



BOZANKAYA E bus 25



25 m Length



max. **600 kWh** Battery Capacity



up to 400km Electrical Range



max. 230 Passengers



80 km/h Top Speed



100% Electric



BOZANKAYA VEHICLE CHARACTERISTICS

Energy Storage

SCL = Single Cell Loading

SCL

SCL Battery System with active cell balancing

- Control and exchangeability of individual cells
- Cell type: Lithium iron phosphate (LiFePO₄) / Lithium tithanat (LTO)
- Capacity: 520 / 600 kWh

Electrical Systems

Low- and high-voltage system, electrically isolated

- 24 V board net: supply of all ancillary components
- High-voltage system: electrical supply of the power train
- Wear-free low-voltage components in the inspection area

Safety

Extensive safety concept comprising battery and power train

- Energy storage and power electronics on the vehicle roof
- Intrinsic safety of LTO-LiFePO₄ cells and single cell monitoring
- Easily accessible low-voltage inspection area

Efficiency

Specific energy consumption: 1.5-1.9 kWh/km

- Highest levels of efficiency in the power train (up to 98%)
- Highest energy recovery rates by effective recuperation
- Minimal energy losses due to active cell balancing

Range

Up to 400 km with a single charge while meeting the highest safety standards

BOZANKAYA CHARGING TECHNOLOGY

Bozankaya plug-in charging technology enables the gentle low-loss overnight charging of the traction batteries.

Individual Vehicles

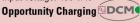
Standard Charging Technology (SL)

- Mobile devices for the charging of a single vehicle
- Constant charging power
- Charging power: 90 / 150 kW
- Input voltage: 400 VAC **Opportunity Charging**

Fleet Management

Dynamic Charge Matrix (DCM)

- Stationary charging system for the simultaneous charging of 10 vehicles
- Variable charging power
- Charging power: 400 kW
- Input voltage: 400 VAC



Charge time: 4-7 hours

(depending on battery capacity and charging power)

DATA COMMUNICATION

Comprehensive concept of

- Continuous monitoring of a wide range of
- maintenance requirements
- Analysis of the available database for customized product care
- Bozankaya vehicle system into the depot

remote monitoring and diagnosis

- operating data Online identification of failures and
- Development of customer-specific software solutions for an optimal integration of the

TECHNICAL DATA

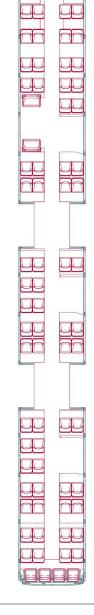
Vehicle Properties	
Top speed	80 km/h
Brake system	WABCO EBS3, regenerative braking
Doors	4-5 double folding doors, electric
Passenger capacity	40-70 seated + 130-160 standing

Dimensions and Weight	
Vehicle length	24 500 mm
Vehicle width	2 550 mm
Vehicle height	3 400 mm
Maximum permissible weight	40 000 kg

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Axles and Wheels	
Front axle (1st axle)	ZF RL 82 EC (independent wheel suspension)
Driven axles (2nd and 3rd axle)	ZF AVE 130 (electric portal axle, max. 4 x 125 kW) / 2nd or 3rd axle Central Motor
Rear axle (4th axle)	ZF AVN 132 (non-driven)
Tyre size	275/70 R22.5
Heating and Air Conditioning (HVAC)	

-15°C to +45°C

Optional (fossil or electric)





HVAC system

Temperature range

Auxiliary heater



Heat pump (electric heating and cooling)

