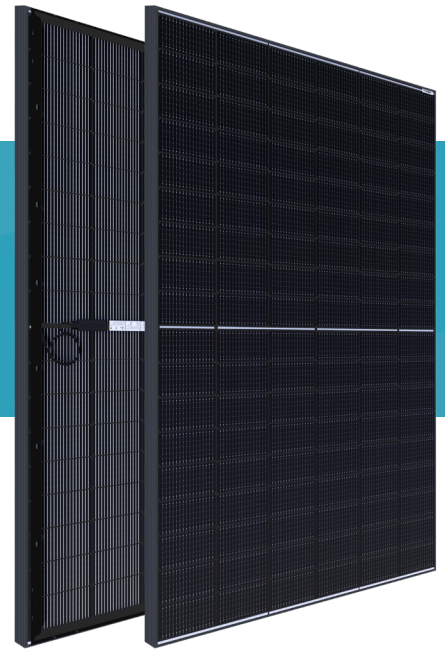


# VEGA SERIES™

## TOPCON Cell Technology

**POWER OUTPUT RANGE**  
420Wp – 435Wp

MODULE CODE  
BVM7609M-XXX-H-HC-BF



**PV MODULE TECHNOLOGY**  
Mono-Bifacial | Single Glass

**PV MODULE POWER RANGE**  
420W | 425W | 430W | 435W

**PV MODULE EFFICIENCY**  
22.28% Max Module Efficiency  
Power Tolerance 0~+5W

**PV MODULE DESIGN**  
Black Frame | Transparent Back  
Split Module Design

### PRODUCT FEATURES + BENEFITS



#### Design to Perform

- High energy yield and faster ROI
- High efficiency up to 22.53%
- Improved incident angle modifier
- Improved low irradiance performance
- Lower temperature coefficient -0.30%/K



#### Build to Last

- Resistance to harsh environments
  - Wind loads up to 2400Pa
  - Snow loads up to 5400Pa
  - Hail impact size 45mm
- Lower impact from temperature efficiency behavior
  - Anti-LeTID performance
  - Anti-PID performance
  - Backed by 3rd party testing validation
- Multi-busbar, half-cut cells to enhance
  - Micro crack resistance
  - Impact of inter-row resistance
  - Improve current flow



#### Best Value

- TOPcon cell technology with 80±5% bifaciality
- Lower Balance of system cost (BOS)
- Reduced levelized cost of energy (LCOE)
- Faster return on investment (ROI)

### PRODUCT WARRANTY

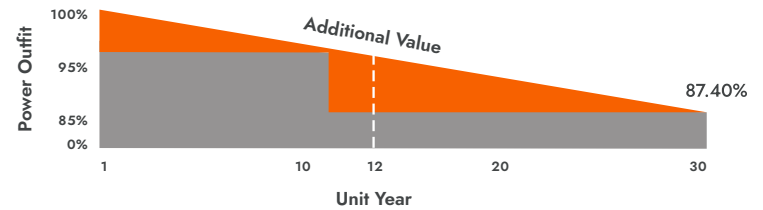
#### Warranty Terms

- 12 Year product warranty
- 30 Year linear product warranty

#### Power Degradation

- First year power degradation no more than 1%
- Subsequent annual power degradation no more than 0.4%

- Output Linear Warranty
- Standard Warranty



### PRODUCT CERTIFICATIONS & TESTS

**UL 61730 | IEC 61215 | IEC 61730 | CE Listed**  
IEC 62716, IEC 61701 Ammonia, Salt mist corrosion test  
IEC TS 62804-1, IEC 60068-2-68PID test, Dust and Sand test  
IEC 61730-2 (UL790) Fire Class C

#### Management System | Certificates

ISO 9001 | Quality management system  
ISO 14001 | Environmental management system  
ISO 45001 | Occupational health and safety management system

\*Please contact Boviet Solar representative for a full list of certificates according to local requirements and PV module product type.

### A RELIABLE, TRUSTED, LONG-TERM INDUSTRY PARTNER



Top 10 Global  
PV Module  
Manufacturer



PVEL PV Module  
Reliability Scorecard  
Top Performer



B&V Successful  
Independent  
Manufacturing Assessment



Supply chain  
traceability  
protocol



Environmental,  
Social, & Governance  
Program



Made in  
Vietnam since  
2013

## ELECTRICAL CHARACTERISTICS | STC

Maximum Power (Pmax)	420W	425W	430W	435W
Maximum Power Current (Imp)	12.91A	13.00 A	13.08A	13.17A
Maximum Power Voltage (Vmp)	32.54V	32.71V	32.88 V	33.05V
Short Circuit Current (Isc)	13.60A	13.69A	13.78A	13.87A
Open Circuit Voltage (Voc)	38.66 V	38.85V	39.04 V	39.23V
Module Efficiency	21.51%	21.76%	22.02%	22.28%
Power Tolerance	0~+5W	0~+5W	0~+5W	0~+5W

STC: AM1.5 Irradiance 1000W/m, 25° C

## ELECTRICAL CHARACTERISTICS | NOCT

Maximum Power (Pmax)	420W	425W	430W	435W
Maximum Power (Pmax)	317.60W	321.38W	325.16W	328.94W
Maximum Power Current (Imp)	10.47A	10.54A	10.61A	10.68A
Maximum Power Voltage (Vmp)	30.33V	30.49V	30.65V	30.81V
Short Circuit Current (Isc)	10.93A	11.00A	11.07A	11.15A
Open Circuit Voltage (Voc)	36.22V	36.40V	36.58V	36.76V

NOCT: AM 1.5 Irradiance 800W/m², 20° C, Wind speed 1m/s

## MECHANICAL CHARACTERISTICS

Solar Cell	Monocrystalline I TOPCon I 182mm Cell I 16 Busbar 108 cell I (6x18) pieces in series
Solar Modules	Bifacial I Black Frame I Transparent Back Sheet Dimensions: 67.80 x 44.65 x 1.19 inch I 1722 x 1134 x 30 mm Weight: 44.09 lb. I 20 kg
Module Front Glass	Single glass I 3.2 mm I 0.13 inch Tempered Glass I AR Coated
Module Frame	Black Frame I 30 mm I 1.19 inch Aluminum Alloy Frame I Anodized I Ultra Strong
Module Junction Box	Model: JMTHY IP68 rated I 3 bypass diodes I Split junction box design
Module Output Cable	Model: IMTHY I 1000 mm I 39.38 inch
Module Connector	
Module Back Glass	Transparent Back Sheet
Module Fire Type	Certification name: xx I Type 1 Fire rated

## PACKING INFORMATION

Pieces per pallet:	36 PCS
Pallets per container (40HQ):	26 Pallets
Pieces per container (40HQ):	936 PCS
Pallet Weight:	770 kg (1697.56 lb.)
Pallet Dimension:	68.78 x 44.69 x 49.49 inch (1747 x 1135 x 1257 mm)

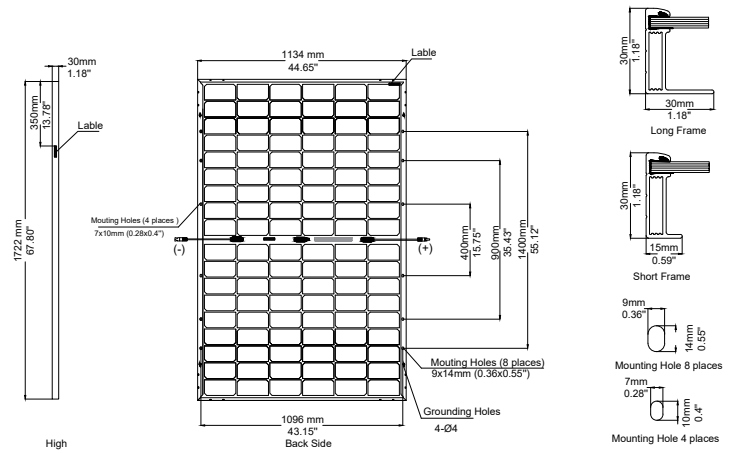
## THERMAL CHARACTERISTICS

Pmax Temperature Coefficient	-0.30%/K	Operating Temperature	-40°F~185°F
Voc Temperature Coefficient	-0.25%/K	Maximum Series Fuse Rating	30A
Isc Temperature Coefficient	+0.046%/K	Maximum System Voltage	1500V DC
NOCT	113±35.6°F	Bifacial Ratio	80±5%

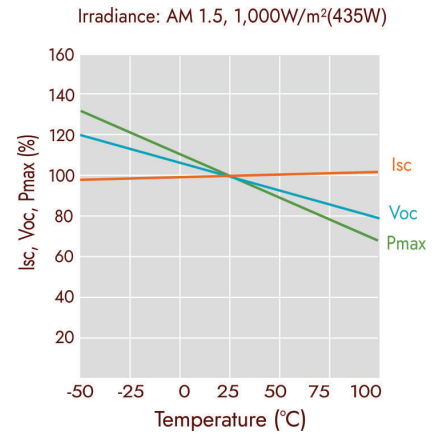
## BIFACIAL OUTPUT-BACKSIDE POWER GAIN

10%	Pmax(W)	462W	467.5W	473W	478.5W
	Module efficiency (%)	23.66%	23.94%	24.22%	24.50%
20%	Pmax(W)	504W	510W	516W	522W
	Module efficiency (%)	25.81%	26.12%	26.42%	26.73%

## PV Module: Mechanical Drawing



## PV Module: IV Curve



## PV Module: IV Curve

