


# Data Sheet – EFOY Pro Fuel Cells

| Fuel Cells   | EFOY Pro 800   | EFOY Pro 800 Duo                  | EFOY Pro 2400  | EFOY Pro 2400 Duo                |
|--|--|-----------------------------------|--|----------------------------------|
| Max. nominal power   | 45 W   | 45 W                              | 110 W  | 110 W                            |
| Min. nominal power <sup>1</sup>  | 25 W   | 25 W                              | 80 W   | 80 W                             |
| Nominal voltage  | 12 V dc / 24 V dc  | 12 V dc / 24 V dc                 | 12 V dc / 24 V dc  | 12 V dc / 24 V dc                |
| Charging current at 12 V / 24 V  | max.: 3,75 A / 1,88 A<br>min.: 2,1 A / 1,05 A  | 3,75 A / 1,88 A<br>2,1 A / 1,05 A | 9,17 A / 4,58 A<br>6,7 A / 3,3 A   | 9,17 A / 4,58 A<br>6,7 A / 3,3 A |
| Recommended battery capacity <sup>2</sup> at 12 V (Lead acid, gel and AGM) at 24 V | 40 to 160 Ah<br>10 to 100 Ah   | 40 to 160 Ah<br>10 to 100 Ah      | 60 to 350 Ah<br>30 to 175 Ah   | 60 to 350 Ah<br>30 to 175 Ah     |
| Weight   | 8,0 kg / 17.6 lbs  | 8,3 kg / 18.3 lbs                 | 9,0 kg / 19.8 lbs  | 9,3 kg / 20.5 lbs                |
| Warranty <sup>3</sup>  | 24 Month / 4.500 hours   | 24 Month / 4.500 hours            | 24 Month / 4.500 hours   | 24 Month / 4.500 hours           |
| Connectable cartridges (with DCS1)   | 1 (2)  | 2 (4)                             | 1 (2)  | 2 (4)                            |
| Length fuel cartridge connector  | 70 cm / 27.6 in  |                                   |  |                                  |
| Switching threshold for automatic battery charging at 12 V / 24 V <sup>4</sup>     | On: <12,3 V / <24,6 V<br>Off: >14,2 V / >28,4 V  |                                   |  |                                  |
| Required start-up voltage at 12 V / 24 V   | >9 V / >18,5 V   |                                   |  |                                  |
| Maximum battery voltage  | <16 V / <32 V  |                                   |  |                                  |
| Noise level (at 1m / 7m distance)  | 42 dB(A) / 25 dB(A)  |                                   |  |                                  |
| Nominal consumption <sup>5</sup>   | 0,9 l/kWh  |                                   |  |                                  |
| Quiescent current draw at 12 V   | 20 mA  |                                   |  |                                  |
| Operating temperature  | -20 °C to +50 °C / -4°F to +122°F  |                                   |  |                                  |
| Start-up temperature   | +3 °C to +50 °C / +37.4 °F to +122°F   |                                   |  |                                  |
| Storing temperature  | +1 °C to +50 °C / +34°F to +122°F  |                                   |  |                                  |
| Recommended altitude <sup>4</sup>  | Standard: ≤1500 m / ≤4920 ft (up to 2000m / 6561 ft)   |                                   |  |                                  |
| Dimensions L x W x H   | 433 x 188 x 278 mm / 17 x 8 x 11 in  |                                   |  |                                  |
| International Protection (IP-Class)  | IP 21  |                                   |  |                                  |
| Inclination along the roll axis  | Permanent: max. 35°; temporary (<10 min): max. 45°   |                                   |  |                                  |
| Inclination along the lateral axis   | Permanent: max. 20°  |                                   |  |                                  |
| User-Interface   | At the unit or via Operating Panel OP2 with text display   |                                   |  |                                  |
| Data-Interface   | RJ-45 plug for accessories (e.g. Interface adapter)  |                                   |  |                                  |
| Electrical Interface   | MNL-plug 4-pins (e.g. Tyco Electronics Universal Mate-N-Lok – Nr. 350779)  |                                   |  |                                  |
| Certificates   |    |                                   |  |                                  |
| Standard Equipment   | <ul style="list-style-type: none"> <li>Operating panel OP2 with cable</li> <li>Mounting plate for EFOY Pro</li> <li>Charge line for battery connection</li> <li>Fuel cartridge holder with belt</li> </ul> |                                   | <ul style="list-style-type: none"> <li>Exhaust hose</li> <li>Off heat duct</li> <li>Service fluid and user manual</li> </ul> |                                  |

| <b>Accessories<sup>6</sup></b> |   |  |
|--------------------------------|---|--|
| DuoCartSwitch DCS1             | Dimensions L x W x H                          | 174 x 119 x 96 mm / 6.9 x 4.7 x 3.8 in     |
|                                | Weight  | 0,7 kg / 1.54 lbs                          |
|                                | International Protection (IP-Class)           | IP 20                                      |
|                                | Quiescent current draw                        | 7.5 mA                                     |
| GSM modem GSM-2-SMS            | Dimensions L x W x H                          | 72 x 32 x 65 mm / 2.8 x 1.3 x 2.6 in       |
|                                | Weight  | 0,5 kg / 1.1 lbs                           |
|                                | Input Voltage                                 | 8 – 30 V dc                                |
|                                | Max. peak current                             | 3,2 A                                      |
|                                | Average current draw (Quiescent / SMS / GPRS) | 30 / 100 / 100 mA                          |
| Fuel cartridge sensor FS1      | Dimensions L x W x H                          | 50 x 20 x 5 mm / 19.7 x 7.9 x 2.0 in       |
| Interface adapter IA1          | Dimensions L x W x H                          | 60 x 33 x 16 mm / 2.4 x 1.3 x 0.6 in       |
| Cluster controller CC1         | Dimensions L x W x H                          | 149 x 77 x 270 mm / 58.7 x 30.1 x 106.3 in |
|                                | Weight  | 0,16 kg / 1.3 lbs                          |
| M28 adapter                    | Dimensions L x W x H                          | 70 x 70 x 61 mm / 2.8 x 2.8 x 2.4 in       |

| <b>Fuel Cartridges</b> | <b>M5</b>                                   | <b>M10</b>                                  | <b>M28 (only with M28-Adapter)</b>  |
|------------------------|---|---|---|
| Volume                 | 5 litre / 1.32 US gallons                   | 10 litre / 2.64 US gallons                  | 28 litre / 7.4 US gallons   |
| Weight                 | 4,3 kg / 9.5 lbs                            | 8,4 kg / 18.5 lbs                           | 22 kg / 48.5 lbs  |
| Nominal capacity       | 5,5 kWh                                     | 11,1 kWh                                    | 31,1 kWh  |
| Dimensions L x W x H   | 190 x 145 x 283 mm /<br>7.5 x 5.7 x 11.1 in | 230 x 193 x 318 mm /<br>9.1 x 7.6 x 12.5 in | 370 x 285 x 395 mm / 14.6 x 11.2 x 15.6 in<br>with M28 Adapter:<br>370 x 285 x 425 mm / 14.6 x 11.2 x 16.7 in |

<sup>1</sup> Nominal power varies by  $\pm 10\%$ , decreases with the operation hours. Specification valid within warranty period.

<sup>2</sup> Depends on battery type and application - bigger batteries possible, if additional energy source available (e.g. solar)

<sup>3</sup> Regional warranty conditions for EFOY Pro fuel cells apply.

<sup>4</sup> Factory Setting - can be modified with Interface Adapter and PC or operating panel OP2.

<sup>5</sup> Effective consumption depends on operating conditions.

<sup>6</sup> All EFOY Pro accessories are for operating in following temperature ranges:  $-20\text{ }^{\circ}\text{C}$  to  $+50\text{ }^{\circ}\text{C}$  /  $-4\text{ }^{\circ}\text{F}$  to  $+122\text{ }^{\circ}\text{F}$