



ISO 14001 certified



Back-up solutions for uninterruptible power supply





**EFOY Energy Solutions** 

## Product catalogue

Valid from: 1st December 2015 Subject to modifications and errors







EFOY ProCube 2030A Mobile Energy Solution



EFOY ProCabinet 40605 / 41205 Stationary Energy Solution

The illustrations may differ from the original.

#### 1 EFOY ProCube 2030A

The EFOY ProCube is a mobile, maintenance-free complete solution for off-grid power supplies - instantly ready for use at all times and in any location.

Article No.	Product Name	Nominal Voltage	Fuel Cell Type	Product Information
153 000 001	2030A 0800S1-0 12V	12 V DC	1 x EFOY Pro 800	Temperatur range: -20 °C to +50 °C / -4 °F to 122 °F
153 000 002	2030A 2400S1-0 12V	12 V DC	1 x EFOY Pro 2400	Max. Methanol Capacity: 1 x M28 / 30 kWh Solar Charge Current: 10 A
153 000 005	2030A 0800S1-0 24V	24 V DC	1 x EFOY Pro 800	IP-Class: IP 33 Dimensions (l x w x h):
153 000 006	2030A 2400S1-0 24V	24 V DC	1 x EFOY Pro 2400	800 x 600 x 410 mm / 31.5 x 23.6 x 16.1 in

#### 2 | EFOY ProCabinet 40605 / 41205

EFOY ProCabinet for stationary applications in remote regions. It is a standardized hybrid power solution fully integrated in a NEMA 3R weatherproof enclosure down to  $-40 \, ^{\circ}\text{C}$  /  $-40 \, ^{\circ}\text{F}$ , available in two sizes.

Article No.	Product Name	Nominal Voltage	Fuel Cell Type	Product Information	
153 000 101	4060S 0800D1-0 12V	12 V DC	1 x EFOY Pro 800 Duo	Temperatur range: -40 °C to +50 °C / -40 °F to 122 °F	
153 000 111	4060S 2400D1-0 12V	12 V DC	1 x EFOY Pro 2400 Duo	Max. Methanol Capacity: 2 x M28 / 60 kWh Solar Charge Current: 30 A	
153 000 102	4060S 0800D1-0 24V	24 V DC	1 x EFOY Pro 800 Duo	IP-Class: IP 43 Dimensions (l x w x h):	
153 000 112	4060S 2400D1-0 24V	24 V DC	1 x EFOY Pro 2400 Duo	610 x 914 x 1067 mm / 424 x 36 x 42 in	
On request	4120S 0800D1-2 12V	12 V DC	1 x EFOY Pro 800 Duo	Temperatur range: -40 °C to +50 °C / -40 °F to 122 °F	
On request	4120S 2400D1-2 12V	12 V DC	1 x EFOY Pro 2400 Duo	Max. Methanol Capacity: 4 x M28 / 120 kWh Solar Charge Current: 30 A	
On request	4120S 0800D1-2 24V	24 V DC	1 x EFOY Pro 800 Duo	IP-Class: IP 43 Dimensions (l x w x h):	
On request	4120S 2400D1-2 24V	24 V DC	1 x EFOY Pro 2400 Duo	1711 x 1118 x 1168 mm / 28 x 44 x 46 in	





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#### 3 EFOY ProEnergyBox 4060P

The EFOY ProEnergyBox is an energy solution for off-grid applications in harsh enviornments with an energy capacity of 60 kWh and a temperature range down to -40 °C / -40 °F.

Article No.	Product Name	Nominal Voltage	Fuel Cell Type	Product Information
153 000 061	4060P 0800S1-0	12 / 24 V DC	1 x EFOY Pro 800 Duo	Temperatur range: -40 °C to +50 °C / -40 °F to 122 °F Max. Methanol Capacity: 2 x M28 / 60 kWh Solar Charge Current: 30 A
153 000 062	4060P 2400S1-0	12 / 24 V DC	1 x EFOY Pro 2400 Duo	IP-Class: IP 43 Dimensions (l x w x h): 1215 x 794 x 616 mm / 47.8 x 31.3 x 24.3 in

#### 4 EFOY ProTrailer 4060T / 4120T

EFOY ProTrailer is a mobile power supply for extreme weather conditions down to -40 °C /-40 °F and provides reliable off-grid power for surveillance.

Article No.	Product Name	Nominal Voltage	Fuel Cell Type	Product Information
On request	4060T 2400D1-0	12 / 24 V DC	1 x EFOY Pro 2400 Duo 2 x M28 (60 kWh)	Temperatur range: -40 °C to +50 °C / -40 °F to 122 °F Max. Methanol Capacity: 4 x M28 / 120 kWh Solar Charge Current: 45 or 60 A
On request	4120T 2400D1-2	12 / 24 V DC	1 x EFOY Pro 2400 Duo 4 x M28 (120 kWh)	IP-Class: IP 43 Dimensions of the base trailer (l x w): 1900 x 1300 mm / 76 x 51 in

### Example Product Description

## EFOY ProEnergyBox 4060P 080051-0 12V

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Product type	Temperature range	Fuel Cell	Number of DuoCartSwitch
EFOY ProCube	4:-40°C to 50°C	0800 - EFOY Pro 800	-0: No DCS 1
EFOY ProCabinet	Max. Energy output	Variant of Fuel Cell	Nominal Voltage
EFOY ProEnergyBox	060:60kWh2xM28	S: Single Version	12V: 12VDC
EFOY ProTrailer	Enclosure type	Number of EFOY Pro fuel cells	5
	P: Plastic enclosure	1:1xEFOYPro	



## EFOY Pro 800 / 800 Duo

The EFOY Pro 800 delivers a maximum output of 45 W. It is ideal for applications with low energy requirements and as a back-up for solar-only installations, which are not reliable during winter.



Article Number	
EFOY Pro 800	EFOY Pro 800 Duo
SET: 151 000 220	SET: 151 000 221
BASIC: 151 000 224	BASIC: 151 000 225
Standard Equiptment	
SET	Operating panel OP2, off heat duct, connecting cable, mounting plate, fuel car- tridge holder, user manual, service fluid
BASIC	User manual, service fluid

## EFOY Pro 2400 / 2400 Duo

The EFOY Pro 2400 delivers a maximum output of 110 W. To ensure longer autonomy without user intervention up to 4 M28 fuel cartridges can be connected to one EFOY Pro 2400 Duo fuel cell.



Article Number	
EFOY Pro 2400	EFOY Pro 2400 Duo
SET: 151 000 222	SET: 151 000 223
BASIC: 151 000 226	BASIC: 151 000 227
Standard Equiptment	
SET	Operating panel OP2, off heat duct, connecting cable, mounting plate, fuel car- tridge holder, user manual, service fluid
BASIC	User manual, service fluid

## EFOY Pro 12000 Duo

The EFOY Pro 12000 Duo, our 500 W fuel cell, delivers 100% reliable off-grid, on-board and back-up power. Its compact design makes it ideal for installation in a 19" control cabinet.



Article Number			
EFOY Pro 12000 Duo			
SET: 500 000 002			
Standard Equiptment			
SET	Isolated exhaust tube, user manual, initial start fluid, recovery fluid		



## **Technical Data**

EFOY Pro	800	800 Duo	2400	2400 Duo	12000 Duo
Max. Output power [1]	45	W	110 W		500 W
Min. Output power [1]	25 W		80 W		400 W
Nominal Voltage	12 V / 24 V DC		12 V / 24 V DC		24 V / 48 V DC
Charging Currant at Nominal Voltage	2.1 A /	1.05 A	6.7 A	/ 3.3 A	20.8 A / 10.4 A
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	32 kg / 70.6 lbs
Dimensions (L x W x H)	4	33 x 188 x 278 m	nm / 17 x 8 x 11	in	640 x 441 x 310 mm / 25.2 x 17.3 x 12.2 in <sup>(2)</sup>
Connectible fuel cartridges (with DCS1)	1 (2)	2 (4)	1 (2)	2 (4)	2 (4)
Operation Temperature		-2	0 °C to +50 °C / -4 °F to 122 °F		
Nominal Consumption	0.9 l/kWh				

 $<sup>^{\</sup>rm 1}\,$  Nominal power decreases with the operation hours. Specification valid within warranty period

All technical data at test conditions of 20 °C / 68 °F





# **EFOY GO!**Mobile Power

Strictly speaking, the EFOY GO! is a battery. But what a battery! With an integrated inverter and four power connectors, you also have convenient power - plug and play - away from the grid.





Certified safety				
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	EF0Y G0! 230 V
Article Number	155 000 010
Battery capacity / type	240 Wh / LiFeP04 20 Ah at 12 V
Outputs	1 x 230 V AC / 400 W / 50 Hz pure sine wave, 1 x 12 V DC / 10 A 2 x 5 V DC / 2 x 2.1 A
Inputs	1 x Power IN (mains, car adapter, solar panel), max. 4 A 1 x fuel cell IN, max 10 A
Weight	5.8 kg / 12.8 lbs
Dimensions (L x W x H)	286 x 186 x 201 mm / 11.3 x 7.3 x 7.9 in
Operation Temperature	-10 °C to +40 °C / 14 °F to 104 °F
Scope of delivery	EFOY GO!, mains adapter, 12 V car charging cable, user manual

<sup>&</sup>lt;sup>2</sup> Dimenstions without 19" frame



Picture	Product Name	Product Information	Article No.
© Grow M.5	Fuel cartridge M5	Cartridge with fuel for EFOY fuel cells. Content: 5 liter / 1.32 US gallons Capacity: 5.5 kWh Weight: 4.3 kg / 9.5 lbs Dimensions (l x w x h): 190 x 145 x 283 mm / 7.5 x 5.7 x 11.1 in Delivery size: Packaging unit with 2 cartridges	150 905 006 USA / CAN: not available
MID MARKET MARKAT MARKET MARKET MARKET MARKET MARKET MARKET MARKET MARKET MARKE	Fuel cartridge M10	Cartridge with fuel for EFOY fuel cells. Content: 10 liter / 2.64 US gallons Capacity: 11.1 kWh Weight: 8.4 kg / 18.5 lbs Dimensions (l x w x h): 230 x 193 x 318 mm / 9.1 x 7.6 x 12.5 in Delivery size: Packaging unit with 2 cartridges	150 905 008 USA / CAN: 150 905 099
M28	Fuel cartridge M28	Cartridge with fuel for EFOY fuel cells. Content: 28 liter / 7.4 US gallons Capacity: 31.1 kWh Weight: 23.4 kg / 51.6 lbs Dimensions (l x w x h): 370 x 285 x 395 mm / 14.6 x 11.2 x 15.6 in Delivery size: Packaging unit with 1 cartridge Note: requires M28 adapter	150 905 040 USA / CAN: 150 905 100

EFOY Pro accessories and spare parts			
Picture	Product Name	Product Information	Article No.
	DuoCartSwitch DCS1	The DuoCartSwitch is used to connect two EFOY fuel cartridges to one EFOY Pro fuel cell. Includes: Port Doppler, connecting cables.	151 000 189
Part of the last o	GSM Modem: GSM-2-SMS	The GSM-2-SMS Modem enables remote monitoring and management of the EFOY Pro fuel. Includes:  Alarm notification in case of system error or low fuel cartridge (as SMS text message or Email)  Optional: Web Interface with data logging, remote control and parameter adjustment	151 906 019
A Part of the second of the se	GSM Modem: GSM-GPS-2	The GSM GPS Modem enables remote monitoring and management of the EFOY Pro fuel. Additional features to GSM-2-SMS Modem: Web Interface with data logging, remote control and parameter adjustment GPS tracking	151 906 062
	Cluster Controller CC1	The cluster controller CC1 provides the following functions:  Operate up to 5 EFOY Pro's in parallel  Connect the fuel cartridge sensor FS1 and PC interface adapter IA1 to the EFOY Pro  Control EFOY Pro via remote-on pins	151 076 058



EFOY Pro accessories			
Picture	Product Name	Product Information	Article No.
	Fuel Cartridge Sensor FS1	The fuel cartridge sensor FS1 monitors the fuel level in the fuel cartridge and signals when it drops below a preset level (pre-alarm). It should be combined with a GSM modem.	151 905 006
	M28 Adapter	The M28 adapter is required to connect an M28 cartridge to the EFOY Pro fuel cell.	151 003 011
	Interface adapter IA1	The interface adapter IA1 allows you to connect EFOY Pro fuel cell to a PC via the serial COM interface.	151 075 011
	USB adapter	The USB adapter is required to connect the interface adapter to a PC with USB interface.	151 906 018
	Port Doubler RJ45-2x1.1	The Port Doubler RJ45-2x1.1 is neccessary to connect several accessories to the EFOY Pro fuel cell.	151 906 035
	EFOY Updater	Update the EFOY Pro fuel cell with the latest firmware with the updater. Easy and for free. Includes: - EFOY Updater - Cables for connection	151 906 021
Automatic Saedy V Let 50.0 A Let SPOY	Operating panel OP2	Operating panel OP2 for EFOY Pro fuel cells Includes: - Display for view values and settings - Surface mount frame - Operating panel with black frame	151 077 056
	Data line DL2	Data line DL2 (10 m / 32.8 ft) for operating panel OP2.	151 075 033
	Fuel cartridge holder	For safe transport of the M5 or M10 fuel cartridges in the vehicle these are fastened using a cartridge holder and a belt. For mounting the cartridge holder in the vehicle you will need four screws and, if necessary, appropriate anchors.  Note: Belt for cartridge holder is necessary	151 905 021
	Belt for cartridge holder	Belt for fastening the M5 or M10 fuel cartridge to the fuel cartridge holder.	151 908 003



cture	Product Name	Product Information	Article No.
Gen's Service Fluid	Service fluid	The service fluid is needed if the display indicates that service fluid needs to be refilled. Only for EFOY Pro 800 / 800 Duo / 2400 / 2400 Duo.	150 903 00
	Mounting plate for EFOY Pro	For secure mounting of EFOY Pro 800 / 800 Duo / 2400 / 2400 Duo.	151 908 012
	Charge line CL4	Charge line CL4 is used to connect the EFOY Pro to the battery. Includes: Connecting line to fuel cell (1 m) Cable with fuse 2 A Sense Cable with fuse 15 A Power	151 906 034
	Connecting line to fuel cell	Cable to connect the EFOY Pro to the battery fuse cables.	151 906 004
	Cable with fuse 2 A Sense	Cable including 2 Ampere fuse to connect the sense line to the battery.	151 906 00
	Cable with fuse 15 A Power	Cable including 15 Ampere fuse to connect the power line to the battery.	151 906 02
	Extension cable Sense line 8 m/26 ft	Extension cable for sense line, length: 8 m / 26 ft	151 906 00
	Extension cable Power line 8 m/26 ft	Extension cable for power line, length: 8 m / 26 ft	151 906 00
	Off heat duct EFOY Pro	During operation the EFOY Pro generates off heat. The off heat duct is used to conduct this off heat to the outside. Includes: Off heat flange Off heat bow Off heat tube External face plate Lense head screws M4 x 10 (4 screws)	151 903 02
	Off heat tube	The off heat tube conducts the off heat to the outside. Jolted the off heat tube is 60 cm / 23.6 in long, it can be extended up to 100 cm / 39.4 in. Diameter: 10 cm / 3.9 in	151 904 00°
	Off heat bow	The off heat bow is used to direct the off heat in an angle to the outside.	151 903 014



EFOY Pro 800 / 800 Duo / 2400 / 2400 Duo accessories and spare parts			
Picture	Product Name	Product Information	Article No.
	Off heat flange EFOY Pro	The off heat flange is required to connect the off heat tube resp. the off heat bow to the EFOY Pro.  Note: Screw set for off heat duct EFOY and EFOY Pro is necessary	151 903 020
	External face plate	The external face plate prevents foreign matters from entering the off heat tube.	151 903 013
	Insulated exhaust hose	During operation the device will produce water vapour and carbon dioxide. These are led to the outside by means of the exhaust hose. The insulation prevents water from freezing.  Length: 1.2 m / 2.65 ft	151 904 003
	Screw set for off heat duct EFOY and EFOY Pro	Includes: 2 x screws for off heat bow 4 x screws for off heat flange EFOY Pro	151 903 025

EFOY Pro 12000 Duo accessories and spare parts			
Picture	Product Name	Product Information	Article No.
Con The Control of th	Initial start fluid	The initial-start fluid is neccessary for the initial start after installing the EFOY Pro 12000 Duo.	500 903 001
	Recovery fluid	The recovery fluid is needed if the display indicates that recovery fluid needs to be refilled.	500 903 002
	Insulated exhaust hose EFOY Pro 12000 Duo	During operation the device will produce water vapour and carbon dioxide. These are led to the outside by means of the exhaust hose. The insulation prevents water from freezing.  Length: 1.0 m / 3.28 ft	500 904 001

#### **EFOY Pro Fuel Cells**

## Contact



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<sup>\*</sup> The freecall number via landline is available in the following countries: Germany, Austria, Belgium, Denmark, France, Great Britain, Italy, The Netherlands, Norway, Spain, Sweden and Switzerland.