EFOY ProTrailer 4120T and 4130T



Mobile, reliable power supply for industrial applications



Dependable off-grid power is a challenge in any application, but in industries where the landscape constantly shifting, the challenge is even greater. Enter the EFOY ProTrailer – a dependable, self-contained energy solution that delivers 100% reliable power wherever power is required.

SFC Energy's EFOY ProTrailer utilizes patented fuel cell technology combined with solar power to deliver a reliable, autonomous power supply ideal for site surveillance, communication, data logging and other industrial applications.

The rugged, purpose-built EFOY ProTrailer integrates the fuel cell in an insulated NEMA $3R-40^{\circ}$ C rated enclosure. It includes a vertical mast and fixed solar mounting. EFOY Pro Hybrid systems are designed to provide 12-18 months of fuel autonomy, making them ideal for short or long term deployments.

The EFOY ProTrailer: what you need to know

- EFOY Fuel Cells are smart energy producers that can continuously and automatically recharge batteries.
- They're based on Direct Methanol Fuel Cell technology, which converts methanol into electricity through a single stage catalytic conversion process.
- When a solar array fails to deliver enough power, the EFOY senses the battery voltage drop and automatically switches on to keep the battery bank charged.
- Once the battery is recharged, the fuel cell returns to standby mode no maintenance or user intervention required.
- EFOY Pro Fuel Cells have Modbus RTU communications built into the firmware, which allows operators to remotely monitor and control the system and schedule fuel replacements.
- EFOY Pro Hybrid solutions deliver 30 50% total cost of ownership savings over alternative off-grid technologies.
- EFOY Pro Fuel Cells are 10 X more efficient, produce up to 99% fewer emissions and only consume 1 – 2% of the volume of fuel vs fuel gas genset technology



Find more information on efoy-pro.com

ProTrailer system design

SFC Energy's EFOY ProTrailers are hybrid power solutions in insulated NEMA 3R enclosures, which house the fuel cell, fuel cartridges, battery bank, solar charge controller and power distribution. Waste heat generated by the EFOY is captured inside the cabinet to keep all the components warm in winter, further improving the efficiency of the system and eliminating the need for a heater.

EFOY ProTrailer Specs

Dimensions of the base trailer (L x W) $3.1 \text{ m} \times 1.5 \text{ m} / 123 \text{ in x} \times 60 \text{ in (hot dipped galvanized)}$ Height of mast 2.7 - 11.6 m / 9 - 38 ft (2000lb worm gear manual winch)

Axel Single – 1587 kg / 3500 lb capacity

Jacks Four – 907 kg / 2000 lb, swivel, telescopic stabilizer jacks

4120T

Hitch type 2" ball or pintle hitch (can customize as required)

Enclosure Insulated NEMA 3R powder coated steel (aluminum or stainless steel optional)

The EFOY ProTrailer solution includes the base trailer, extendible vertical mast, insulated NEMA 3R enclosure housing the EFOY Pro fuel cell(s), battery bank, solar charge controller and methanol fuel cartridges. The solar array with fixed fold-in mounting structure comes wired to a solar combiner box with a safety disconnect switch. Top of mast mounting plate, Nycoil mast curly cable, spare tire and wind turbine integration are available as options.

Hybrid Power Supply Sp	Decs
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Solar panels (subject to design)

Fuel cell

Single or Dual EFOY Pro 2400 Duo (110W/220W)

Up to 4 x 400 Wp 72 cell solar panels (1600 W)

Solar charge controller 60A MPPT

Solar mounting Fixed side solar mounting (2 to 4 panels)

Nominal voltage 12 V or 24 V

Temperature range $-40 \,^{\circ}\text{C}$ to $+50 \,^{\circ}\text{C}$ / $-40 \,^{\circ}\text{F}$ to $+122 \,^{\circ}\text{F}$

Certification CSA 22.2 no. 14.05 & cETL/us Certification

EFOY fuel cartridges 4 x M28 (28L) cartridges

Battery capacity @ 24 V / 24 V 4 x 150Ah 12V Sealed AGM Batteries

EFOY remote monitoring Modbus RTU / SFC Connect / TBox (optional)

4130T

Single or Dual EFOY Pro 2400 Duo (110W/220W) Up to 4 x 400Wp 72 cell solar panels (1600 W)

60A MPPT

Fixed side solar mounting (2 to 4 panels)

12 V or 24 V

-40 °C to +50 °C / -40 °F to +122 °F

CSA 22.2 no. 14.05 & cETL/us Certification

2 x MT60 (60 L) cartridges

2 x 250Ah 12V Sealed AGM batteries

Modbus RTU / SFC Connect / TBox (optional)

EFOY Pro Hybrid Solutions

Guaranteed power availability 24 / 7 / 365.

Smart, automatic battery charging supplements solar shortfalls.

2x MT60 fuel cartridges provide 132 kWh of energy autonomy – enough to power a 60 W load for 92 days without solar input. Combined with solar, the solution provides 12 – 18 months of energy autonomy and superior power reliability.



Certified safety









