

MOBILE BATTERIES : A CLEANER ALTERNATIVE TO DIESEL

MEMS mobile batteries provide a flexible and sustainable solution for your energy needs. The powerful lithium-ion battery systems store 422 kWh from wind and solar sources, supplemented with energy from the grid or if needed a generator. The containers are designed to be durable, safe and easy to transport, making them ideal for your temporary energy demand.



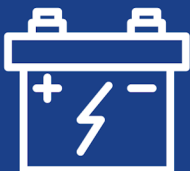
Powerful 422 kWh / 318 kVA battery systems

The MEMS mobile batteries consist of a 10ft. container, which stores lithium-ion batteries and result in a total storage capacity of 422 kWh. With a nominal power output of 285 kW and a peak load output of 500 kVA, these battery systems can supply sufficient energy for your project.



Avoid or reduce CO₂ and NO_x emissions

With the help of MEMS mobile batteries, an optimal and energy-efficient set-up can be chosen to reduce or fully avoid the use of diesel. This reduces not only pollution, but also the number of engine hours for any diesel generators, therefore fuel costs can be saved.



Modular and plug and play set-up as an on and off-grid solution

The systems are developed to deliver clean and quiet energy whenever, wherever; by the push of a button releasing 318 KVA of power. They can be used as stand-alone source of power or be combined with other energy assets to create the ideal energy set-up.



Easy to install

Our mobile batteries can be installed quickly and easily. They secure the energy supply fast since they can charge and discharge within one hour. Seamless integration with the existing infrastructure, such as grid connection, diesel generators, solar panels and wind turbines, is possible.

Applications



Peakshaving

Supercharge your existing electrical infrastructure with this battery. Ideal for fast charging electrical equipment and powering lifts and cranes.



Grid reinforcement

High costs and long waiting times for upscaling your mains connection are a thing of the past.



Diesel hybrid

Adding a battery to a traditional diesel generator set-up can reduce engine running hours and cut down diesel consumption.



Part of a smart grid

The batteries can be used to supply temporary power for humanitarian aid or disaster relief in combination with mobile renewables or generators.



Grid congestion

Residential solar and electric cars can cause frequent overload on energy substations. The battery can be used as a buffer at these locations when power is surging.



Grid maintenance and takeover

The batteries are able to perform synchronous gridtake overs, when maintenance on energy substations is needed.



Renewables

The batteries can store surplus energy at large local renewable assets. Furthermore, they can be used for load balancing and portfolio optimisation. turbines, is possible.



Contributing to a stable national grid by supplying or consuming power on demand.

Technical specifications and set-up options

Dimensions	Length 3m , Width 2.50m , Height 2.60m
Weight	8,700 Kg
Power	318 kVA Danfoss Energy Storage Inverter
Capacity	422 kWh BMW High Voltage System se09
Grid voltage	3-phase 230/400 Vac, connection via PowerSyntax (power lock) 400 amp connectors (1x input, 2x output) and 1x 63 amp CEE output
Grid frequency	50 Hz (60Hz possible)
Operating temp.	-20C - +40C
Climate control	Liquid cooled automotive batteries, container actively ventilated
Safety	Battery packs actively cooled and monitored on cell level and individually controlled in case of emergency. (Temperature) monitoring on all power electronics, fire and smoke detection.
Transport	Transport under ADR class 9, UN 3536, UN 3481
Standards	NEN3140, NEN3840, Low Voltage Directive 2014/35/EU, EMC directive 2014/30/EU, Batteries directive 2006/66/EU, HD IEC 60364: 2005, NEN 1010: 2015, IEC 61439-2: 2011, EN 61000-6-2:2005, EN 61000-6-4:2007+A1:2011, IEC 62619: 2017, IEC 60947, IEC 61439, IEC 62271-100, IEC 62271-102, IEC 62271-103, IEC 62271-200. Road and sea transport ADR class 9, UN 3536, UN 3481 (Lithium-Ion Batteries in equipment)