

ELIOS | Voltaic 110F-B







All Black Flexible 110W Solar Panel

Data Sheet



The Voltaic110F-B is a lightweight, flexible 110W solar panel designed for efficient energy generation in mobile and off-grid applications. With an operating voltage of 20.9V and current of 5.27A, it's ideal for curved surfaces where rigid panels are unsuitable. Built with a durable ETFE front layer and TPT backsheet, it offers excellent resistance to harsh environments. Weighing just 2.15 kg and bendable up to 240°, it combines flexibility with strength. Equipped with an IP68 junction box, MC4 connectors, and high resistance to heat and humidity, it ensures reliable solar performance on the move.

Features & Benefits

-  Lightweight Design: Only 2.15 kg for easy transport and quick setup.
-  Flexible Structure: Bends up to 240°, 70% lighter than glass panels.
-  Durable & Weatherproof: ETFE/PET layers resist impact, moisture, and -40 °C to +85 °C.
-  High Efficiency: Monocrystalline cells reach up to 24% conversion efficiency.
-  IP68 Protection: Waterproof junction box and MC4 connectors ensure reliable sealing.
-  Easy Installation: Mounts or adheres easily without heavy frames.

Certifications

ETL | UL 61730-1:2017 | CSA C22.2#61730-1:2019 Ed.2 | UL 61730-2:2017 Ed.1+R:30Apr2020 | CSA C22.2#61730-2:2019 Ed.2 | UL 61215-1:2017 Ed.1 | UL 61215-1-1:2017 Ed.1 | UL 61215-2:2017 Ed.1

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ELECTRICAL SPECIFICATIONS

Maximum Power at STC (Pmax)	110W
Optimum Operating Voltage (Vmp)	20.9V
Optimum Operating Current (Imp)	5.27A
Open - Circuit Voltage (Voc)	24.5V
Short - Circuit Current (Isc)	5.36A
Operating Module Temperature	-40°C to +85°C
Maximum System Voltage	1000V DC
Maximum Series Fuse Rating	10A
Power Tolerance	±3%
STC: Irradiance 1000 W/m ² , module temperature 25 °C, AM=1.5;	

MECHANICAL SPECIFICATIONS

Solar Cell	Mono solar cell, 166*83 mm, 3*12 layout
Dimensions	1079.5 x 562 x 3 mm (42.50 × 22.13 × 0.12 in)
Color	Black
Front Material	ETFE
Backsheet	TPT
Junction Box	IP68
Output Cables	90cm 4mm ² cable
Connectors	Compatible MC4
Weight	2.15kg (4.74 lb)
Thickness	3mm (0.12 in)
Max bending degree suggested	240 degrees

Applications

- Off-Grid
- Van & RV
- Marine
- Portable Power Solutions
- Residential
- Curved Roofs

Warranty

- 30 year performance warranty to 80%
- 10 year performance warranty to 90%
- 12 year warranty against production and material defect

Dimensions

