# Bi72 Bifacial ModulesPrism Solar<br/>TECHNOLOGIESThe Clear Choice

## 72-CELL BIFACIAL SERIES Bi72-457BSTC

Prism's glass-on-glass modules make brilliant use of the sun by generating up to 35% more energy per Watt than traditional modules.



#### High Module Efficiency

Bifacial module efficiencies of up to 23.2% are achieved through the use of advanced bifacial N-type silicon cell technology, with LID resistance built in. Prism's cells offer near equal front and back efficiencies up to +22.8% helping customers capitalize on their solar investment.



#### Superior Low Light Performance

Prism's modules offer exceptional performance in low light conditions due to the additional back energy.

#### Bifacial Technology

Both front and back surfaces of the module are capable of generating electricity. The back surface generates additional power. Mounting considerations that maximize a site's available albedo light can yield up to 35% gain in energy generation per installed Watt.



#### Seamless Integration

Prism's frameless modules with our streamlined j-box offer a solution to many possible applications including: Awnings, Canopies, Carports, Commercial Rooftops, Dividers, Facades, Fencing & Siding.



#### Quality and Reliability

Highest fire rating possible, achieving A ratings in burning brand and spread of flames. IEC/UL certified to bifacial (BSTC<sup>\*</sup>) standards with an additional 300W/m<sup>2</sup> irradiance to guarantee safe operation at bifacial levels.



### Prism Solar guarantees the front and back side power production for all its bifacial modules<sup>4</sup>

Proudly manufactured in the USA and ARRA compliant



## 72 CELL BIFACIAL SERIES BSTC 438-457 W

#### Electrical Data for Bifacial Modules Bi72-438BSTC, -445BSTC, -451BSTC, -457BSTC

Projected specifications for Front STC<sup>1</sup>, Rear STC<sup>1</sup>, Bifacial STC (BSTC<sup>\*</sup>)

Parameters for Bi72-438/-445/-451/-457		Front STC <sup>1</sup>	Rear STC <sup>1</sup>	BSTC*
Rated Power	Pmax (W)	345/350/355/360	311/315/320/324	438/445/451/457
Rated Voltage	Vmp (V)	38.9	38.9	38.9
Rated Current	Imp (A)	8.87/9.0/9.13/9.26	7.98/8.1/8.22/8.33	11.3/11.4/11.6/11.8
Open Circuit Voltage	Voc (V)	48.3	48.3	48.3
Short Circuit Current	lsc (A)	9.4/9.53/9.67/9.80	8.45/8.58/8.7/8.82	11.9/12.1/12.3/12.4
Module Efficiency	(%)	17.5/17.8/18.1/18.3	15.6/16/16.24/16.5	22.3/22.6/22.9/23.2
Max System Voltage	UL/IEC	1000V		
Series Fuse Rating/Limiting Reverse Current		20A		
PowerTolerance		-1.5%/+3%	-3%/+3%	-3%/+3%
Electrical Parameter Tolerance		-6%/+6%	-6%/+6%	-6%/+6%
Power Temperature Coefficient		–0.4139 %/°C		
Voltage Temperature Coefficient (Voc)		–0.2923 %/°C		
Current Temperature Coefficient (Isc)		+0.0413 %/°C		
NOCT (C°)		47°C +/- 2°C		

#### Irradiance Dependence Bi72-445BSTC



#### Temperature Dependence Bi72-445BTC



#### Dimensions, mm [in]

Length & width dimensions and j-box location are +/- 5mm.



#### 6 [.236]

#### TO MAXIMIZE POWER

- a) Avoid shading the back side of the module by the support rack.
- b) Mount modules over highly reflective surfaces, such as a white roof or crushed white stone.
- c) Elevate modules above the mounting surface as much as possible.
- d) Refer to the Design Guide.



#### www.prismsolar.com

Glass, Front & Back	2 x 3.2mm Tempered
Frame Type	Frameless
Bypass Diodes	3
Junction Box	Slim Profile - Does not shadow bifacial cells
Cable (Type/Gauge/Length)	PV Wire/12 AWG/1000mm to 1200mm
Connectors	Тусо РV4
Exterior Glass Dimensions	2000mm X 984mm X 7.2mm <sup>2</sup> (78.74in X 38.74in X 0.28in) <sup>2</sup>
Weight	33.9kg (74.8 lbs.)
Operating Conditions	
Temperature	–40°C to 85°C (–40°F to 185°F)
Max Mechanical Load <sup>3</sup>	4-point mount (80mm): 2400 Pa (snow/wind load)
	4-point and 6-point mount (120mm):
	5400 Pa (snow load)/2400 Pa (wind load)

#### **Certifications & Warranty**

Mechanical Data

Certifications and Listings	UL1703, IEC61215/61730, CE, CAN-CSA,
Fire Rating	Type=13; Burning Brand =A; Spread of Flames =A
Limited Warranty (Workmanship/Power)	10 Years/30 Years Output (Front and Back) <sup>4</sup>

1 - Measured at Standard Testing Conditions (STC): cell temp 25°C, AM1.5, 1000W/m<sup>2</sup>.

2 - Length and width dimensions are +/- 5mm.

3 - To achieve this max weight loading, the support and racking system must meet the mechanical weight loading specified.

- 4 Please see the Prism Solar Warranty for Bifacial Modules for complete details.
- \* Bifacial STC (BSTC) = cell temp 25°C, AM1.5, 1000W/m<sup>2</sup> (FRONT) + 300W/m<sup>2</sup> (BACK).

IMPORTANT: Prism modules are rated at STC conditions and Bifacial STC conditions (BSTC<sup>\*</sup>). BSTC<sup>\*</sup> ratings account for additional power produced from the back of the module. Under certain mounting conditions, Prism modules could produce more power than their STC rating. This additional power should be accounted by using the BSTC<sup>\*</sup> rating when sizing and selecting system components.

CAUTION: Read the Installation Manual and Design Guide carefully before using this product. All specifications are subject to change without notice.

Bi72 Gen2 specifications, all values subject to change without notice. All rights reserved. rev 1