Fact sheet μDBFC

This fact sheet provides basic information about the research and development work of MERIT Ltd.

The Prototype was build to prove the operation areas of a μDBFC in applications such as smart phones, Laptops and other portable devices.

Specifications:

Cell size: 8.4 x 6.0 x 3.2 cm
Structure: 2 Cells connected
Electrode area: 3 x 5.4 cm (one cell)
Fuel volume: each cell 18ml

Note: This prototype is not industrially manufactured, but produced by our scientists. The use of ideal materials and machines would easily shrink the cell size.

Open Circuit: 2.2V
Power density: 38.6 mW /cm²
Maximum power: 1.25W (1A, 1.25V)
Operates at room temperature

10wt% of NaBH4 in aqueous alkaline solution provide 1A for 3h 47min. (3,78Ah)

Comparison with other μDFC:

This table shows the advantages of a μDBFC compared to a μDMFC.

	μDBFC	**μDMFC**
Open Circuit	1.1V	0.6V
Power density	38.6 mW /cm² (0.6V)	10 mW /cm² (0.4V)

The collected data are from the newest information to be found at the time of publication.

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