

Model T-3 Technical Specifications

Characteristic	Specification	
Performance	Net power (typical*)	2.0 kW
	Voltage range (VDC)	48V (46V–57V)
	Idle to peak power	1 to 10 minutes (min to max)
Operating conditions	Ambient operating temperature	(–25°C to 47°C)
	Fuel cell operating temperature	(–25°C to 80°C)
	Humidity	No effect
	Altitude	<10000 ft (3048 m)
Design	Module dimensions	29 in. long X 16.5 in. wide X 23 in. high (73.7 cm long X 41.9 cm wide X 58.4 cm high)
	Weight per module	210lb (95.2 kg)
	Fuel tank capacity	3 to 55 gallons (12 to 208 liters)
	Operating noise	<85 dB
	Ease of use	Push button
Fuel	Methanol (DI water mix or pure)	60/40% or 100%
	Fuel consumption	0.85 L/kWh
Communications	Communications ports	USB 1.1/2.0 B connector
	Battery interconnect	SB50 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 data	Liquid effluent (by volume):	Water: 99.7% Methanol: <0.3%** Volume: 300 ml/hr
	Gas effluent (by volume):	Air (mostly nitrogen): 94% CO ₂ : <6.0% Volume: 380l/min (13.4 CFM)
	OSHA 8hr TWA PEL for: CO, CO ₂ , HCHO, CH ₃ OH & NO _x	Significantly lower than OSHA standard.

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
- Up to 30% power drop ambient temperature of > 40-47C.
- Up to 30% power drop altitude of > 14,000 feet.

*At 100 hours of stack life.

**Not toxic to humans at this level.

