# EFOY ProShelter





## Reliable, autonomous power supply for industrial applications



## **EFOY ProShelter Hybrid features:**

The purpose-built **EFOY ProShelter** integrates EFOY fuels cells with fuel cartridges, battery bank, solar charge controllers, power distribution panel and space for customer equipment, all in a single C-can enclosure with 6" insulated walls. It's optimized for ultra-reliable performance in the harshest winter conditions.

Energy solutions performance is monitored through cold chamber testing and rated to -40° C.

EFOY ProShelter Hybrid systems are designed to provide ~12-18 months of energy autonomy.

### EFOY ProShelter Hybrid technology:

- **©** EFOY Fuel Cells convert methanol into electricity through a single-stage catalytic conversion process. They continuously and automatically recharge batteries.
- **b** When a solar array fails to deliver enough power, the EFOY(s) automatically switches on to ensure the battery bank is charged. Once completed, the fuel cell(s) returns to standby mode.
- **b** EFOY Pro Fuel Cells support Modbus TCP or EFOY Cloud communications allowing operators to monitor and control the system remotely.

## EFOY ProShelter Hybrid benefits:

- **b** EFOY ProShelter Hybrid solutions deliver 30 50% total cost of ownership savings over alternative off-grid technologies.
- **b** They 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

# ProShelter system design



Green power availability 24/7/365

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Dimensions (D x W x H) 2432 x 6045 x 2591 mm / 96 x 238 x 102 inch Weight (empty/Full Est\*) 4,763 kg / 10,500 lbs - 8,618 kg / 19,000 lbs Housing Powder coated steel enclosure White - open to customer preference Housing color - standard IP-protection category Nema 4 Weatherproof

20 ft C-can\*

\*30ft, 40ft and custom length also available upon request



### Hybrid Power Supply Specs

EFOY Fuel Cell Multiple EFOY Pro 2800 or Pro 12000 Duo units as required (up to 2.5 kW)

Solar Panels (subject to design/upon Up to 14 x 675W mounted on the ProShelter and request)

additional panels as required

Wind turbine Upon request 24 V or 48 V DC Nominal voltage

120VAC, 208VAC available or other Client preferences Output voltage

-40 °C to +45 °C / -40 °F to +113 °F Temperature range

Certification cETLus Certified to CAN/CSA Standard 22.2 No. 14

and conforms to UL508A

**EFOY Fuel Cartridges** 4 to 8 M28 or MT60 cartridges per EFOY as required Battery capacity @ 24 V / 48 V

500 Ah - 2,000 Ah Lead Carbon Battery Bank as

required

2800 - Modbus TCP or EFOY Cloud **EFOY Remote Monitoring** 12000 - Modbus RTU or SFC Connect

Additional space for customer equipment Yes – on back pan and on c-can walls



### **EFOY Pro Hybrid Solutions**

Reliable Green Power Availability 24 / 7 / 365.

Smart, automatic battery charging supplements solar shortfalls.

Larger capacities would house 46x MT60 fuel cartridges provide 3036 kWh of energy autonomy enough to power a 500 W load for 44 days without any solar input.

Combined with a solar array, the hybrid solution provides approximately 12 - 18 months of energy autonomy and superior power reliability.

### **Certified safety**







