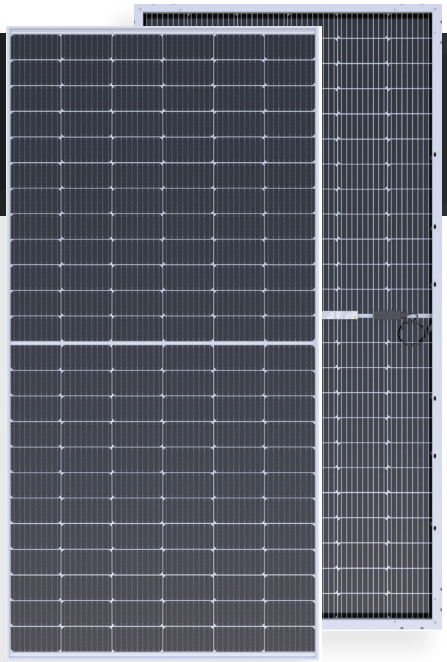
VEGA SERIES™



BIFACIAL | DOUBLE GLASS | PV MODULE

PERC Cell Technology | P-Type

Power Range:	440W I 445W I 450W
Technology:	PERC I Half cut cell I 9 Busbar I 144 Cells
Design:	Double Glass I Silver Frame I Glass Back
Module Efficiency:	20.2%
Cell Efficiency:	22.5%~23.3%
Power Tolerance:	0~+5W
System Voltage:	1000/1500 V DC
Module Size:	84.06 x 41.19 x 1.38 inch
Module Weight:	68.34 lb.
Module Code:	BVM6612M-XXXS-H-HC-BF-DG

DESIGNED TO PERFORM AND BUILT TO LAST

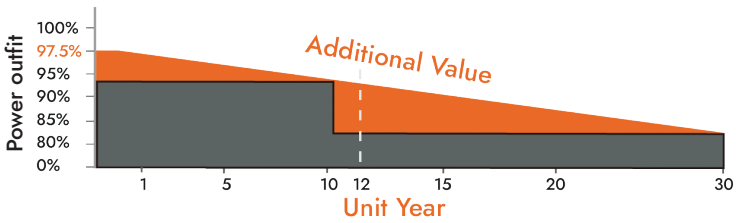
Our PV modules are designed with better technology in mind, made from robust product components, under stringent quality control steps and high-tech manufacturing processes.

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
- PERC — 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 I IEC 61215 I IEC 61730 I CEC Listed I 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)	440W	445W	450W
Maximum Power Current (Imp)	10.92A	10.99A	11.06A
Maximum Power Voltage (Vmp)	40.37V	40.57V	40.76V
Short Circuit Current (Isc)	11.48A	11.55A	11.60A
Open Circuit Voltage (Voc)	48.60V	48.80V	49.05V
Module Efficiency	19.7%	19.9%	20.2%
Power Tolerance	0~+5W	0~+5W	0~+5W

STC: AM1.5 Irradiance 1000W/m², 25° C

ELECTRICAL CHARACTERISTICS I NOCT

Maximum Power (Pmax)	440 W	445 W	450 W
Maximum Power (Pmax)	333.33W	337.13W	340.87W
Maximum Power Current (Imp)	8.86A	8.91A	8.97A
Maximum Power Voltage (Vmp)	37.63V	37.82V	38.00V
Short Circuit Current (Isc)	9.23A	9.28A	9.32A
Open Circuit Voltage (Voc)	45.53V	45.72V	45.96V

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

MECHANICAL CHARACTERISTICS

Solar Cell	Monocrystalline I PERC PV Cells 166mm Cell I Half-cut I 9 Busbar I 144 (6x24) pcs in series
Solar Modules	Bifacial I 84.06 x 41.19 x 1.38 inch. I Weight: 68.34 lb.
Module Glass	2.0mm (0.079inch) High transparency, low iron, AR-coated semi-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 Backside	2.0mm thickness, transparent with a grid. High transmitted, low iron, and strength semi-tempered glass
Module Fire Type	Type 29 Fire rated

PACKING INFORMATION

Pieces per pallet:	30
Pallets per container (40HQ):	22
Pieces per container (40HQ):	660
Pallet Weight:	2127.5 lb
Pallet Dimension:	85.23 x 43.31 x 45.88 inch

MAXIMUM RATING

Operating Temperature	-40°F~185°F
Maximum Series Fuse Rating	20A
Isc Temperature Coefficient	1000/1500V DC

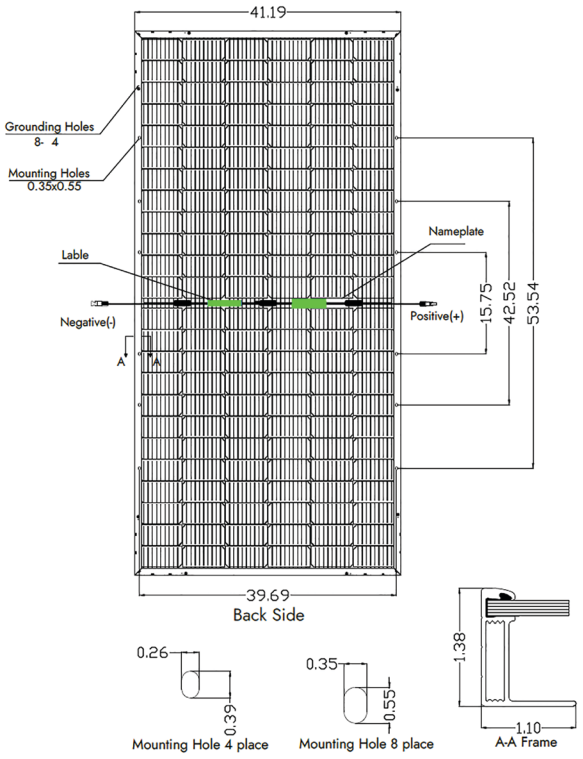
THERMAL CHARACTERISTICS

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

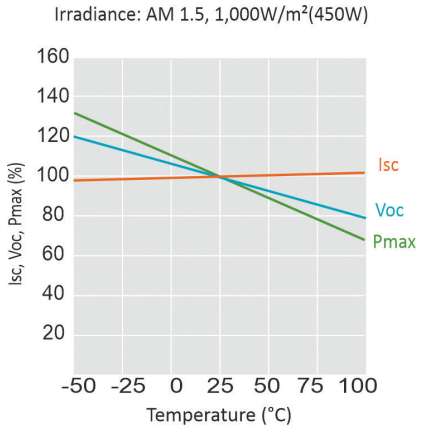
BIFACIAL OUTPUT-BACKSIDE POWER GAIN

10%	Pmax(W)	484	490	495
	Module efficiency (%)	21.67	21.92	22.17
20%	Pmax(W)	528	534	540
	Module efficiency (%)	23.64	23.91	24.18

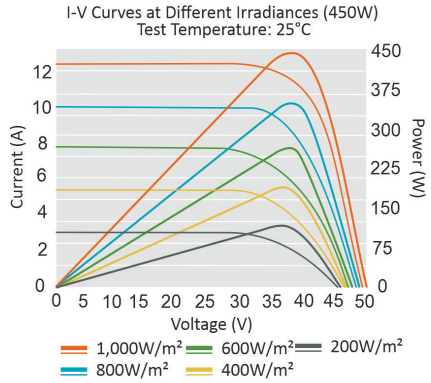
PV Module: Mechanical Drawing



PV Module: IV Curve



PV Module: IV Curve



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