



## **Forsee Power strengthens its range of ultra-thin high-energy batteries with ZEN 8 SLIM for off-highway and light vehicles**

Paris, October 27<sup>th</sup>, 2021 – Forsee Power, the expert in smart battery systems for sustainable electromobility, strengthens its ultra-thin modular battery range with the ZEN 8 SLIM offering. Available in battery modules and battery packs with integrated BMS, this new solution is intended to electrify vehicles with very small spaces, without altering the room available for the operator or passengers while ensuring the safety of the battery.

This new range is aimed at 100% electric off-highway vehicles for the construction, agriculture, and industry sectors. Driven by more and more stringent environment and occupational health regulations, these sectors are experiencing very strong growth with an annual market potential for battery systems expected at 1 billion euros by 2027. The range is also aimed at light vehicles such as mini cars and autonomous vehicles.

### **An ultra-thin battery with very high energy density and very high modularity**

The major challenge in electrifying off-highway vehicles is to be able to integrate the batteries into a vehicle designed to receive a thermal power train: the available spaces can be divided and are sometimes limited.

Only 128mm thick, Forsee Power's ZEN 8 SLIM batteries are extra flat and fit in any position (both vertical and horizontal) for optimal integration into the vehicle. An innovative architecture significantly optimizes the costs as well as the size of the power distribution units, and further reduces the volume taken in the vehicle.

The new range also offers very high modularity and scalability allowing the installation of 16 modules in series and 6 branches in parallel, thus supporting a multitude of combinations ranging from 48V / 8kWh up to 800V / 760kWh. To perfectly match the on-board energy to the system voltage, it includes 48V and 72V modules as well as a 48V pack with its own integrated BMS.

In addition, ZEN 8 SLIM batteries are very robust, air and water resistant (IP67), and are very safe thanks to the use of ISO 26262 certified components. ZEN 8 modules offer a lifespan of up to 5,000 cycles. This system not only extends the life of the batteries but also ensures optimal performance, whatever the climatic conditions, including the most contrasted.

**Finally, ZEN 8 SLIM batteries offer an excellent energy density of 251 Wh / L, among the most efficient on the market.** They incorporate the best high energy density NMC lithium-ion cells capable of delivering high performance and offering a full day of operation. The batteries can also be charged to 100% in 1 hour only thanks to charging compatibility up to 1C for the needs of partial or full charging –during an operator's break, for example– depending on the needs of the application.

More than ten projects are currently under study with major European and Asian OEMs. ZEN 8 SLIM battery systems are produced close to Forsee Power's customers, in Chasseneuil-du-Poitou in France for the European market and Zhongshan in China for the Asian market.



#### **About Forsee Power**

Forsee Power is an industrial group specializing in smart battery systems for sustainable electric transport (LEV, trucks, buses, trains, marine vessels).

A major player in Europe, Asia, and North America the Group designs, assembles and supplies energy management systems based on the most robust cells available on the market as well as provides installation, commissioning and on-site or remote maintenance.

Forsee Power also offers financing solutions (battery rental) and second life solutions for transport batteries. [www.forseepower.com](http://www.forseepower.com) | @ForseePower

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