

# **SAPPHIRE**

**Monoperc Bifacial Glass to Glass Module** 



Committed to Quality, Punctuality, and Customer Support since 1992.



Over 15 Years of Sustainable Power with Photovoltaic Modules, New High WP Modules United with Quality and Efficiency



With presence in Green Energy Projects Across the Globe.



Our Mission: Delivering Clean, Reliable Energy while Reducing Carbon Footprint through wide range of Residential and Commercial Solar Offerings.

# 108 HALF CUT CELL MONOPERC BI-FACIAL GLASS **TO GLASS MODULE**

### **TECHNICAL SPECIFICATION**

#### Electrical data at 1000W/m<sup>2</sup>, 25°C and A.M1.5 (STC in accordance with IEC 60904-3)

Model Name	E395HCBG108	E400HCBG108	E405HCBG108
Rated Power at STC	395	400	405
Power Tolerance	+5W	+5W	+5W
Model Efficience at STC	20.25%	20.51%	20.76%
Open Circuit Voltage - VOC (Volts) (±10%)	36.34	36.61	36.77
Short Circuit Current - ISC (Amps) (±10%)	13.15	13.21	13.24
Max Power Voltage - VPM (Volts)	31.54	31.81	32.13
Max Power Current - IPM (Amps)	12.53	12.58	12.61

At low irradiance ( $200W/M^2$ ,  $25^{\circ}c$  and AM1.5) the module yields at least 95% of the STC efficiency.

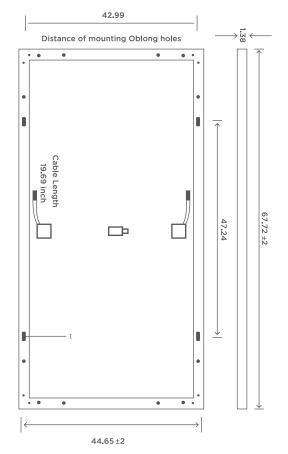
Test uncertainty for Pmax ±3%

Permissible Operating Conditions		
Operating Temperature Range	-40° C TO 85° C	
Max.system Voltage	1500V DC	
Maximum Snow Load Capacity	5400PA	
Resistance Against Hail	Max Ø24mm with Impact Speed of 51 Mph	
Protection Class Against Electrical Shock	II	
Maximum Reverse Current	30 A	
Bifaciality	70±5%	

Thermal Data	
Temp. Coefficient Open-circuit Voltage	-0.28%/°C
Temp. Coefficient Short Circuit Current	0.05%/°C
Temp. Coefficient Rated Power	-0.35%/°C
NOCT (Normal operating cell temperature)	45° C ±2°C

Mechanical Data	
Number of Cells and Cell Type	108 Monoperc Bi-Facial Solar Cells(182mm X 91mm)
Dimensions: (L X W X H)	67.72 inch X 44.65 inch X 1.38 inch
Weight	48.50 pounds
Front Glass	2 mm High Transmission, Solar Galss
Embedding	Top EVA, Bottom POE
Back Glass	2 mm High Transmission, Solar Galss
Junction Box	3 Split Junction Box IP68
Number of Bypass Diodes	3
Cables	4mm² Solar Cables, Length 19.69±10inch
Connectors	MC4 Compatible / Staubli Option Available
Application Class	А

Warranty	
Product Warranty	12 years
Performance Warranty	30 years
	0.35



### FEATURES\_\_\_\_



AR Coated High Transmission Glass



MC4 Compatible Connectors



PID Resistance



Anodised Aluminium Frame



Snow Load Resistance upto 5400 Pa

# **BENEFITS**



Low LCOE, Faster Payback Period



30% More Power Best In Class Efficiency upto 21.5%



Multi-Bus Bar Technology for Better Current Collection



Lowest Guaranteed First Year and Annual Degradation



Well-Composed Components Stress to Reduce Micro Cracks



















Product under testing at TUV for IEC standards.



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