

## EFOY fuel cells data sheet

Performance data <sup>1</sup> 12 V	EFOY 80	EFOY 150	EFOY Pro 2800
Max. output power	40 W	75 W	125 W
Output power <sup>2</sup> within 3000 hours	24 W	45 W	105 W
Output power <sup>2</sup> within 6000 hours	--- <sup>3</sup>	--- <sup>3</sup>	87 W
Max. charging current @ 10.5 V	3.8 A	7.1 A	11.9 A
Recommended minimal battery capacity lead batteries	40 Ah	60 Ah	80 Ah
Maximum adjustable battery capacity lead batteries		800 Ah	
Recommended minimum battery capacity LiFePO <sub>4</sub> batteries	20 Ah	30 Ah	40 Ah
Maximum adjustable battery capacity LiFePO <sub>4</sub> batteries		600 Ah	
Quiescent consumption		0.5 W	

Performance data <sup>1</sup> 24 V	EFOY 80	EFOY 150	EFOY Pro 2800
Max. Output power	40 W	75 W	125 W
Output power <sup>2</sup> within 3000 hours	21 W	43 W	100 W
Output power <sup>2</sup> within 6000 hours	--- <sup>3</sup>	--- <sup>3</sup>	83 W
Max. charging current @ 10.5 V	1.9 A	3.6 A	6.0 A
Recommended minimal battery capacity lead batteries	20 Ah	30 Ah	40 Ah
Maximum adjustable battery capacity lead batteries		400 Ah	
Recommended minimal battery capacity LiFePO <sub>4</sub> batteries	10 Ah	15 Ah	20 Ah
Maximum adjustable battery capacity LiFePO <sub>4</sub> batteries		300 Ah	
Quiescent consumption		0.6 W	

[1]

General technical data EFOY fuel cells	EFOY 80	EFOY 150	EFOY Pro 2800
Nominal voltage	Lead: 12 V / 24 V (Lead-Gel, lead-acid, AGM) LiFePO <sub>4</sub> : 12.8 V / 25.6 V		
Acceptable battery types	Lead: 2 V cells: 6S (12 V) and 12S (24 V) LiFePO <sub>4</sub> : 3.2 V cells: 4S (12.8 V) and 8S (25.6 V)		
Consumption <sup>4</sup>	0.9 l / kWh		
Number of fuel cell cartridges	1		
Length of fuel cartridge connection	75 cm / 29.5 in		
Weight	6.5 kg	6.9 kg	7.8 kg
Dimensions (L x D x H)	448 x 198 x 275 mm / 17.6 x 7.8 x 10.8 in		
Operation	At the device, using the EFOY app, using the operating panel		
Data interface	RJ-12 Socket (CAN & RS232) for use of accessories RJ-45 socket (Ethernet)		
Communication protocol	MODBUS TCP; plain text (SIO Commands)		
Electrical interface	4-pin socket for EFOY charging cable Power: Plus (+) and Minus (-): 4 mm <sup>2</sup> Sense: Plus (+) and Minus (-): 0.75 mm <sup>2</sup>		
Electrical interface for EFOY accessories	2-pin socket: plus (+) and minus (-): min 0.75 mm <sup>2</sup> / max 2.5 mm <sup>2</sup> Voltage: Battery voltage / max. current 2 A (external fuse necessary)		
Sound pressure level <sup>5</sup> at 1 m	< 44 dB (A)	< 47 dB (A)	< 50 dB (A)
Minimal installation space (L x W x H)	EFOY Fuel cell only: 510 x 320 x 290 mm / 20.1 x 12.6 x 11.4 in		
Inclination around roll axis	Permanent: max. 35°		
Inclination around lateral axis	Permanent: max. 35°		
Operating temperature <sup>6</sup>	EFOY: -20 °C to +40 °C EFOY Pro: -20 °C to +50 °C		
Start temperature	EFOY: +3 °C to +40 °C EFOY Pro: +3 °C to +50 °C		
Storage temperature	+1 °C to +50 °C		
IP protection class	IP 21		

[2]

Altitude	At approx. 2000 m above sea level, there may be a reduction in performance	
Warranty <sup>7</sup>	24 months (within 3.000 operating hours)	24 months (within 6.000 operating hours)
Certificates		

Fuel cartridges	M5	M10
Volume	5 liters / 1.32 gallons	10 liters / 2.64 gallons
Weight	4.3 kg	8.4 kg
Nominal capacity	5.6 kWh	11.1 kWh
Autonomy @ 50 W	111 h	222 h
Dimensions (L x W x H)	190 x 145 x 283 mm / 7.5 x 5.7 x 11.1 in	230 x 193 x 318 mm / 9.1 x 7.6 x 12.5 in

<sup>1</sup> All performance data refer to the measurement at the connection for the charging cable on the fuel cell side.  
<sup>2</sup> The output power varies by +/- 10% and decreases with the operating hours, depends on the installation situation and the operating conditions.  
<sup>3</sup> Operation still possible after 3000 h, no guaranteed power output.  
<sup>4</sup> The actual consumption depends on the operating conditions and operating hours.  
<sup>5</sup> The sound pressure level varies and depends on different components and operating conditions.  
<sup>6</sup> At temperature above +35 °C (EFOY, the output power may be reduced. At temperatures below 0°C, charging of lithium batteries(LiFeP04) may not always be possible. Follow the instructions from the battery manufacturer.  
<sup>7</sup> The warranty conditions for EFOY 80, EFOY 150 and EFOY Pro 2800 apply.