



BOZANKAYA E bus 18



18 m
Length



max. 450 kWh
Battery Capacity



up to 400 km
Electrical Range



max. 144
Passengers



80 km/h
Top Speed



100%
Electric

E-MOBILITY IS OUR DRIVE.

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 titanate (LTO)
- Capacity: 390 / 450 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: 1.1 – 1.3 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: 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

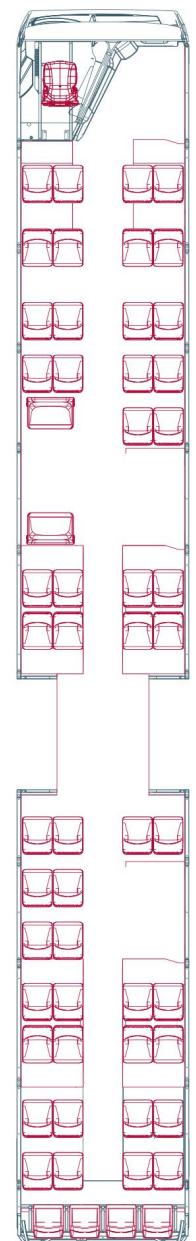
Charge time: 3–8 hours

(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	3-4 double folding doors, electric
Passenger capacity	32-54 seated + 90-72 standing

Dimensions and Weight

Vehicle length	18 300 mm
Vehicle width	2 550 mm
Vehicle height	3 213 mm
Maximum permissible weight	29 000 kg

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 axle, Central Motor (250-410kW)
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)



BOZANKAYA A.Ş.

Sincan Organize Sanayi Bölgesi Ahi Evran Mah.
Artuklular Sok. No: 3/B, Sincan / Ankara / Turkey 06930

T +90 312 267 11 41
F +90 312 267 11 44

info@bozankaya.com
www.bozankaya.com.tr

