



e-JEST

POSITIVE ENERGY
OF THE CITY



 **KARSAN**

**FIRST EUROPEAN ELECTRIC
BUS BRAND IN JAPAN**

POSITIVE ENERGY NOW IN THE CITY

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





e-JEST

ALSO KNOWN AS SMALL CITY BUS

Designed to feed the main lines of city transportation, e-JEST 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



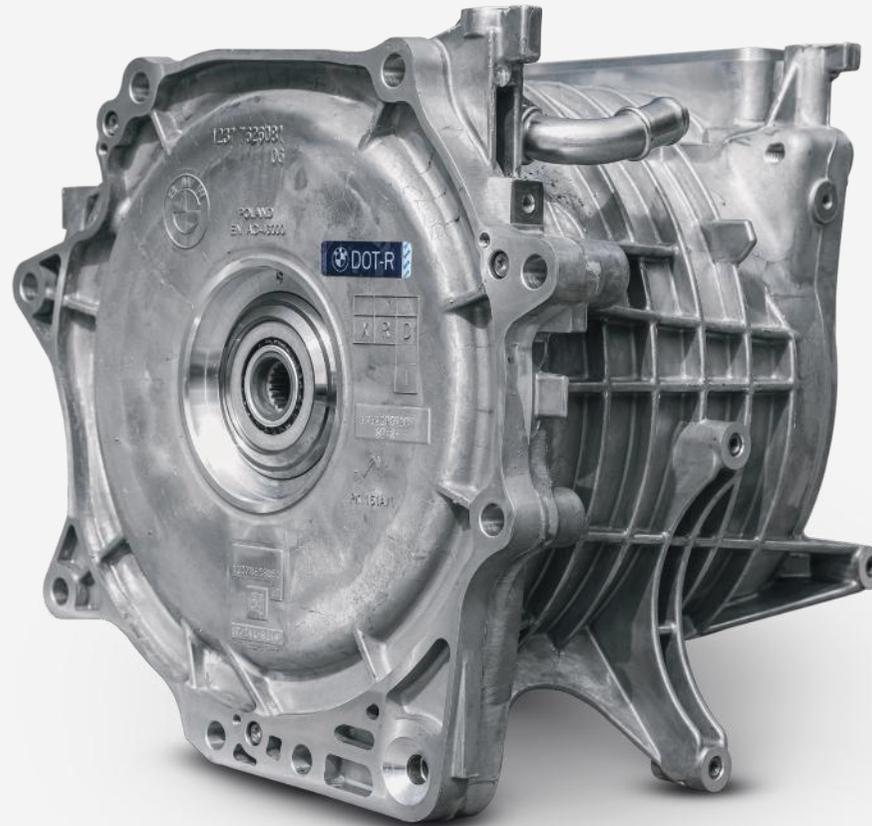
290 Nm
Max. Torque



25 %
Max. Gradeability



70 km/h
Max. Speed



Powerful BMW Electric Motor

Although e-JEST 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. e-JEST is always ready with its strong, quiet and efficient motor to conquer any city terrain. e-JEST's efficient BMW motor generates high torque and reassures the driver in demanding situations.

in cooperation with



UNIQUE AND INNOVATIVE DESIGN

e-JEST respects and sustains the historical heritage of the city. Having a perfect look with its new age compact design, e-JEST 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

Travelling with e-JEST 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. e-JEST, which won a design award in Design Türkiye, is created to bring a different atmosphere to the city in every aspect. e-JEST's view from the rear is so extraordinary that future designs will be influenced by it.

Rims With An Aesthetic Appearance

It's in e-JEST'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 e-JEST, 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

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



EUROPEAN MARKET LEADER

Jest has been meeting public transportation needs in many countries since 2013. Having proved itself with more than 10.000 units on the road, Jest continues to improve city life as being preferred every day in different locations of the world.

e-JEST added a new one to its global achievements and became the market leader in the European market for the third time in a row.



*According to Europe Minibus and Bus Market Report datas published by Chatrou CME Solutions in 2020 & 2021 & 2022.

EVERYTHING IS CONSIDERED FOR DRIVER'S COMFORT

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



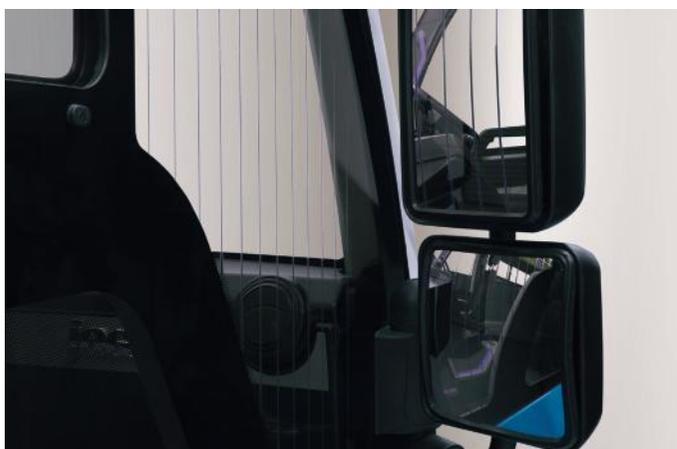
Tilttable & Telescopic Electrohydraulic Leather Steering Wheel



Driver Seat Without Arm Rest



Driver Air Conditioner



Electric Heated Mirrors & Sidewalk Mirrors



Heated Windows and Windshield



Manual Roof Hatch

POSITIVE FUTURE

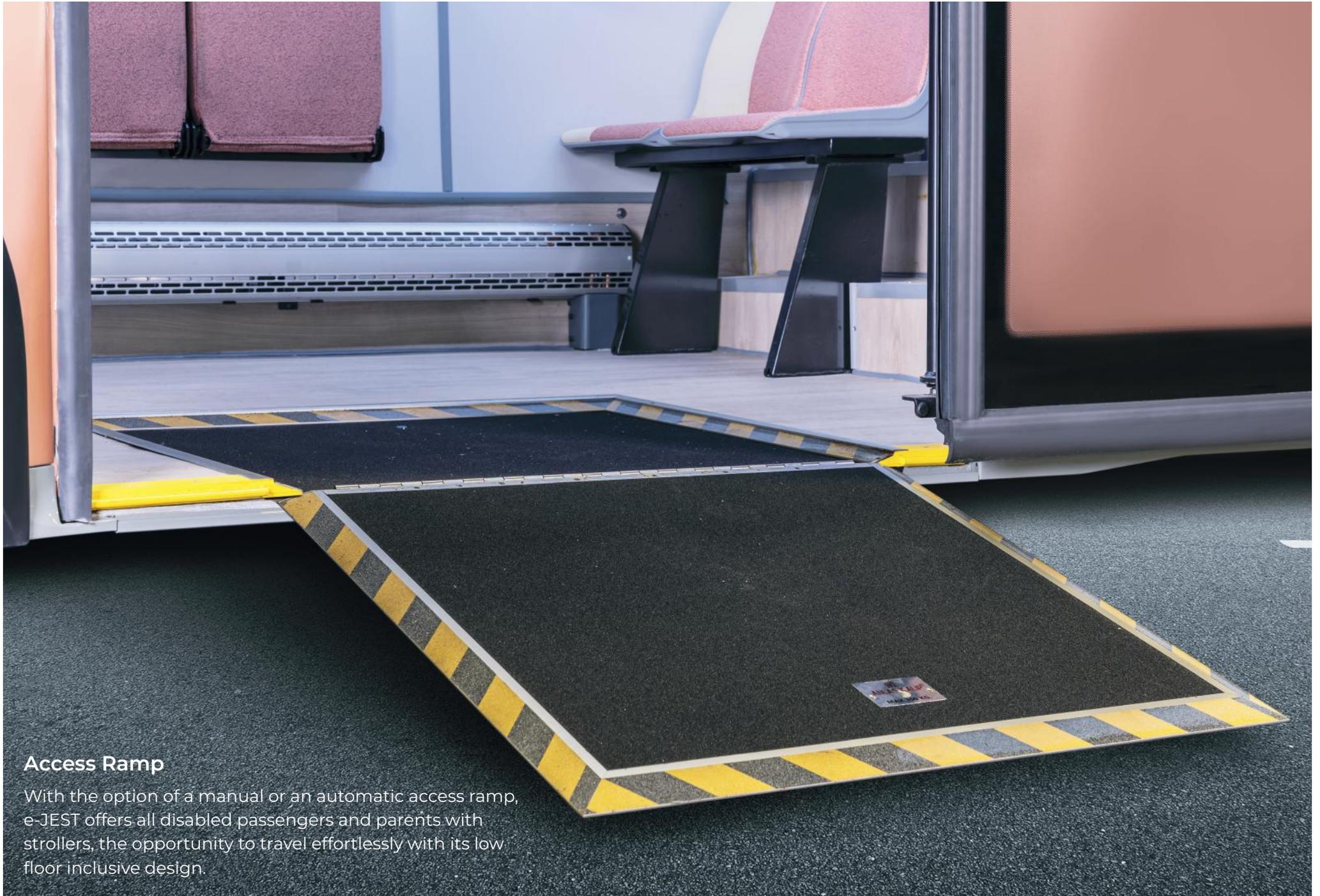
Zero Emission

e-JEST is green, not only in color but in design. e-JEST keeps future generations healthier with 0% emissions.



POSITIVE LIFE





Access Ramp

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

Silent

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



POSITIVE PERFORMANCE

Battery Packs

Li-Ion batteries and electric motor bring e-JEST to life with its safe proven real world experience.

Double Battery

	Capacity	88 kWh
	Range	210 km



Quick and Easy Charging

e-JEST easily charges itself through the charging socket at the rear right side. e-JEST, which can be charged with two types of AC, DC and CHAdeMO recharge battery for 4 hours at night and 65 minutes with quick charging during the day.

Regenerative Power

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



Charging socket location might be different on vehicles.



Comfortable Hill Start Even 25% Slope

Steep hills do not pose a challenge for e-JEST. e-JEST is always ready with its strong motor to conquer any city terrain. It's 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, e-JEST travels easily in narrow streets of old cities and climbs up ramps while fully loaded.

POSITIVE TECHNOLOGY

10" Full Digital Cluster

e-JEST 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.





Start & Stop

To start e-JEST, After turn on the ignition key,only touch the Start/Stop button.
To start e-JEST, onlt touch the Start/Stop key after you insert the card.
It's that simple to start e-JEST.



10.1" Multimedia Touchscreen

Everything is at the tip of your fingers thanks to the e-JEST'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 e-JEST, there is no distance between you and the world. You can always go online with e-JEST's Wi-Fi technology, and electronic devices can be charged through the USB ports in passenger area. e-JEST 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 e-JEST comes in. Because e-JEST is electric powered, it does not pollute nature and reduces the total utility costs by using a more economical resource.

Superior Durability

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



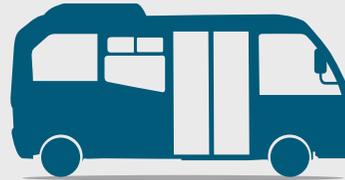


Maximum Capacity Utilization

e-JEST 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 m Minibus | 22 Passanger Capacity

Peak Hours

%100

Off-Peak Hours

%100



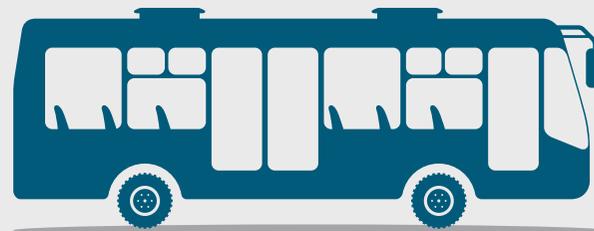
8 m Midibus | 58 Passanger Capacity

Peak Hours

%100

Off-Peak Hours

%43



12 m 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

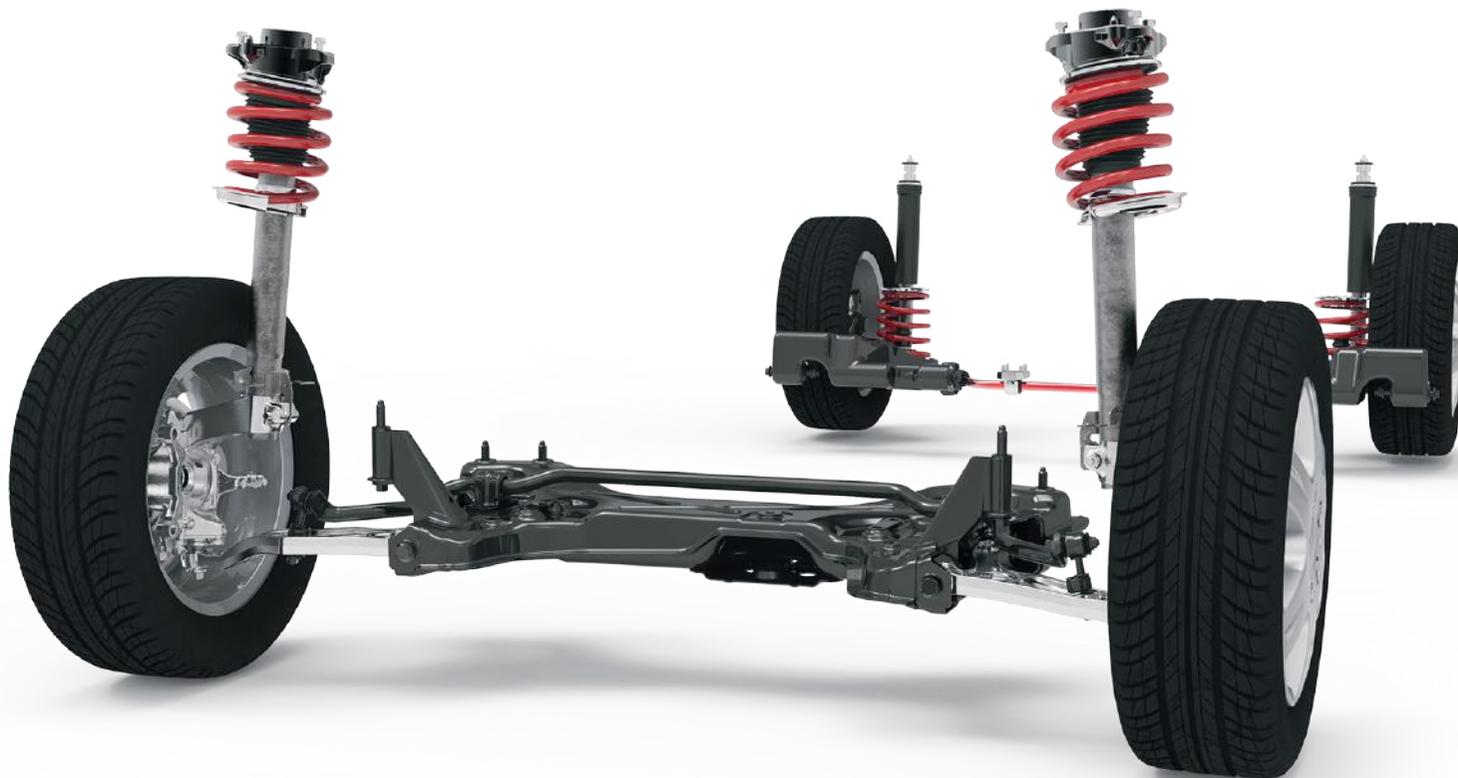


Sliding Passenger Door

OFFERS COMFORTABLE SERVICE TO CITIZENS

Independent Suspension

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



Original Low Floor

Getting in e-JEST 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 e-JEST easily.







Spacious Interior

In addition to adequate seat width and ample space between the seats, e-JEST 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 e-JEST 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 e-JEST.

Passenger Capacity & Layout Alternatives



Seated	Foldable	Wheelchair	Max. Standing*	Max. Total Passenger*
10	-	-	12	22
10	2	-	10	22
10	-	1	8	19

*Values are examples. These values may change as +/- depending on the selected features.



POSITIVE SAFETY

e-JEST 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.

e-JEST 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, e-JEST develops a collective travel model in developing modern cities reducing the need for passenger cars. e-JEST accomplishes this both with its comfort and unique features, as well as its respect for nature.

e-JEST 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 .

2023



Karsan has become the first European electric bus brand to enter the Japanese market with its new right-hand drive e-JEST model.

2022



Karsan started the production of the new generation e-ATA HYDROGEN, which produces its own electricity with renewable green hydrogen energy, starting a new era in the evolution of electric technology.

2021



Karsan expands its product range with 10-12-18 meter buses and offers a full range of electric buses.



Karsan signed a 5-year contract with Oyak Renault for the production of Megane Sedan models.



Karsan introduced Autonomous e-ATAK, the first serial-production level 4 bus in Europe and America.

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 Eome Municipality.

2013



In 2013, it re-developed its product portfolio with its own vehicles, namely Jest, Atak and Star.

2017



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

2019



Karsan now manufactures e-ATAK for a sustainable future and preserve natural resources of historical cities.

2018



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



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.



Karsan became one of the 6 finalists in the prototype design contest for a next generation delivery vehicle at US Postal Service and remained in the evaluation stage for five years and the tender was awarded to another bidder in February 2021.

TECHNICAL SPECIFICATIONS

VEHICLE TYPE

Vehicle Category & Class	RHD M2 / M3 Category & Class A
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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
Range (km) ¹	210
High Voltage Battery (Type - Capacity)	Li-ion - up to 88 kWh
Charging (Type - Power - Time)	
AC Type ²	22 kW - 4h ²
DC Combo ²	80 kW - 65 min ²
CHAdeMO DC Charge	80 kW - 65 min ²

BODY

Body Type	Monocoque Space Frame - Original Low Floor (270mm 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
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DIMENSIONS

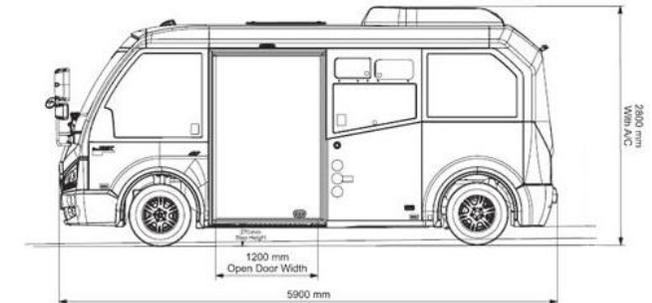
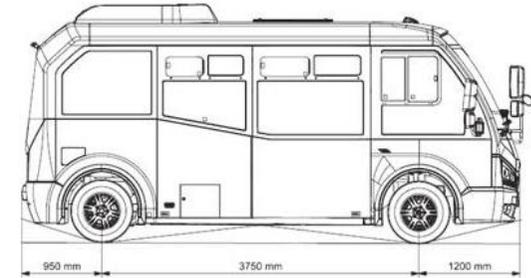
Overall Length (mm)	5,900
Overall Width (mm)	2,055 (without mirrors)
Overall Height (mm)	2,800 (with A/C)
Interior Height (mm)	2,245 (maximum)
Front Overhang (mm)	1,200
Rear Overhang (mm)	950
Wheelbase (mm)	3,750
Gross Vehicle Weight (kg)	5,000 / 5,200

TIRES

Tire Sizes	225 / 75 R 16C
Rim Sizes	6J x 16"

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.



EQUIPMENT FEATURES

STYLE

Exterior Design	
LED High Beam & Low Beam Lights	S
LED DRL (Day Time Running Lights)	S
LED Fog Lamps	S
LED 3 rd Stop Lamp	O
Rear Clearance Lamps	O
16" Alloy Wheels	S
Tinted Side Glasses & Transom Windows	S
Sliding Passenger Door	S
Manual Access Ramp	S
Electric Access Ramp	O
Exterior Passenger Door Opening Button (Under Wiper)	S
Body Colored Bumpers	S
Passenger Compartment	
Yellow Handrails	S
Stainless Steel Handrails	O
11 Stop Buttons on Handrails	S
Q-Strait	S
TECHNOLOGY	
Driver Compartment	
Leather Steering Wheel	O
10" Digital Cluster	S
Electric Park Brake	S
Multimedia Touchscreen	S
Speed Limiter - 50 km/h (On-off available)	S
2 Mode Regeneration Module	S
Acceleration Limiter (On-off available)	S
Rear Parking Sensor	S
Camera Systems	
Rear View & Driver & Service Door Camera & DVR (1 TB)	O
Front & Inside & Rear View & Driver & Service Door Camera & DVR (1 TB)	O
Video & Audio Systems	
Radio + USB Port + Bluetooth Connections	S
4 Speakers	S
External Speaker	O
Goose Neck Microphone + Amplifier	O

Passenger Compartment	
Stop Sign & Digital Clock	S
4 USB On Handrails	S
Internet Access Infrastructure (Wi-Fi Router)	O
Line Systems	
Smart Tachograph	O
Heightened Roof Destination Info Preparation with Digital Route Indicator ³	O
Validator Preparation	O
COMFORT	
Heating & Cooling System	
Roof Mounted Passenger A/C	S
Driver AC	S
High Voltage Heater	S
Pre-heater (Diesel) ⁴	S
Mirrors & Windows	
Manual Roof Hatch	S
Electric Roof Hatch	O
Electric & Heated Japanese Spec Side Mirrors	S
Sidewalk Mirror	S
Electric & Heated Driver Window	S
Heated Front Left 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	
Tiltable & Telescopic Hydraulic Steering Wheel	S
Remote Controlled Central Locking System	S
Driver Seat Without Arm Rest	S
Driver Overhead Bin	S
Semi-Closed Driver Cabin (with Hand Luggage Area)	S
Fully Separated Driver Cabin	O

Passenger Compartment	
Plastic Type Passenger Seats	O
Plastic Type Passenger Seats with Fabric	S
Billboard ⁵	O
Other	
12V Battery	S
22 kW High Capacity Charger	S
CHAdEMO Charger	S
The Light Above The Passenger Door	S
Cerb Side Lights	S
Ignition Key	S
Front, Side and Rear Destination Sign Preparation	S
FMS 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
Electric Motor Fire Detection System	S
Fire Suppression System (For Pre-Heater) ⁶	O
Brake Pad Wear Sensor	S
Reverse Gear Buzzer	S

³ It can be provided also without indicator.

⁴ With standard heating system.

⁵ Only with Fully Separated Driver Cabin.

⁶ If pre-heater option is selected in Class I vehicle, this option must be selected.

S = Standard

O = Option

