EFOY ProCabinet 42605X (500W)



Reliable autonomous power supply for industrial applications



Dependable off-grid power is a challenge in any application, even more so when powering critical loads in remote locations. The EFOY ProCabinet is a dependable, self-contained energy solution that delivers 100% reliable power wherever power is required.

SFC Energy's EFOY ProCabinet utilizes patented EFOY fuel cell technology combined with solar power to deliver a reliable, autonomous power supply ideal for SCADA/PLC, instrumentation, communication, surveillance and other industrial applications.

The rugged, purpose-built EFOY ProCabinet integrates the fuel cell in an insulated NEMA 3R -40° C rated enclosure including fuel cartridges, battery bank, solar charge controller, power distribution and room for integrating customer equipment. EFOY ProCabinet Hybrid systems are designed to provide 12 -18 months of fuel autonomy, making them ideal for long term autonomous deployments.

The EFOY Pro Hybrid Solutions: 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



ProCabinet system design

SFC Energy's EFOY ProCabinets are hybrid power solutions in insulated -40°C rated NEMA 3R enclosures, which house the fuel cell, fuel cartridges, battery bank, solar charge controller, power distribution and customer equipment. Exhaust heat generated by the EFOY is captured inside the cabinet to keep the battery bank and all the electronic components warm in winter, further improving the efficiency of the system and eliminating the need for a heater.

Dallan Day

24 V or 48 V

| EFUY Procadiner Specs | 42605% | Barrery Box | |
|--------------------------|---|--|--|
| Dimensions (D x W x H) | 915 x 1423 x 1930mm / 36 x 56 x 76 inch | 1016 x 1320 x 1066mm / 40 x 52 x 42 inch | |
| Weight (empty, on stand) | 363 kg / 800 lbs | 182 kg / 400 lbs | |
| Housing | Powder coated steel enclosure | Powder coated steel enclosure | |
| Housing color – standard | Grey | Grey | |
| IP-protection category | Nema 3R Weatherproof | Nema 3R Weatherproof | |
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Hybrid Power Supply Specs

Nominal voltage

Temperature range Certification

| EFOY Fuel Cell | EFOY Pro 12000 Duo (500W) | |
|----------------------------------|--|--|
| Solar Panels (subject to design) | Up to 12 x 400 Wp 72 cell solar panels (4800W) | |
| Solar Charge Controller | 96A MPPT | |
| Nominal voltage | 24 V or 48 V | |
| Temperature range | -40 °C to +50 °C / -40 °F to +122 °F | |
| Certification | CSA 22.2 no. 14.05 & cETL/us Certification | |
| EFOY Fuel Cartridges | Max 4 x MT60 (60L) cartridges | |
| Battery capacity @ 24 V / 48 V | 8 x 256Ah 12 V Sealed AGM batteries | |
| EFOY Remote Monitoring | Modbus RTU / SFC Connect / TBox (optional) | |
| Additional space for customer | Yes — on back pan in extended side cabinet | |

//DCOCV

24 V or 48 V

-40 °C to +50 °C / -40 °F to +122 °F

CSA 22.2 Industrial Control Panel Specifications

- Welded nut lifting eyes
- Slide out metal battery trays

-40 °C to +50 °C / -40 °F to +122 °F

• Junction box with cable pass-through

CSA 22.2 Industrial Control Panel Specifications

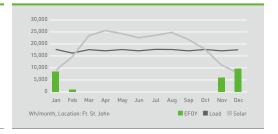
- · Gasketted gland plate
- · Lockable handle
- Insulated perimeter

EFOY Pro Hybrid Solutions

Guaranteed power availability 24 / 7 / 365.

Smart, automatic battery charging supplements solar shortfalls.

 $4x\,MT60$ fuel cartridges provide $264\,kWh$ of energy autonomy – enough to power a $300\,W$ load for $37\,$ days without any solar input. Combined with a solar array, the hybrid solution provides 12 – $18\,$ months of energy autonomy and superior power reliability.



Certified safety



equipment





