

ELIOS Voltaic 585HC-BF







585W Bifacial Mono-Crystalline Silicon Solar Panel

Data Sheet



UL and IEC tested, our 585W bifacial solar panels offer an impressive efficiency of up to 22.64%, harnessing sunlight from both the front and rear sides to maximize energy generation. This advanced design ensures superior energy performance, even in less-than-ideal lighting conditions. Whether for residential or commercial use, these panels are engineered for durability and reliability, delivering consistent, high-performance energy solutions year-round.

Features & Benefits

-  More energy, even in partially shaded areas with half cut cell technology.
-  Designed to Withstand High Mechanical load : 5400 Pa (Front) and 5400 Pa (Back), ensuring durability in extreme weather conditions.
-  TOPCon technology with 16-busbar design for better performance in hot climates.
-  Delivers up to 25% extra power, thanks to its bifacial design.
-  Exceptional Anti-PID performance through the use of optimized mass-production processes and strict materials control.
-  Better temperature coefficients come from half-cell design.

Certifications

TUV Austria | MCS | INTERTEK | UL | IECCE | Archiles| UL 61215 / UL 61730 | IEC 61215 / IEC 61730 | CSA C22.2#61730:2019 | HALT Test Highly Accelerated Life and Extended Reliability Test | IEC 61853 PAN File | IEC TS 62804 PID Resistance | IEC 60068 Dust and Sand Resistance | IEC 62716 Ammonia Resistance | IEC 61701 Salt Mist Resistance | Bankability Report | EN ISO 9001:2015 Quality Management System | EN ISO 14001:2015 Environmental Management System | EN ISO 45001:2018 Occupational Health and Safety Management Systems

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ELECTRICAL SPECIFICATIONS

Rated Peak Power (Pmax)	585 W
Open Circuit Voltage (Voc)	51.79 V
Short Circuit Current (Isc)	14.14 A
Maximum Power Voltage (Vmp)	43.89 V
Maximum Power Current (Imp)	13.37 A
Solar Cell Efficiency	22.64%
Bifaciality Ratio	80±5%
Power Tolerance	0~+3%
Standard Test Conditions	Air Mass AM 1.5 Irradiance 1000 W/m ² Cell Temperature 25°

THERMAL SPECIFICATIONS

Open Voltage Temperature Coefficient VOC (%/C°)	-0.25
Open Voltage Temperature Coefficient ISC (%/C°)	+0.045
Power Temperature Coefficient PMP (%/C°)	-0.29
NOCT (C°)	45±2

OPERATING CONDITIONS

Maximum System Voltage - Vmax (V)	1500
Maximum Series Fuse (A)	30
Operating Temperature	IEC: -40° to +85°C UL: -40°C to +90°C

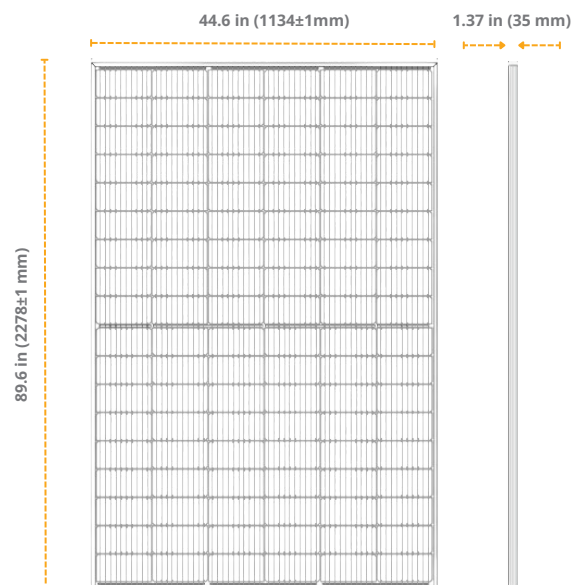
MECHANICAL SPECIFICATIONS

Cells Per Module	144 (72x2)
Solar Cell Type	Grade A - N Type (TopCon) Mono-Crystalline
Front Surface	3.2mm Tempered AR Coated Glass
Back Cover	Transparent Backsheet
Frame	Anodized Aluminum (Black/Silver)
Junction Box	IP68 with Original MC4
Wire Length	1200mm, Cable length could be customized
Fire Classification	Type 1
Dimensions (LxWxD)	89.6 X 44.6 X 1.37 in (2277±1 x 1133±1 x 35 mm)
Net Weight	29 ± 1 kg (63.94 ± 2.2 lbs)
Output Port	MC4
Output Cable	4.0 mm ²

PACKAGING & SHIPPING INFO

Retail Box: Dimensions (LxWxD)	90.6 x 44.9 x 47.24 in 2290x1140x1300 mm
Box Weight	12,656 kg 27,902 lbs
40 Feet High-Cube Container	434 Modules 31 Modules per Pallet

Dimensions



Applications

- Off-Grid Systems
- Residential roof-tops
- Commercial / Industrial
- Solar Power Plant

Warranty

- 12-year extendable product warranty
- 30-year linear power warranty
- Only -0.4% annual degradation