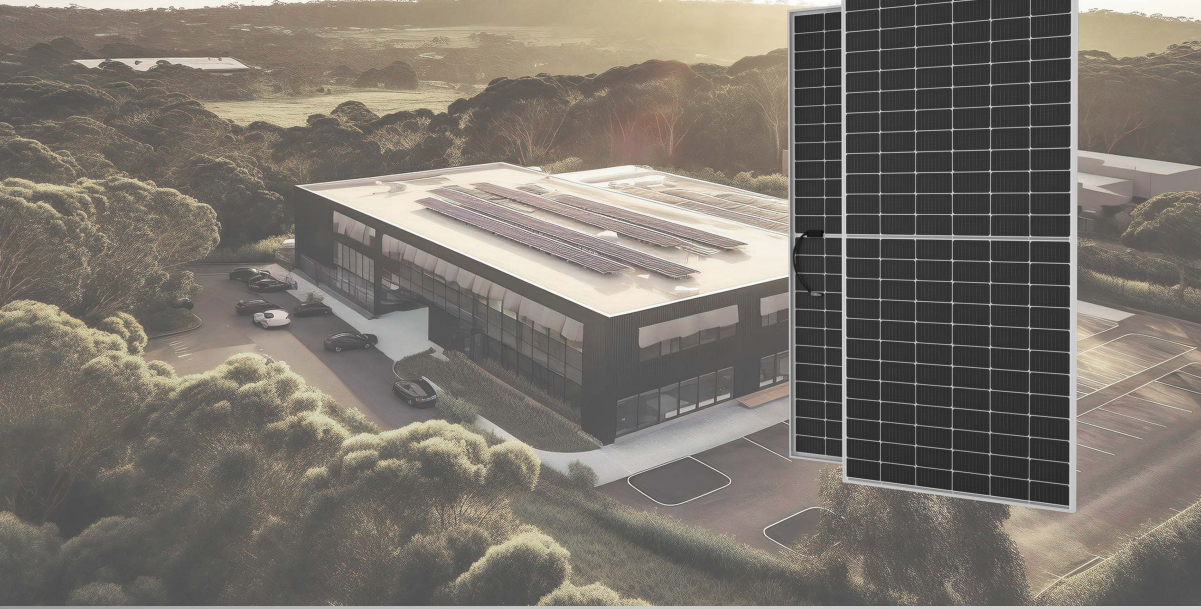


ELIOS

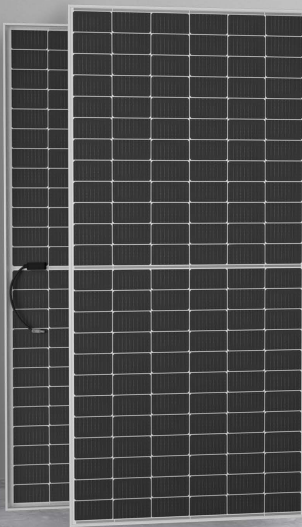
Voltaic550HC-BF



550 Watts

Bi-facial Solar Panel

- ✓ New M10 Cells
- ✓ PERC
- ✓ 10 Busbars
- ✓ Half-Cells
- ✓ Only 29 kg



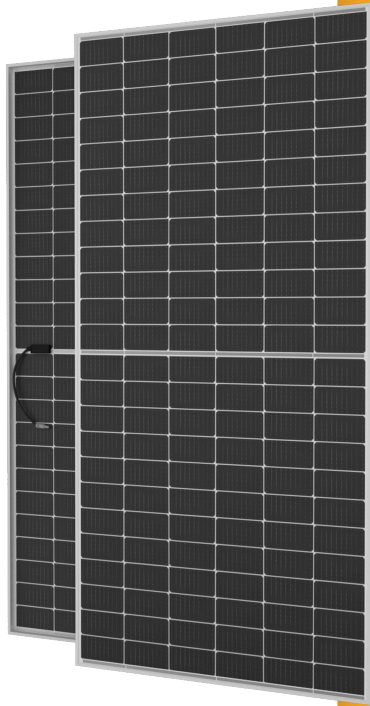
Renewable Power

Enjoy **Green** Life

TIER-1
MANUFACTURER



ELIOS | Voltaic550HC-BF

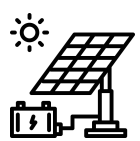
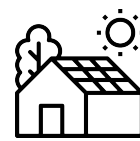
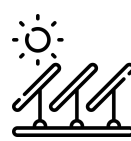
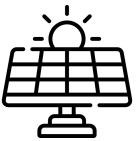


Bi-Facial Mono-crystalline 550W Solar Panel

Our latest innovative 550W bifacial solar panel is among the best solar panels for off-grid and commercial applications, thanks to its bifacial design, it can provide over 700W of power.

Featuring premium Grade A+ monocrystalline solar cells, PERC technology, half-cut cells, and 10 busbars, this panel ensures exceptional efficiency and output.

Experience superior performance and reliability with our monocrystalline solar panel solution.



Applications

Off-Grid Systems | Residential | Commercial | Industrial | Lightning System | Solar Power Plants

Certifications



IEC 62782:2016 Dynamic Load | IEC TS 62804 PID Resistance | IEC 60068 Dust and Sand Resistance
IEC 62716 Ammonia Resistance | IEC 61701 Salt Mist Resistance | UL 61215 / UL 61730 | IEC 61215 / IEC 61730
EN ISO 9001: 2015 Quality Management System | EN ISO 14001: 2015 Environmental Management System
EN ISO 45001: 2018 Occupational Health and Safety Management Systems

Key Features



Module's Cell Efficiency up to 23%



Lower Internal Resistance Loss



Less Partial Shading Current Mismatch Loss so More Power Output



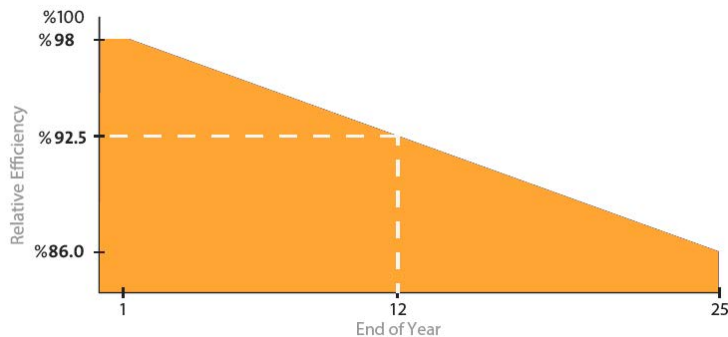
Lower Micro-crack Problem Loss Comparing with 5-busbar Module



Lower Degradation PERC Technology



Better Temperature Coefficients Come From Half-cell Design



12 Year Product Warranty

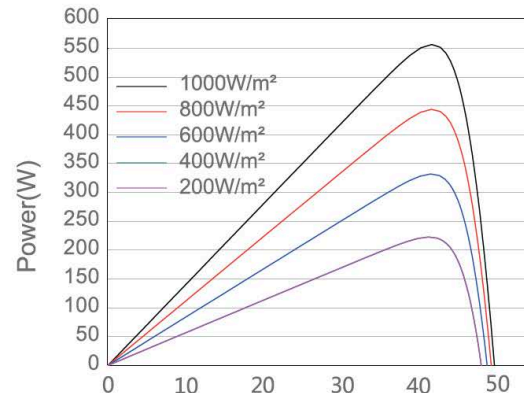
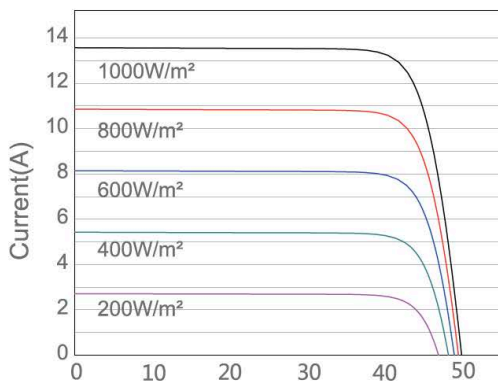


25 Year Linear Power Warranty



Only -0.5% Annual Degradation

I-V CURVES



ELECTRICAL CHARACTERISTIC

POWER AT STC	550 W
Short Circuit Current - I _{sc} (A)	13.69
Maximum Power Current - I _{mpp} (A)	13.05
Open Circuit Voltage - V _{oc} (V)	50.25
Maximum Power Voltage - V _{mpp} (V)	42.19
Module Efficiency - η' (%)	21.3%
Bifaciality Ratio (%)	65±5%

Values at Standard Test Conditions STC (Air Mass AM 1.5, Irradiance 1000 W/m², Cell Temperature 25° C).

MATERIAL CHARACTERISTIC

Characteristics	Value
Cells per Module	144 (72 x 2)
Cell Type	Grade A - Mono PERC Crystalline Silicon/10 BB 182x91mm
Front Surface	3.2mm Tempered AR Coated Glass
Encapsulant	PID Free EVA
Back Cover	Transparent Backsheet
Frame	Anodized Aluminum (Black/Silver)
Junction Box	IP68, 3 Bypass Diodes
Cable Length	Cables Length Could be 300mm, or 1200mm With Original MC4 Connector
Fire Classification	Type I

THERMAL CHARACTERISTIC

Characteristics	Value
Open Voltage Temperature Coefficient VOC (%/C°)	-0.22
Short Circuit Current Temperature Coefficient ISC (%/C°)	+0.05
Power Temperature Coefficient PMP (%/C°)	-0.35
NOCT (°C)	45±2

PHYSICAL CHARACTERISTIC

Characteristics	Value
Dimensions (mm inch)	2277±1 x 1133±1 x 35 mm 89.6 X44.6 X 1.37 inch
Weight (kg lbs)	29 ± 1kg 63.94 lbs
Packaging	Value
Modules per Pallet	31
40 Feet High-Cube Container	620 Modules

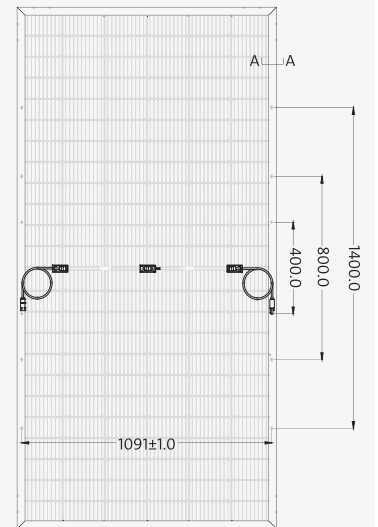
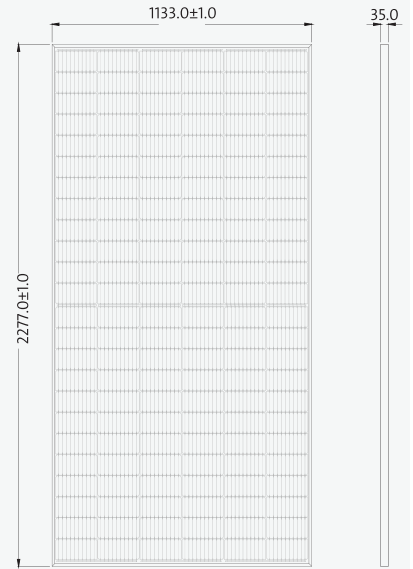
OPERATING CONDITIONS

Maximum System Voltage - V _{max} (V)	1500
Maximum Series Fuse (A)	25
Operating Temperature Range (°C)	IEC: -40 to +85 UL: -40 to +90

Mechanical Load**	Value
Max Static load (Front)	5400 Pa
Max Static load (Back)	2400 Pa
Dynamic load	1000 Pa

- ◆ Power measuring tolerance: ± 3%, other measurements tolerances: ± 5%.
- ◆ Datasheet is subjected to change without prior notice, always obtain the most recent version of the datasheet.
- ◆ ** Caution: For professional use only, the installation and handling of PV modules and cleaning modules require professional skills and should only be performed by qualified professionals, please read the Installation and Operation Manual before using the modules, also Cleaning Guidelines

MODULE DRAWINGS



Cross Section A-A

