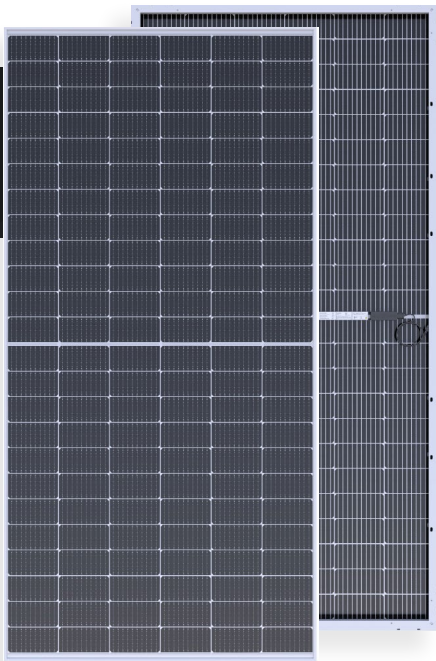


VEGA SERIES™

UTILITY SCALE SOLAR MONO | BIFACIAL | PERC | PV MODULE



Power Range:	530W 535W 540W 545W 550W
Technology:	PERC Half cut cell 10 Busbar 144 cells
Design:	Double Glass Silver Frame Transparent Back
Module Efficiency:	21.10%
Cell Efficiency:	22.5%~22.6%
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.

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

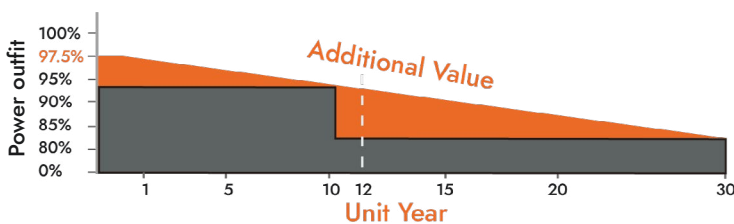
Large wafer design

Beautiful aesthetic

Robust product component

WARRANTY

30 Years - Linear power performance warranty
12 Years - Enhanced product warranty



Output Linear Warranty

1 (12) years product warranty

Standard 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 | CE Listed | MCS

ISO 9001 Quality Management System

ISO 14001 Environmental Management System

OHSAS 18001 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 | STC

Maximum Power (Pmax)	530W	535W	540W	545W	550W
Maximum Power Current (Imp)	12.66A	12.71A	12.76A	12.82A	12.88A
Maximum Power Voltage (Vmp)	41.94V	42.17V	42.40V	42.58V	42.76V
Short Circuit Current (Isc)	13.43A	13.48A	13.55A	13.72A	13.84A
Open Circuit Voltage (Voc)	49.71V	49.80V	49.89V	49.98V	50.13V
Module Efficiency	20.3%	20.5%	20.7%	20.9%	21.1%
Power Tolerance	0~+5W		0~+5W		0~+5W

STC: AM1.5 Irradiance 1000W/m², 25° C

ELECTRICAL CHARACTERISTICS | NOCT

Maximum Power (Pmax)	530W	535W	540W	545W	550W
Maximum Power (Pmax)	417W	421W	425W	429W	433W
Maximum Power Current (Imp)	10.16A	10.24A	10.32A	10.40A	10.48A
Maximum Power Voltage (Vmp)	41.1V	41.15V	41.20V	41.25V	41.32V
Short Circuit Current (Isc)	10.71A	10.74A	10.81A	10.86A	10.92A
Open Circuit Voltage (Voc)	49.0V	49.23V	49.45V	50.68V	49.87V

NOCT: AM 1.5 Irradiance 800/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	4mm ² (EU) I 12 AWG (US) 39.38 inch
Module Connector	Multi contact (MC4) compatible connectors
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

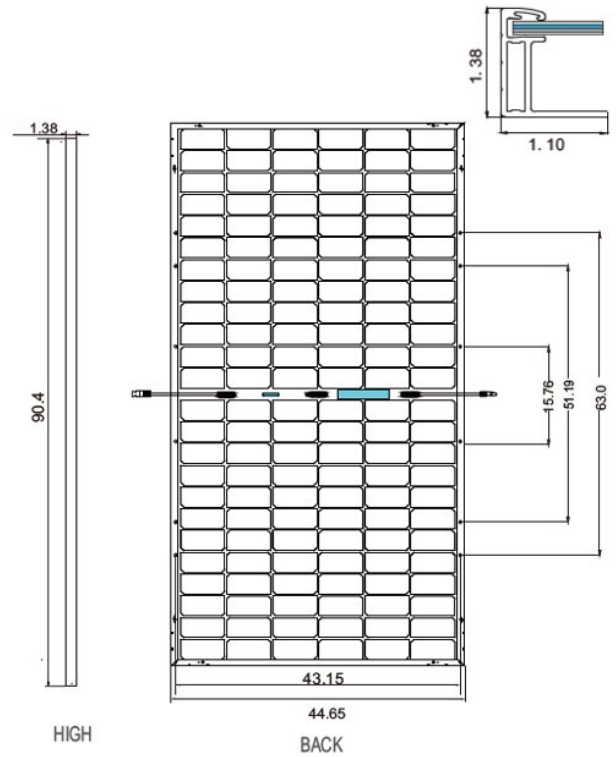
THERMAL CHARACTERISTICS

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

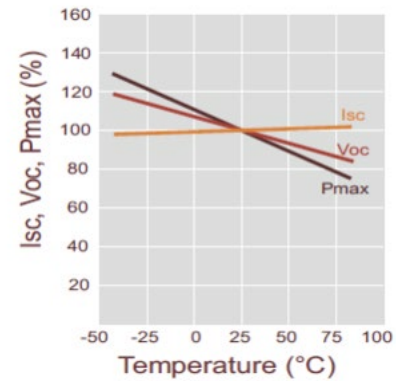
10%	Pmax(W)	583	589	594	600	605
	Module efficiency (%)	22.39	22.60	22.81	23.03	23.24
20%	Pmax(W)	636	642	648	654	660
	Module efficiency (%)	24.43	24.66	24.89	25.12	25.35

PV Module: Mechanical Drawing



PV Module: IV Curve

Irradiance: AM 1.5, 1,000W/m² (540W)



PV Module: IV Curve

I-V Curves at Different Irradiances (540W)
Test Temperature: 25°C

