

EMILY 3000

Mobile on-board power for electronic equipment in command and control vehicles



Up to 80 % weight reduction



Extended runtime



Simplified logistics



To date, soldiers have to start the engine or use noisy generators to supply power to sensors, radios, measurement and defense devices inside their vehicles.

EMILY fuel cell recharges vehicle on-board batteries fully automatically, silently and non-detectable. EMILY also charges batteries off-vehicle as field charger.

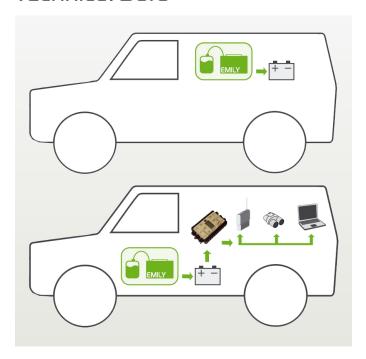
By integrating the EMILY fuel cell generator into a vehicle, on-board batteries are automatically recharged on demand and maintained at the same time. Therefore, the use of conventional generators, including time-intensive maintenance, become unnecessary.

EMILY 3000 offers a power increase of 35 percent compared to its predecessor EMILY 2200, which has been successfully qualified and officially cleared for military usage by the Geman Armed Forces.

Like its predecessor, EMILY 3000 has also been designed to meet MIL-STD 810F and VG97010-2.

EMILY 3000 offers enhanced charging flexibility. Therefore it is possible to charge along with conventional batteries modern lithium-ion and lithium-polymer batteries.





EMILY 3000 can be used as on-vehicle and mobile offvehicle charging device. In connection with the SFC Power Manager 3G, EMILY 3000 can recharge several batteries and supply multiple devices simultaneously with power. When using an EMILY fuel cell, maintenance and operating costs as well as weight can be reduced significantly. Furthermore, fully automatic, loss and emission free recharging of batteries - without turning on the engine - extends runtimes of all devices tremendeously. Therefore, maintenance interruptions during a mission are reduced and long-term energy supply is ensured.

Additionally, EMILY fuel cell generator operates without producing signature. Outside a vehicle, EMILY is acoustically non-detectable and almost noiseless compared to conventional generators. In operation, EMILY fuel cell does not produce any emission that can be detected by reconnaissance systems.

Technical data	
Charing power per day	3000 Wh
Nominal power	125 W (begin +10 % / after 3000 h -10 %)
Nominal voltage	12 V / 24 V / 10.8V / 14.4 V / 25.2 V
Charging current @ 12 V / 24 V	10 A (limited) / 5,2 A
Weight	< 12.5 kg / 27.56 lbs
Dimensions L x W x H	476 x 206 x 285.5 mm 18.7 x 8.1 x 11.2 in
Runtime with 10 l fuel cartridge	~ 100 h when using full nominal power
Operating temperature	-25 °C to +50 °C -13 °F to +122 °F
Warranty	2 years / 3000 operating hours

Fuel cartridges	M10	M28
Volume	10 l / 2.64 US gal	28 l / 7.4 US gal
Weight	8.4 kg / 18.5 lb	22 kg / 48.5 lb
Nominal capacity	11.1 kWh	31.1 kWh
Dimensions L x W x H	230 x 193 x 318 mm 9.1 x 7.6 x 12.5 in	370 x 285 x 403 mm 14.6 x 11.2 x 15.6 in

Environmental characteristics	
Water protection	MIL-STD 810F Method 506.4, Procedure I
Vibration	MIL-STD 810F Method 514.5, Table 514.5C-VII, Figure 514.5C-3 AECTP 400 B401 light tanks
Sand and dust	MIL-STD 810F Method 510.4 Procedure I and II
Drop	MIL-STD 810F Method 516.6 Procedure IV
Altitude	up to 3000 m /10,000 ft @ 100 % nominal power up to 4000 m /13,000 ft @ 80 % nominal power
Noise emission	MIL-STD 1474D Table 2-II > 30 m / 98.43 acoustically non-detectable
EMI / EMC	MIL-STD 461, RE102-3, RE102-4 VG 95373, Class II



Subject to change. 1308-v1

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