

About Us

PowerFilm specializes in the design, engineering, manufacturing and assembly of custom solar solutions. A US-based company with over 200 staff-years of technical expertise, PowerFilm delivers innovative remote, portable power solutions to meet client needs.

The Soltronix brand brings PowerFilm expertise, innovation and commitment to US-based crystalline silicon solutions. Soltronix brings you complete solutions to fit your application, including panels, encapsulation, semi flexible substrates, proprietary PowerBoost charge controllers, and the collaboration and customer service you expect from a US-based company.

PowerFilm's proprietary manufacturing provides custom amorphous silicon panels that work in any light environment, including the indoor, industrial lighting of many IoT sensor and application.

Celebrating thirty years in business, PowerFilm is proud to be one of the few US-based solar manufacturing companies operating today.

Core Competencies

Solar expertise

Global leader in proprietary, custom manufacturing of flexible amorphous silicon (aSi) material. PowerFilm provides solutions from uW to kW, from mV to 30V, from panels an inch square to many yards square.

Custom design and assembly of semi-flexible crystalline silicon (cSi) solutions, from 20W to 200W, leveraging advantages of full-cell assemblies with integrated charge controllers.

R&D and assembly experience with both HIT and GaAs technologies.

Technical expertise

Industry-leading, PhD-level in designing and building solar solutions across multiple technologies and countless applications.

Dedicated staff-level expertise in EE and ME design, prototyping and manufacturing.

Recognized, ongoing partner in many US government R&D initiatives.

Experienced with a wide range of laminates, adhesives, substrates and interconnect options.

Complementary electronics expertise including recommendations and sourcing of various battery capacities and chemistry, custom-built and off-the-shelf charge controllers, EHC recommendations and programming, and connectors and cabling.

Business expertise

30 years as a US-based company designing, engineering, manufacturing, distributing, supporting and improving solar technology and custom solutions.

US-based facility, including all design, engineering, production and customer support.

Serving remote, portable energy needs across government, industrial, commercial and consumer markets.

Markets Served

Government

- From our founding based on DOE research, the US government has been a consistent PowerFilm partner and customer.
- PowerFilm products meet and exceed MIL-STD-810G specifications.
- PowerFilm a-Si provides key advantages for the US military and her NATO allies: flexibility in form factors, durability necessary in harsh conditions, and the lightweight critical to expeditionary forces.
- Technology agnostic, with extensive experience in not only aSi but also cSi, HIT and GaAs photovoltaic product design, engineering and production.
- Solutions offered across man portable, basing and vehicle needs.

Custom

Our technology and engineering expertise provide quick understanding and response to your application needs -- needs in power, in supporting electronics, in performance under varying environmental conditions.

PowerFilm's ownership of the process from design to manufacturing enables us to quickly prototype to your requirements, providing solutions in the quantities you need as your business evolves.

Panels of nearly any size and power profile, on any substrate you choose, with the encapsulation you need, in a flexible form factor, delivered in the quantities you choose.

Beyond the panel, PowerFilm offers full consultation and delivery on the complete electronics package you need -- battery

Government
From our founding based on DOE research, the US government has been a consistent PowerFilm partner and customer.

PowerFilm products meet and exceed MIL-STD-810G specifications.

Consumer

Beyond custom solutions, PowerFilm offers a range of off-the-shelf products to serve remote, portable power needs for hundreds of needs.

Products have been certified across a range of consumer and military standards. Form factors include rollable and foldable products, integrated solutions with embedded electronics, accessory cables and supporting electronics, and a limited range of individual aSi panels.