

# TheBattery Energy Storage Solutions



## TheBattery Plug & Play Energy Storage

#### Meeting the future

Storage of electricity will play an inevitable role in our energy grid. It is needed to match energy production against consumption and to stabalize the grid due to increasing decentralized generation and the growing penetration of electrical vehicles. Already today, industrial battery storage is frequently used to mitigate the risk of the unpredictability of renewable energy sources.

#### **New opportunities**

TheBattery balances energy supply and demand, avoiding significant investments in power grids and connections. In addition, TheBattery enables trading opportunities as well as autonomous electricity grids in combination with solar and/or wind energy. TheBattery is being used by multiple utilities, grid operators, large and small energy producers and traders, EV fast charging service providers and industrial production companies.

#### Plug & Play

TheBattery comes as a Plug & Play standardized unit, manufactured, preconfigured, commissioned and tested in Alfen's production facilities. This guarantees minimal on-site impact and instant operation. With storage experience since 2011 and renowned leadership in realizing grid connections, Alfen has the unique capability to supply a full turnkey offering for battery storage.









## Engineered based on 80 years' experience and innovation in the electricity grid

Established development team with extensive experience of inverters, batteries, management software and auxiliary grid solutions.



#### Fully integrated end-to-end storage solution

Turnkey realization of complete battery projects including project management, substations, grid connection, remote monitoring and on-site service.



## Standardized production with flexibility to adapt to your needs

Modular plug & play system, expandable over time to meet future demands and customization.



#### Best in class battery package and components

Independent selection of battery and component suppliers to ensure the optimal solution for each situation. Guaranteed lifetime with minimum 10 years performance warranty.



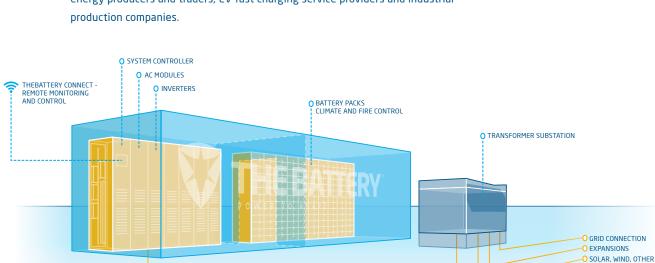
#### Continuous insights and remote management

Remote monitoring and management module based on Alfen's extensive experience with electrical vehicle charging equipment.



#### Built for all applications and all environments

Experience with applications in load balancing, trading, frequency control and autonomous grids. Global client base of utilities, grid operators, large and small energy producers and traders, EV fast charging service providers and industrial production companies.



O LOW VOLTAGE AC CONNECTION





### Applications of TheBattery

#### **Load balancing**

As a result of the growing demand of electricity in combination with local intermittent renewable power generation, the grid has to facilitate increasingly fluctuating patterns. TheBattery offers solutions to stabilize the grid and limit investments in grids and grid connections, for example in combination with EV charging hubs or fast charging stations.



#### Microgrid and mobile

TheBattery enables autonomous electricity grids in combination with solar or wind energy. As such TheBattery provides an alternative for new grid connections or oil-fueled generators. It delivers a reliable supply of electricity for production processes in parts of the world without (stable) electricity grids, and offers solutions for temporary use at e.g. construction sites or festivals.



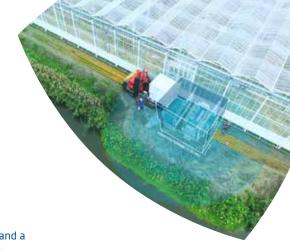
#### **Energy trading**

TheBattery allows for trading on both the wholesale energy trading market, e.g. imbalance settlement, as well as on Balancing Services e.g. frequency response. On the imbalance settlement market discrepancies between contracted and actual power demand and supply are settled. The PCR platform stabilizes frequency disruptions in the entire interconnected high-voltage grid. These trading options allow for significant improvements in return on investment from sustainable energy sources.



## Alfen, at the Center of the Electricity Grid

**Enabling the Energy Transition** 



With smart grid solutions, energy storage systems, charging stations for electric vehicles and a diverse portfolio of other products, systems and services, Alfen has a central and connecting role in the energy grid. We are building the electricity grid of the future: reliable, sustainable and innovative.

#### Transformer substations

Market leader in substations for grid operators, industrial corporations and the horticultural industry.

#### **Energy storage**

Solutions for load balancing, trading and autonomous electricity grids in combination with solar or wind energy.

#### **EV** charge points

Complete range of charge points for domestic, business and public locations, and unique solutions for e.g. load balancing in combination with storage

#### **Electricity grids**

Complete solutions in the field of high and medium voltage grids.

#### **Grid automation**

Large range of functionalities for remote measuring and management.

#### Management & Maintenance

Full maintenance and service offering.



### Contact

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