

# **VEGA SERIES™**

# BIFACIAL | DOUBLE GLASS | PV MODULE PERC Cell Technology | P-Type

Power Range: 530W I 535W I 540W I 545W I 550W I 555W
Technology: PERC I Half cut cell I 10 Busbar I 144 cells
Design: Double Glass I Silver Frame I Glass Back

Module Efficiency: 21.3%

Cell Efficiency: 22.5%~23.3% Power Tolerance: 0~+5W

System Voltage: 1000/1500 V DC

Module Size: 90.40 x 44.65 x 1.38 inch

Module Weight: 73.86 lb.

Module Code: BVM7612M-XXX-H-HC-BF-DG

## DESIGNED TO PERFORM AND BUILT TO LAST

Our PV modules are designed with better technology in mind, made from robust product components, under stringent quality control steps and high-tech manufacturing processes.

PERC, half-cut, multi-busbar, and large cell designs enables our PV modules to pack more power per module, capture more photons, produce more energy, and provide reliable, dependable system performance under different installations requirements, difficult weather, or environmental conditions. Whether you are EPC, installer, contractor, or project developer, we have the right and better PV module for your residential, commercial, industrial, and utility scale solar projects.



Monocrystalline technology



P-Type semiconductor



Passivated emitter and rear cell technology



Half cut cell



Multi-Busbar cell



Large wafer design



Beautiful aesthetic

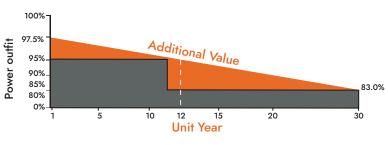


Robust product component

#### WARRANTY

30 Years - Linear power performance warranty

12 Years - Enhanced product warranty



Output Linear Warranty

Standard Warranty

1 (12) years product warranty

2 Out linear warranty with 2.5% degradation in the 1st year and less than 0.5% degradation each year from 2nd year to 30th year

#### **CERTIFICATES**

UL 61730 | IEC 61215 | IEC 61730 | CEC Listed | CE

ISO 9001 Quality Management System

ISO 14001 Environmental Management System

ISO 45001 Occupational Health and Safety Management System

\*Please contact with Boviet Solar representatives for full list of certificates according to local requirements and product type

#### **ELECTRICAL CHARACTERISTICS I STC**

Maximum Power (Pmax)	530W	535W	540W	545W	550W	555W
Maximum Power Current (Imp)	12.66A	12.71A	12.76A	12.82A	12.88A	12.95A
Maximum Power Voltage (Vmp)	41.94V	42.17V	42.40V	42.58V	42.76V	42.93V
Short Circuit Current (Isc)	13.43A	13.48A	13.55A	13.72A	13.84A	14.08A
Open Circuit Voltage (Voc)	49.71V	49.80V	49.89V	49.98V	50.13V	50.20V
Module Efficiency	20.4%	20.5%	20.7%	20.9%	21.1%	21.3%
Power Tolerance	0~+5W	0~+5W	0~+5W	0~+5W	0~+5W	0~+5W

STC: AM1.5 Irradiance 1000W/m², 25° C

#### **ELECTRICAL CHARACTERISTICS I NOCT**

Maximum Power (Pmax)	530W	535W	540W	545W	550W	555W
Maximum Power (Pmax)	401.48W	405.27W	409.09W	412.75W	416.44W	420.37W
Maximum Power Current (Imp)	10.27A	10.31A	10.35A	10.40A	10.45A	10.50A
Maximum Power Voltage (Vmp)	39.10V	39.31V	39.53V	39.69V	39.86V	40.02V
Short Circuit Current (Isc)	10.79A	10.83A	10.89A	11.03A	11.12A	11.32A
Open Circuit Voltage (Voc)	46.57V	46.66V	46.74V	46.83V	46.97V	47.03V

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

#### MECHANICAL CHARACTERISTICS

Solar Cell	Monocrystalline I PERC PV Cells 182mm Cell I Half-cut I 10 Busbar I 144 (6x24) pcs in series
Solar Modules	Bifacial I 90.40 x 44.65 x 1.38 inch. I Weight: 73.86 lb.
Module Glass	2.0 mm (0.079 inch) High transparency, low iron, AR Coated tempered Glass
Module Frame	Frame 35 mm Ultra-strong anodized aluminum alloy frame
Module Junction Box	IP68 rated I 3 bypass diodes
Module Output Cable	4mm² (EU) I 12 AWG (US) 39.38 inch
Module Connector	MC4 / JM608 *Please confirm the connector type with Boviet Solar before order processing.
Module Encapsulant	POE
Module Backsheet	2.0mm thickness, transparent with a grid.     High transmitted, low iron, and strength tempered glass
Module Fire Type	Type 29 Fire rated

#### PACKING INFORMATION

Pieces per pallet:	31
Pallets per container (40HQ):	20
Pieces per container (40HQ):	620
Pallet Weight:	2399.73 lb
Pallet Dimension:	91.37 x 44.69 x 49.49 inch

#### MAXIMUM RATING

Operating Temperature	-40°F~185°F
Maximum Series Fuse Rating	30A
Isc Temperature Coefficient	1000/1500V DC

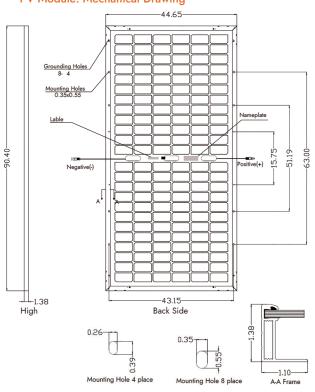
### THERMAL CHARACTERISTICS

Pmax Temperature Coefficient	-0.35%/K
Voc Temperature Coefficient	-0.285%/K
Isc Temperature Coefficient	+0.05%/K
NOCT	113±35.6°F

#### **BIFACIAL OUTPUT-BACKSIDE POWER GAIN**

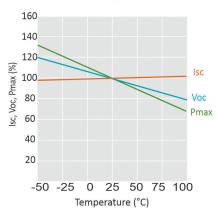
10%	Pmax(W)	583	589	594	600	605	611
	Module efficiency (%)	22.39	22.60	22.81	23.03	23.24	23.45
20%	Pmax(W)	636	642	648	654	660	666
	Module efficiency (%)	24.43	24.66	24.89	25.12	25.35	25.58

#### PV Module: Mechanical Drawing



#### PV Module: IV Curve

Irradiance: AM 1.5, 1,000W/m<sup>2</sup>(555W)



#### PV Module: IV Curve

