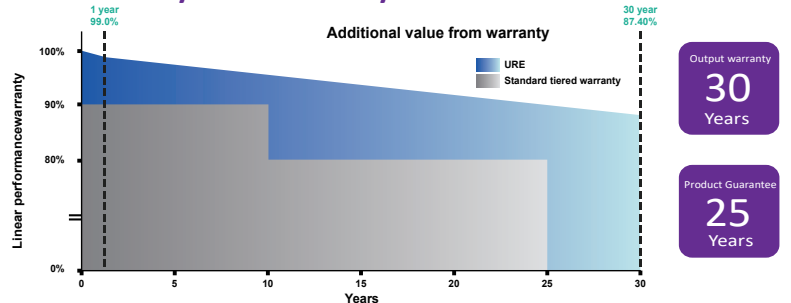
Engineering Drawing (mm)



Dependence on Irradiance



Reliability with Warranty



For more information, please visit us at www.urecorp.com