

BOZANKAYA E bus 12



12 m Length



max.**250kWh** Battery Capacity



up to 300 km Electrical Range



max. **90** Passengers



80 km/h Top Speed



Electric



BOZANKAYA VEHICLE CHARACTERISTICS

Energy Storage

SCL = Single Cell Loading

SCL Battery System with active cell balancing

- Control and exchangeability of individual cells
- Cell type: Lithium iron phosphate (LiFePO₄) / Lithium tithanat (LTO)
- Capacity: 250 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 LiFePO₄-LTO cells and single cell monitoring
- Easily accessible low-voltage inspection area

Efficiency

Specific energy consumption: 0.7-0.9 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 340 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: 60 / 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

Opportunity Charging DCM

Charge time: 3-6 hours

(depending on battery capacity and charging power)

DATA COMMUNICATION

Comprehensive concept of remote monitoring and diagnosis

- Continuous monitoring of a wide range of operating data
- Online identification of failures and maintenance requirements
- Analysis of the available database for customized product care
- Development of customer-specific software solutions for an optimal integration of the Bozankaya vehicle system into the depot

TECHNICAL DATA

Vehicle Properties		
Top speed	80 km/h	
Brake system	WABCO EBS3, regenerative braking	
Doors	2-3 double folding doors, electric	
Passenger capacity	38 seated + 52 standing	

Dimensions and Weight	
Vehicle length	12-12.5 m
Vehicle width	2 550 mm
Vehicle height	3 400mm
Maximum permissible weight	19 O00 kg

Axles and Wheels	
Front axle (1st axle)	ZF RL 82 EC (independent wheel suspension)
Driven axle (rear axle)	ZF AVE 130 (electric portal axle, max. 2 x 125 kW)/AV132 Central Motor(150-250kW)
Tyre size	275/70 R22.5

Heating and Air Conditioning (HVAC)	
HVAC system	Heat pump (electric heating and cooling)
Temperature range	-15°C to +45°C
Auxiliary heater	Optional (fossil or electric)



