



JEST ELECTRIC POSITIVE ENERGY OF THE CITY



in cooperation with



POSITIVE ENERGY NOW IN THE CITY

With features that push the boundaries of technology, Jest Electric offers unique privileges and stimulates cities with positive energy. Are you ready for the future now?



JEST ELECTRIC ALSO KNOWN AS SMALL CITY BUS

Designed to feed the main lines of city transportation, Jest Electric can navigate narrow streets without difficulty thanks to its compact size. Therefore, it allows a transportation network that can expand and access every point in the city.



135 kW
Max. Power



290 Nm
Max. Torque



25 %
Max. Gradeability



70 km/h
Max. Speed



Powerful BMW Electric Motor

Although Jest Electric is battery powered, it is as powerful as diesel vehicles. This power is derived from a BMW 100% electric motor which ensures strong acceleration performance. Jest Electric is always ready with its strong, quiet and efficient motor to conquer any city terrain. Jest Electric's efficient BMW motor generates high torque and reassures the driver in demanding situations.

Mechanic warranty is limited to 2 years or 200.000 km (whichever finishes first).

in cooperation with



UNIQUE AND INNOVATIVE DESIGN

Jest Electric respects and sustains the historical heritage of the city. Having a perfect look with its new age compact design, Jest Electric is adapting to the texture of the city thanks to its small footprint. It increases the image of the city and becomes an iconic figure.



ATTRACTIVE DESIGN

Charming Front Design

Traveling with Jest Electric offers many privileges. Wide angle windshield and LED headlamps, grooved front grille and LED daytime running lamps create a stylish design detailed with sharp lines that leaves a lasting impression.



Rear Design

Unique and award winning, Jest Electric, which won a design award in Design Turkey, is created to bring a different atmosphere to the city in every aspect. Jest Electric's view from the rear is so extraordinary that future designs will be influenced by it.

Rims With An Aesthetic Appearance

It's in Jest Electric's DNA to dominate eyes and feelings. The 16" aluminum alloy rims reflect its energetic soul with a flawless appearance on the road.

Wide Angle View

With Jest Electric, it is possible to look at life from a wide angle. The panoramic windshield designed to ensure a commanding view of the road, does not let anything escape from sight.



LED Light Path

JEST Electric exceeds your expectations with LED lighting that enhances visibility and safety, while giving an aesthetic appearance to the interior. For passengers, traveling with Jest Electric is very pleasurable.

JEST, ALREADY IN SERVICE

Jest has been meeting public transportation needs in many countries since 2013. Having proved itself with more than 7,700 units on the road, Jest continues to improve city life as being preferred every day in different locations of the world.



EVERYTHING IS CONSIDERED FOR DRIVER'S COMFORT

Bringing a new dimension to cockpit; Jest Electric makes driving more comfortable and convenient with its unique features including commanding seating position and broad visibility reducing driver fatigue.



Tilttable & Telescopic Electrohydraulic Leather Steering Wheel



8 Way Adjustable Pneumatic Driver Seat With Arm Rest



Driver Air Conditioner



Electric Heated Mirrors & Sidewalk Mirrors



Heated Windows and Windshield



Electric Roof Hatch

POSITIVE FUTURE

Zero Emission

Jest Electric is green, not only in color but in design. Jest Electric keeps future generations healthier with 0% emissions.



POSITIVE LIFE



Access Ramp

With the option of a manual or an automatic access ramp, Jest Electric offers all disabled passengers and parents with strollers, the opportunity to travel effortlessly with its low floor inclusive design.

Silent

With Jest Electric, there is a different energy for every moment. Providing a quiet first class ride for its passengers and promising a more peaceful city life, Jest Electric greatly reduces noise pollution both in and around Jest Electric.



POSITIVE PERFORMANCE

BMW Battery Packs

BMW Li-Ion batteries and electric motor bring Jest Electric to life with its safe proven real world experience.



Single Battery

	Capacity	44 kWh
	Range	105 km

Double Battery

	Capacity	88 kWh
	Range	210 km



Battery warranty is limited to 4 years or 60.000 km (whichever finishes the first) for 44 kWh single battery; 4 years or 120.000 km (whichever finishes the first) for 88 kWh double battery packs.

in cooperation with



Quick and Easy Charging

Jest Electric easily charges itself through the charging socket in the front grille. Jest Electric, which can be charged with two types of AC and DC, recharges battery for 2 hours* at night and 55 minutes* with quick charging during the day.

Regenerative Power

During braking, Jest Electric regenerates up to 25% of the kinetic energy and charges its batteries. This increases Jest Electric's range.



* For 44 kWh battery and up to 80% in ideal conditions.
Charging socket location might be different on vehicles.



Comfortable Hill Start Even 25% Slope

Steep hills do not pose a challenge for Jest Electric. Jest Electric is always ready with its strong motor to conquer any city terrain. Its efficient BMW motor generates high torque and reassures the driver in demanding situations. With its hill holder function, on steep hills it is as easy as going on the straight road.

Superior Maneuverability

Thanks to the short turning radius and superior climbing performance, Jest Electric travels easily in narrow streets of old cities and climbs up ramps while fully loaded.

POSITIVE TECHNOLOGY

10" Full Digital Cluster

Jest Electric is a good road companion. Because it shares everything and operates continuously to ease the driving. Its digital instrument cluster provides all vehicle information and warnings like charge status, remaining range and average consumption, for safe and easy operation.

All you need to do is to enjoy a smooth ride.



Keyless Start & Stop

Technological solutions which make life easier are incorporated into Jest Electric. It is so smart that it does not need a key. RFID Card is enough for it to wake up. To start Jest Electric, only touch the Start/Stop key after you insert the card. It's that simple to start Jest Electric.



10.1" Multimedia Touchscreen

Everything is at the tip of your fingers thanks to the Jest Electric's wide touchscreen, which is equipped with a radio/MP3 player, bluetooth and USB port for a more enjoyable journey. From this screen you can control air conditioning in the vehicle, select best routes with navigation, view rear camera and surveillance system for safe and easy driving experience.

Wi-Fi and USB Ports

When you are in Jest Electric, there is no distance between you and the world. You can always go online with Jest Electric's Wi-Fi technology, and electronic devices can be charged through the USB ports in passenger area. Jest Electric incorporates all the latest trends and high tech transportation needs for its passengers.

POSITIVE SERVICE



THE BEST CHOICE FOR MUNICIPAL AND PRIVATE CORPORATIONS



Budget Friendly

Fossil fuel reserves are decreasing gradually. The decline triggers prices and reduces the profit margin of public transportation companies. This is where Jest Electric comes in. Because Jest Electric is electric powered, it does not pollute nature and reduces the total utility costs by using a more economical resource.

Superior Durability

Jest Electric is produced with technology gained from Karsan's 50+ years of manufacturing, including corrosion protection using cathaphoresis techniques. In addition to being designed as a public transport vehicle, Jest Electric will withstand years of daily use with its strong monocoque chassis and composite plastic and aluminum body panels. With these standard features, Jest Electric will protect the user investment for the life of the vehicle.



Maximum Capacity Utilization

Jest Electric reduces operational costs during off peak hours where oversized empty buses has redundant capacity. Thus it offers the capacity as required by a city for these hours and brings an affordable approach to public transportation.



Capacity Utilization



5,8 mt JEST Electric | 25 Passanger Capacity

Peak Hours
%100

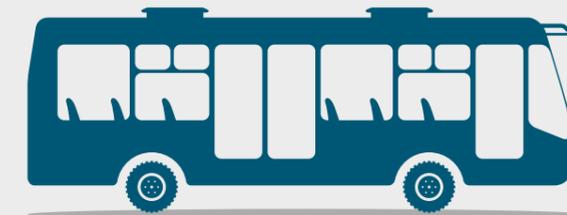
Off-Peak Hours
%100



8 mt Bus | 58 Passanger Capacity

Peak Hours
%100

Off-Peak Hours
%43



12 mt Bus | 105 Passanger Capacity

Peak Hours
%100

Off-Peak Hours
%24

REMOVES THE CHALLENGES OF PUBLIC TRANSPORTATION



Ergonomic Cockpit



Digital Route Indicator



Semi Closed Driver Cabin



Sliding Passenger Door



Outward Swing Passenger Door

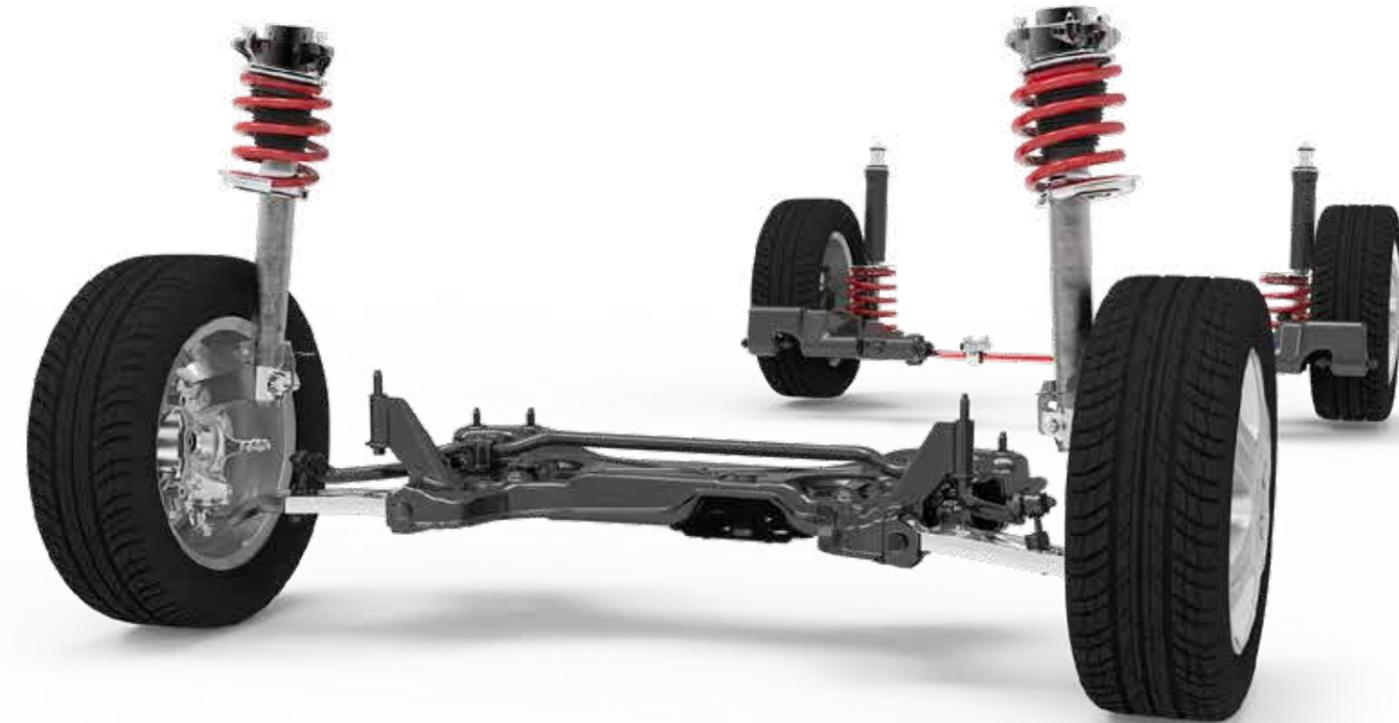


Validator Preparation

OFFERS COMFORTABLE SERVICE TO CITIZENS

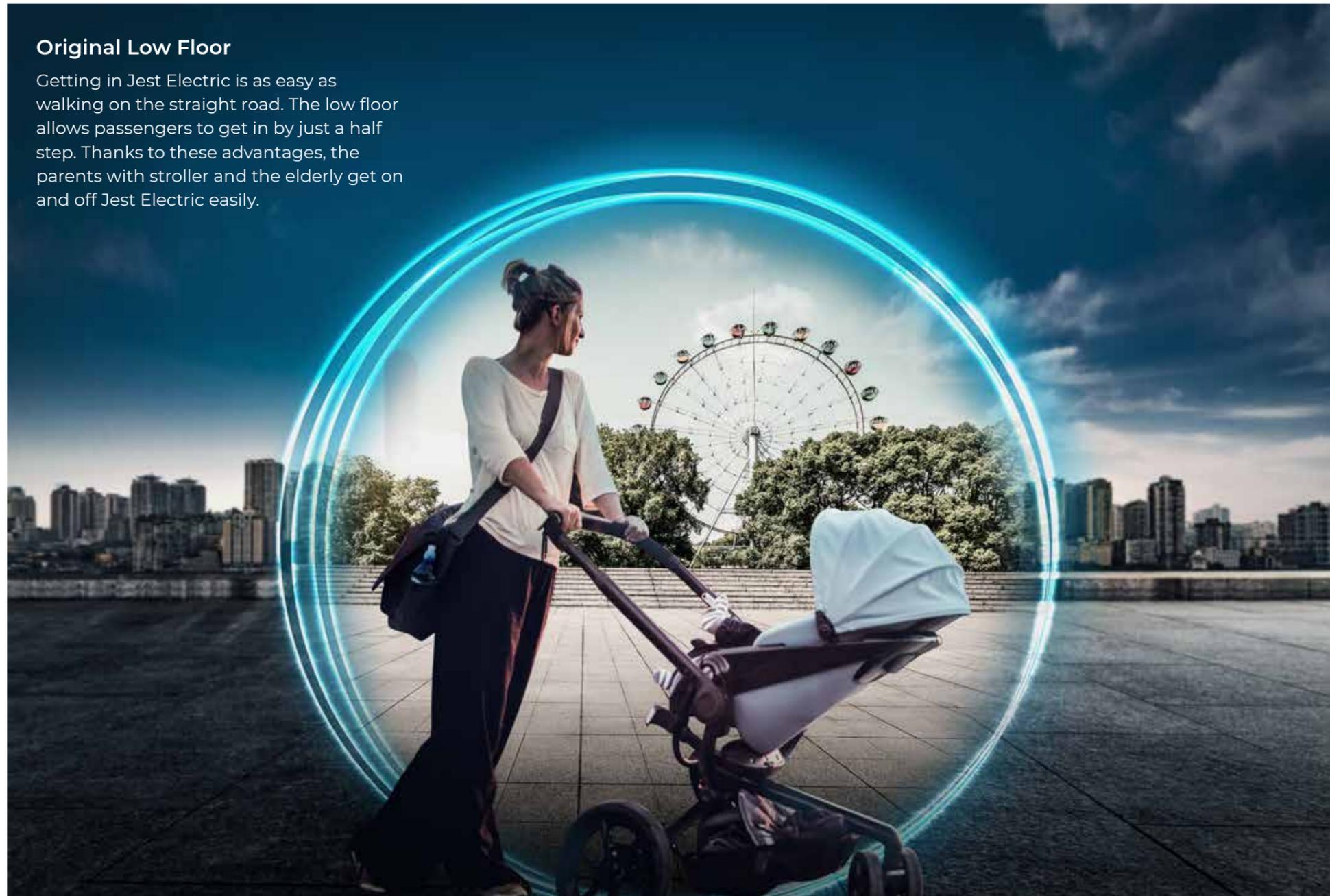
Independent Suspension

Until Jest Electric, passenger and operator comfort has not been expected in public transport. With 4-wheel independent suspension, Jest Electric reduces road vibration and increases passenger comfort offering an automobile like comfort.



Original Low Floor

Getting in Jest Electric is as easy as walking on the straight road. The low floor allows passengers to get in by just a half step. Thanks to these advantages, the parents with stroller and the elderly get on and off Jest Electric easily.





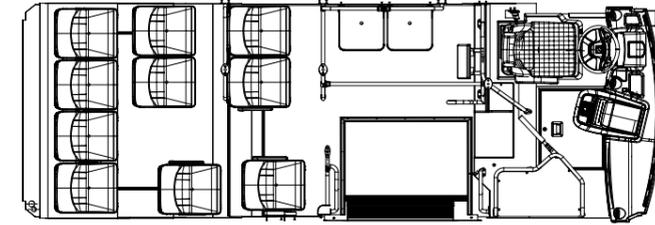
Spacious Interior

In addition to adequate seat width and ample space between the seats, Jest Electric offers spacious travel possibilities with its roomy interior design and panoramic windows, so the passengers just need to sit back and relax while viewing the cityscape.

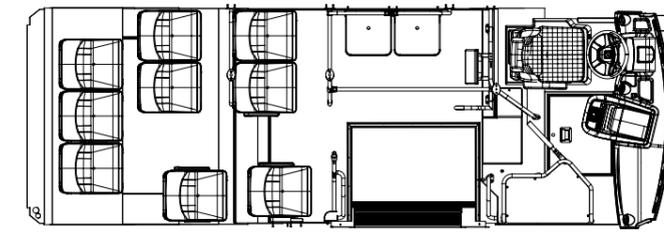
Seat Positioning

Passengers getting on the Jest Electric can reach seats positioned on the low floor conveniently without an extra step. Moreover, with all the front-facing fixed seats, all passengers spend a pleasurable time in Jest Electric.

Passenger Capacity & Layout Alternatives



10 Fixed + 2 Folding Seats (Double Battery Pack) | Class A



9 Fixed + 2 Folding Seats | Class A

Jest Electric Single Battery (44 kWh)

	Charger	Seated	Foldable	Wheelchair	Max. Standing	Max. Total Passenger
Class I	22 kW	9	2	1	15* / 16**	24* / 25**
Class A	22 kW	9	2	1	13	22

Jest Electric Double Battery (88 kWh)

	Charger	Seated	Foldable	Wheelchair	Max. Standing	Max. Total Passenger
Class A	22 kW	10	2	1	11* / 12**	21* / 22**
		9	2	1	12* / 13**	21* / 22**

* With Sliding Passenger Door

** With Outward Swing Passenger Door

POSITIVE SAFETY

Jest Electric offers technological active and passive safety systems in order to protect its valuable driver and passengers.

- (ESP)** ELECTRONIC STABILITY PROGRAM
- (ABS)** ANTI-LOCK BRAKING SYSTEM
- (DTC)** DRAG TORQUE CONTROL
- (HSA)** HILL START AID
- (EBD)** ELECTRONIC BRAKEFORCE DISTRIBUTION
- (TCS)** TRACTION CONTROL SYSTEM
- (BAS)** BRAKE ASSIST SYSTEM



CHANGING HABITS REQUIRES POSITIVE ENERGY

The mini-bus emerged as part of economic priorities 60 years ago in the friendly lands of Anatolia. It began to spread to modern cities in the 1980's and continues to grow as more cities increase their sustainable transportation network.

Jest Electric is designed to change the outlook of public transportation in many parts of the world, it is designed to challenge public transport perceptions.

Upgrading public transportation, Jest Electric develops a collective travel model in developing modern cities reducing the need for passenger cars. Jest Electric accomplishes this both with its comfort and unique features, as well as its respect for nature.

Jest Electric provides solutions to transportation issues with new generation technology, and becomes the source of happiness for communities.



KARSAN... FROM PAST TO PRESENT

1966



Karsan's adventure began in 1966 with 269 independent entrepreneurs.

1981



In the first 15 years, it continued to work as a part supplier for Original Equipment Manufacturers (OEMs).

2006



From 1981 onwards, it began manufacturing J9 minibuses for Automobiles Peugeot. Later, it manufactured the first minivan in collaboration with Peugeot.



In 2006, Karsan manufactured J9 Premier, which was completely its own product. In the following year, it established strategic alliances with Hyundai, Renault and Citroen.

2009



In line with its vision updated in 2009 as "Limitless Transportation Solutions", Karsan developed the V1 project in response to New York's Taxi of Tomorrow tender.

2011



Starting to manufacture buses in 2011, Karsan manufactured the first big bus for Rome Municipality.

2019



Karsan now manufactures Atak Electric for a sustainable future and preserve natural resources of historical cities.

2018



Karsan's first electric vehicle Jest Electric, which is electrified by BMW i, was launched in Munich, in cooperation with BMW.

2017



Jest+ was relaunched with an esthetic look and enhanced features.

2013



In 2013, it re-developed its product portfolio with its own vehicles, namely Jest, Atak and Star. Furthermore, it has entered into new agreements with leading companies such as Hyundai, Industry Italiana Autobus and Bozankaya.



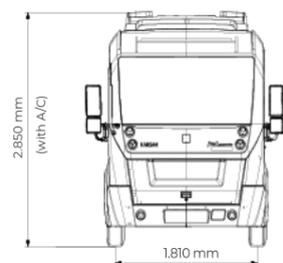
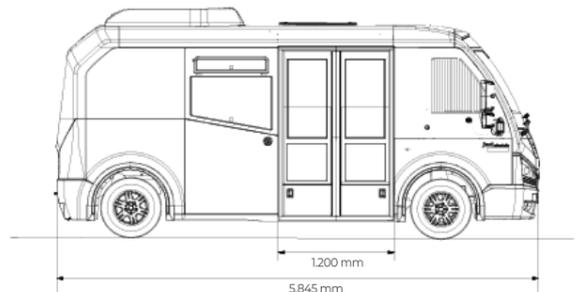
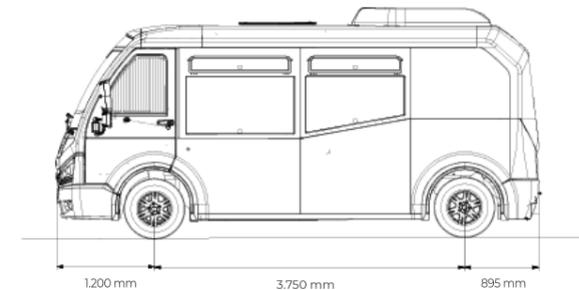
Karsan's factory, located in Hasanağa, Bursa, Turkey, having 90.000 m² of indoor space on a total area of 200.000 m², has a capacity of manufacturing 65.000 vehicles/year. Today, in its modern facilities Karsan has been producing for more than 50 years for the world's leading brands and its own brand.



Recently, Karsan became one of the 6 finalists in the prototype design contest for a next generation delivery vehicle that will replace 180,000 vehicles currently available at US Postal Service. Additionally, it established a strategic partnership with Morgan Olson, a leader in business transportation.

TECHNICAL SPECIFICATIONS

VEHICLE TYPE			
Vehicle Category & Class	M2 Category & Class 1 / Class A		
POWERTRAIN SYSTEM			
Drive Type	Battery Electric Vehicle (BEV)		
Engine Type	Electric Traction Motor		
Maximum Power (kW & hp)	135 & 184		
Maximum Torque (Nm)	290		
Transmission	Single Speed Automatic Transmission		
PERFORMANCE & ELECTRICAL SYSTEM			
Top Speed (km/h)	70		
Turning Radius (mm)	6.993		
Maximum Gradeability (%)	25		
Battery Alternatives	Single Battery	Double Battery	
Range (km) ¹	105	210	
High Voltage Battery (Type - Capacity)	Li-ion - 44 kWh	Li-ion - 88 kWh	
Charging (Type - Power - Time)	AC Type 2	22 kW - 2h ²	22 kW - 4h ²
	DC Combo 2	50 kW - 55 min ²	80 kW - 65 min ²
BODY			
Body Type	Monocoque Space Frame - Original Low Floor (270 mm Step Height)		
Corrosion Resistance	Cataphoresis Coating & Under Coating		
SUSPENSION			
Suspension System	4WIS-Four Wheel Independent Suspension System		
Front Axle	Independent, MacPherson, Coil Springs & Telescopic Shock Absorber		
Rear Axle	Trailing Arm, Helical Spring + Anti Roll Bar		
BRAKES			
Front & Rear Brakes	Hydraulic & Disc		
DIMENSIONS			
Overall Length (mm)	5.845		
Overall Width (mm)	2.055 (without Mirrors)		
Overall Height (mm)	2.850 (with A/C)		
Interior Height (mm)	2.185 (Maximum)		
Front Overhang (mm)	1.200		
Rear Overhang (mm)	895		
Wheelbase (mm)	3.750		
Gross Vehicle Weight (kg)	5.000		
TIRES			
Tire Sizes	215/75 R 16C		
Rim Sizes	6J x 16		



EQUIPMENT FEATURES

STYLE

Exterior Design	
LED High Beam & Low Beam Lights	S
LED DRL (Day Time Running Lights)	S
Fog Lamps	S
LED 3 rd Stop Lamp	LP
Rear Clearance Lamps	LP
16" Alloy Wheels	S
Tinted Side Glasses & Transom Windows	S
Outward Swing Passenger Door	S
Sliding Passenger Door	AP
Manual Access Ramp	S
Electric Access Ramp	AP
Body Colored Bumpers	S

Passenger Compartment	
Blue Handrails	S
Stainless Steel Handrails	LP
2 Stop Buttons on Handrails	S

TECHNOLOGY

Driver Compartment	
Leather Steering Wheel	S
10" Digital Cluster	S
Electric Park Brake	S
10,1" Multimedia Touch Screen	S
Speed Limiter - 50 km/h (On-Off Available)	S
2 Mode Regeneration Module	S
Acceleration Limiter	S
Rear Parking Sensors	LIP & SP
Navigation	MP

Camera Systems	
Rear View Camera	LIP & SP
Driver & Service Door Camera	LIP & SP
Front & Inside Camera & DVR (1 TB)	SP

Video & Audio Systems	
Radio + USB Port + Bluetooth Connections	S
4 Speakers	S
External Speaker	O

Passenger Compartment	
Stop Sign & Digital Clock & Temperature Indicator	S
USB on Handrails	S
Internet Access Infrastructure (Wi-Fi Router)	MP & LP

Line Systems	
Smart Tachograph	O
Roof Destination Info Preparation with Digital Route Indicator ³	LIP & SP
Validator Preparation	LIP & SP

COMFORT

Heating & Cooling System	
Roof Mounted Passenger A/C (12 kW)	S
Driver A/C	S
High Voltage Heater (7 kW)	S
Pre-Heater (Diesel)	O

Mirrors & Windows	
Manual Roof Hatch	S
Electric Roof Hatch	LP
Electric & Heated Side Mirrors	S
Sidewalk Mirror on Right	S
Electric & Heated Driver Window	S
Heated Front Right Window	S
Heated Windscreen	S
Front Manual Sun Visor (Driver Only)	S

Interior Lights	
Driver Area Illumination	S
Passenger Area LED Light Path	S

Driver Compartment	
Tilttable & Telescopic Hydraulic Steering Wheel	S
Remote Controlled Central Locking System	S
8 Way Adjustable Pneumatic Driver Seat with Arm Rest	S
Driver Overhead Bin	S
Semi-Closed Driver Cabin (with Hand Luggage Area)	S
Fully Separated Driver Cabin	IP

Passenger Compartment	
Plastic Type Passenger Seats	S
Plastic Type Passenger Seats with Fabric	O
Billboard	IP

Other	
12V Battery	S
22 kW High Capacity Charger	S
CCS2 Charging Cable (3 Phases x 32A)	O
Fleet Management System Gateway	S

SAFETY

ESP - Electronic Stability Program	S
Hill Holder	S
ABS - Anti-Lock Braking System	S
EBD - Electronic Brake Force Distribution	S
HBA - Hydraulic Brake Assistant	S
VDC - Vehicle Dynamics Control	S
TCS - Traction Control System	S
DTC - Drag Torque Control	S
TPMS - Tire Pressure Monitoring System	S
Battery Room Fire Detection System	S
Engine Room Fire Detection System	S
Brake Pad Wear Sensor	S
Reverse Gear Buzzer	S

S = Standart
 AP = Access Pack
 IP = Isolation Pack
 LIP = Line Pack
 LP = Luxury Pack
 MP = Multimedia Pack
 SP = Surveillance Pack

³ It can be provided also without indicator.

¹Based on NEDC testing standards with a base-level equipped vehicle. Range may vary depending on various factors, in particular: individual driving style, route characteristics, outside temperature, heating/air conditioning, seated & standing passenger weight.

²Charging up to 80% battery capacity in ideal conditions.

