

FEV Signature Solutions

Mass estimation software

Our solution enables our customers to offer vehicles with superior range estimation

FEV offers

- ▶ Software for precise vehicle mass estimation for range estimation applications
- ▶ Customization services for prototypes or series applications
- ▶ Additional services as modification/extension, integration, commissioning and calibration



Why FEV

- ▶ High estimation precision, also in corner cases
- ▶ Software-based solution that does not rely on additional hardware but on basic on-board sensors and communication – no additional hardware and sensors required
- ▶ For all vehicle classes and powertrain types
- ▶ Enables many downstream functions (e.g. range estimation)
- ▶ Compliant with EU regulation 2019/1213
- ▶ Innovative – patent application pending
- ▶ White-box option and customer friendly license model, as one time license fee and tailored license scope

Reference projects

FEV'S MASS ESTIMATION SOFTWARE



EV Passenger Car

(Concept car)



Hybrid Passenger Car

(Concept car)



ICE Medium

Duty Truck

(Series development)



EV Medium

Duty Truck

(Series development)



ICE Medium

Duty Truck

(Series development)



ICE Heavy

Duty Truck

(Concept phase)



ICE Medium

Duty Truck

(Concept phase)



ICE Heavy

Duty Truck

(Series development)

■ Battery electric vehicle

■ Hybrid electric vehicle

■ Concept vehicle



Patent application

SAVELSBERG; SCHÄFERS; SENFT
Assistance system for determining a vehicle
mass using a linear estimation function
DE102019108111A1

FEV's mass estimation for superior range prediction



- ▶ Issue: Neglecting the current vehicle weight may lead to gross range prediction errors.
- ▶ Solution: FEV Online Mass Estimation Software can significantly improve precise energy consumption and range prediction algorithms.
- ▶ Usable for various applications such as range prediction, charge scheduling, eco routing, optimized gear shifting strategies or ESP.

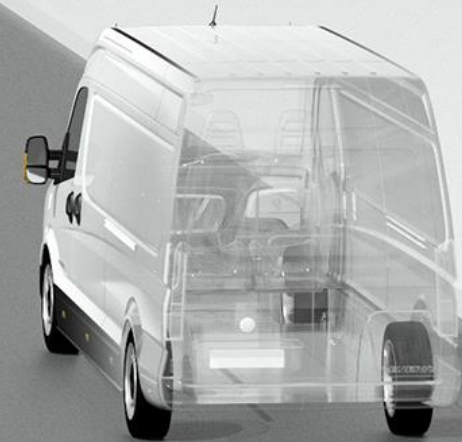


Conventional
Range Prediction

Actual
Range



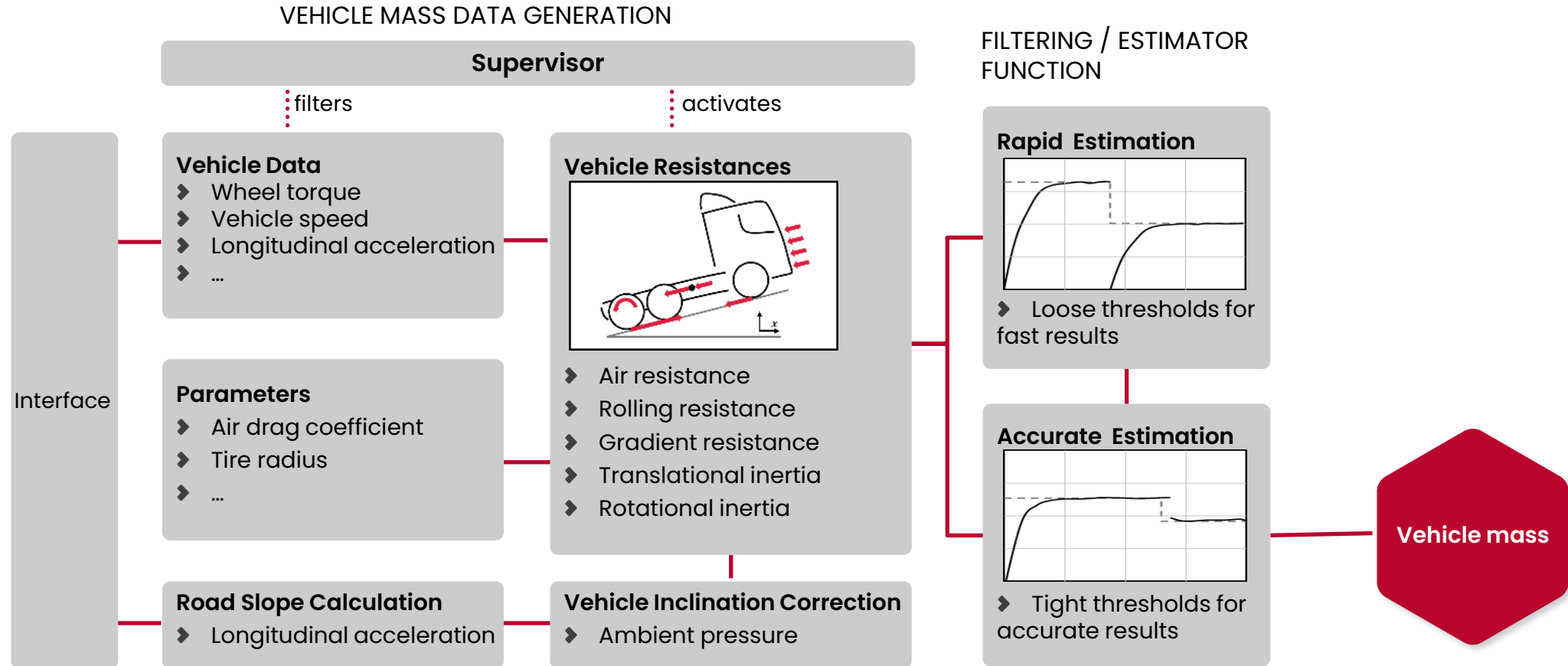
FEV
Range Prediction



The FEV mass estimation software is a pure software solution based on common vehicle sensors and internal signals



FUNCTIONAL ARCHITECTURE OF THE FEV MASS ESTIMATION SOFTWARE



Get in touch with us for further information



[www.fev.com/en/
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