

DMFC Model T-1 Specifications

Characteristic	Specification	
Performance	Gross power (typical*)	1.5 kW
	Net power (typical*)	1.1 kW
	Voltage range (VDC)	24V (18V–28V);48V (44V–55V)
	Idle to peak power	1 to 20 minutes (min to max)
Operating conditions	Ambient operating temperature	–4°F to 113°F (–20°C to 45°C)
	Fuel cell operating temperature	77°F to 176°F (25°C to 80°C)
	Humidity	No effect
	Altitude	< 6500 ft (1981 m)
Design	Module dimensions	19.25 in. long X 19 in. wide X 22.5 in. high (48.8 cm long X 48 cm wide X 57 cm high)
	Weight per module	150 lb (68 kg)
	Fuel tank capacity	3 to 55 gallons (12 to 208 liters)
	Operating noise	<70 dB
	Ease of use	Push button
Fuel	Methanol (DI water mix or pure)	50% to 100%
	Fuel consumption	0.85 L/kWh
Communications	Communications ports	USB 2.0 A and B connectors
	Battery interconnect	SB175 polarized connector
	Remote monitoring	Available as an option
Safety	Battery over voltage shutdown	Yes
	Battery under voltage shutdown	Yes
	Over temperature shutdown	Yes
	Under temperature shutdown	Yes
	Fuel tank leak detection shutdown	Yes
	Cooling failure	Yes
	Fuel level and refill indicator	Yes
Freeze protection (in idle mode)	Yes	
Exhaust trace element data	CO ₂	< 3%
	Methanol	< 0.23%**
	Water	99.77%
	Waste volume	1.14 cups/hr (270 ml/hr)

Note:

The stack turns on, begins to consume methanol, and accumulated stack hours when:

- The battery voltage decreases to the lower threshold voltage level (user defined)
- The ambient temperature of the unit decreases below +5°C

*At 100 hours of stack life.

**Not toxic to humans at this level.