

50W SemiFlex Solar Panel with Built-In Charge Controller and Integrated Edge Seal

Applications: Starting battery management for two battery vehicles, TRU battery management, and telematics.

Keep your fleet running smoothly with the 50W SemiFlex Solar Panel, designed for commercial transportation. This maintenance-free solution charges starting batteries for two battery vehicles, supports TRU batteries, and powers telematics, helping fleet managers prevent starting battery failures, reduce downtime, and lower operating costs.

The Integrated PowerBoost Charge Controller maximizes solar output for 12V battery systems—extending battery life, preventing overcharging, and reducing maintenance expenses.

The Place & Pull double-release liner enables quick, damage-free installation by minimizing panel flex, a common issue with other semi-flexible designs. This protects the high-efficiency Maxeon monocrystalline cells, ensuring exceptional power output and long-term durability.

With an integrated edge seal, the panel eliminates external edge taping, reducing installation time while ensuring a clean, professional finish that withstands harsh conditions.

The 50W SemiFlex Solar Panel helps fleets stay on schedule by reducing jumpstarts, extending battery life, and cutting maintenance costs—improving reliability, efficiency, and overall performance.



Benefits

- Easy installation with integrated edge seal and Place & Pull double-release liner
- Built-in PowerBoost Charge Controller for optimized charging and battery safety
- Rugged, self-cleaning surface
- High-efficiency Maxeon cells for maximum power output
- Designed, engineered and assembled in the USA
- Tested to meet or exceed performance standards

PowerFilm[®] SOLAR

ASSEMBLED IN THE USA

Electrical Characteristics

Battery Charge Type	12V Battery (Flooded, AGM, or LiFePO)
Charging Voltage	14.4V (float) 14.6 (max)
Charging Efficiency	88-91% with integrated PowerFilm charge controller
Output To PowerBoost Charge Controller	Nominally 50W
Effective Power To Battery	44.3W

*Typical specs measured at STC. Contact PowerFilm for maximum specs and tolerances for custom designs or complex applications.

Physical Characteristics

Part Number	R3-15F14.4VXBA
Dimensions	43.7 x 12.6 x 0.1 inches 1,110.0 x 320.0 x 2.5 mm
Weight	2.9 lbs / 1.3 kg

Thermal Characteristics

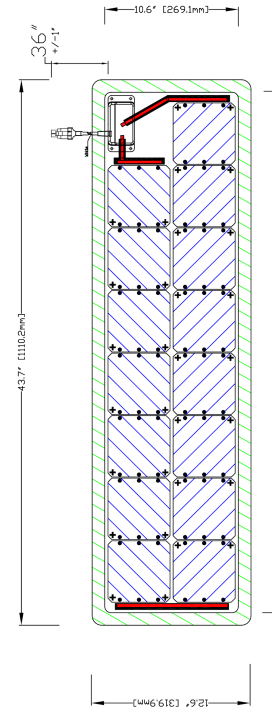
Temperature Coefficient for Power	-0.27%/°C
Temperature Coefficient for Voltage	-0.236%/°C
Temperature Coefficient for Current	0.058%/°C

Connector

- Aptiv Weather Pack

Certifications

- CE
- RoHS



IV Curve

