

FBF_BFB / 108 cells

410 W - 430 W

Mono-Crystalline Bifacial PV Module

URECO Glory TOPCon module uses URECO TOPCon monocrystalline bifacial solar cells, and URECO advanced 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		
		FBF410BFB	5%	10%	FBF415BFB	5%	10%	FBF420BFB	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]	37.90	37.90	37.90	38.05	38.05	38.05	38.20	38.20	38.20
Maximum Power Voltage	[V]	31.35	31.35	31.35	31.50	31.50	31.50	31.65	31.65	31.65
Short Circuit Current (Isc)	[A]	13.52	14.20	14.87	13.63	14.31	14.99	13.74	14.43	15.11
Maximum Power Current	[A]	13.08	13.73	14.39	13.18	13.84	14.50	13.28	13.94	14.61
Model		FBF425BFB	5%	10%	FBF430BFB	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]	38.35	38.35	38.35	38.50	38.50	38.50			
Maximum Power Voltage	[V]	31.80	31.80	31.80	31.95	31.95	31.95			
Short Circuit Current (Isc)	[A]	13.85	14.54	15.24	13.96	14.66	15.36			
Maximum Power Current	[A]	13.37	14.04	14.71	13.46	14.13	14.81			

*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 High transmittance, reinforced glass
Rear Glass	2.0mm part of the structure is grid-like black ceramic glass
Frame	Black anodized aluminum alloy
Junction Box	IP68
Connector Type	MC4
Length of Cable	4mm ² , 1200mm in length
Package Configuration	36+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

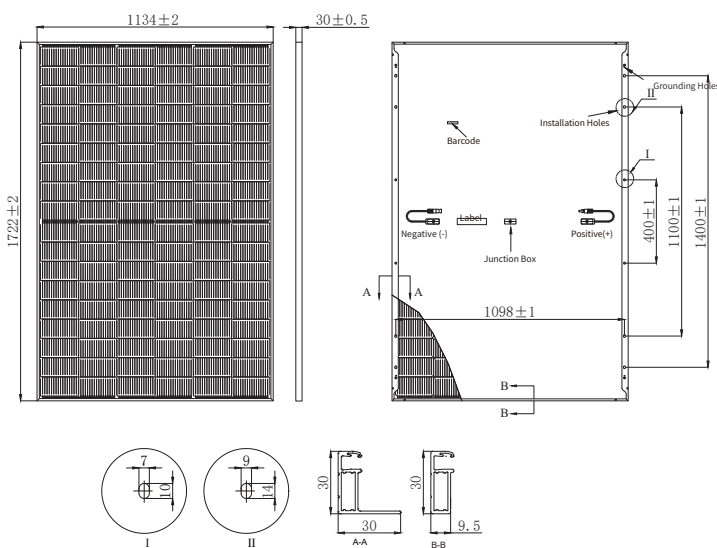
Item	Specification
Mechanical Load	5400 Pa
Maximum System Voltage	1500 VDC
Series Fuse Rating	25 A
Operating Temperature	-40 to 85 °C

Temperature Characteristics

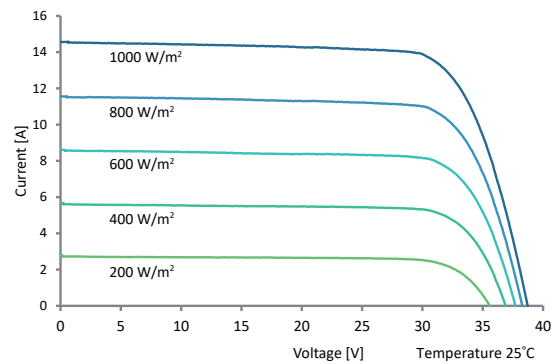
Item	Specification
Nominal Module Operating Temperature	41°C ± 3°C
Temperature Coefficient of Isc	0.045 % / °C
Temperature Coefficient of Voc	-0.250 % / °C
Temperature Coefficient of Pmax	-0.300 % / °C

*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%.

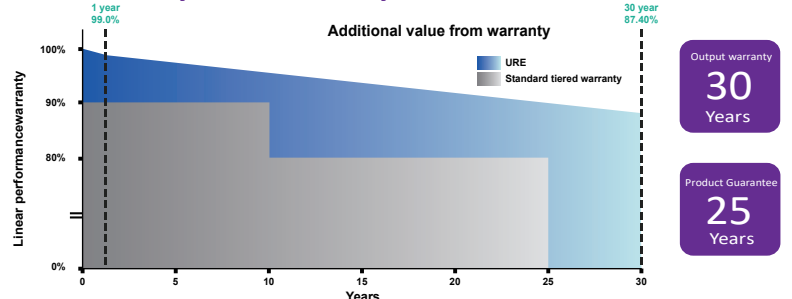
Engineering Drawing (mm)



Dependence on Irradiance



Reliability with Warranty



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