

MOBILITY REDEFINED



in cooperation with



ATAK *electric*

ATAK ELECTRIC REDEFINES MOBILITY

Technology, design, comfort and many more...
All expectations change with 300 km range of Atak Electric and
mobility is redefined. Discover Atak Electric's pioneering features.



MORE ENERGY MORE MOBILITY

Daily operations can easily be achieved with Atak Electric's
extended range and superior technology.



Range:
Up to 300 km



ESTHETICS REDEFINED

Every city dreams of Atak Electric.
Atak Electric adapts itself to toughest city
conditions with its dynamic and compact design.



CHARACTERISTIC FRONT-DESIGN

Atak Electric promises much more than you would expect with its exterior design. Besides its charming curvy front line, its horizontal LED main and dipped beam lights and stylish day time running lamps ensure harmony with the city.



REAR DESIGN THAT LEAVES A LASTING IMPRESSION

An agile-looking design, a perfect craftsmanship... With Atak Electric, everything you left behind will watch you with admiration. Rear LED lights placed vertically and background details create a unique design.

DRIVING PLEASURE REDEFINED



ERGONOMIC COCKPIT WITH MODERN DESIGN

With the very first step into Atak Electric, an enchanting atmosphere welcomes you. LED ambiance lights that create a futuristic atmosphere and leather and stitch detailed steering wheel raise Atak Electric up from a public transportation vehicle. Atak Electric becomes the ambassador of the modern design concept.

Atak Electric takes the comfort to the highest level and makes its driver desire to drive longer with its spacious and ergonomic cockpit. Creating a refreshing atmosphere with its superior airflow, Atak Electric makes its driver work easier in every road condition.

WIDE ANGLE VIEW

Atak Electric's wide angle of view provides total control of the road. Set the level upon road conditions or kneel while passengers get on and off the bus, with Electric Controlled Air Suspension (ECAS).

EVERY DRIVER WANTS TO OWN ATAK ELECTRIC

Every detail has been taken care of in Atak Electric in order to ensure driver comfort to allow focus on the road.



Adjustable Driver Seat



Electrical Heated Mirrors



Isolated Cabin

COMFORT REDEFINED

Imagine a bus that sets comfort as the foremost priority.
And now, name it Atak Electric.

The first class comfort that Atak Electric provides
its passengers has the level of superiority that can
re-establish the dynamics of public transport.



ORIGINAL LOW FLOOR

The low-height floor which enables to get on with only half a step is the most important aspect of its comfort level. With this advantage, elders and parents with strollers can easily get on and off Atak Electric. Passengers can reach the seats that are mounted on the low floor without any extra steps after getting on the vehicle.



SPACIOUS INTERIOR

Atak Electric: Best place to daydream. With its wide leg room that increases comfort and wide window area that offers a panoramic view of the city, Atak Electric takes its passengers to a journey that they will never want to end.

POWERFUL AIR CONDITIONER & HEATER

The powerful air conditioner and heater that can handle any extreme climate, makes the passenger feel as comfortable as they are at home.

PROFITABILITY REDEFINED

With Atak Electric you also maximize the utilization of passenger capacity. This ensures more profitability for your enterprise or municipality.

How?
Atak Electric reduces operational costs during off peak hours where oversized empty buses have redundant capacity. Fulfilling both peak and off-peak capacity demand of cities, Atak Electric brings an efficient approach to public transportation.



8 mt Atak Electric | 52 Passenger Capacity



Capacity Utilization

Peak Hours
%100

Off-Peak Hours
%100



12 mt Bus | 105 Passenger Capacity

Peak Hours
%100

Off-Peak Hours
%50

52
*Passenger
Capacity*

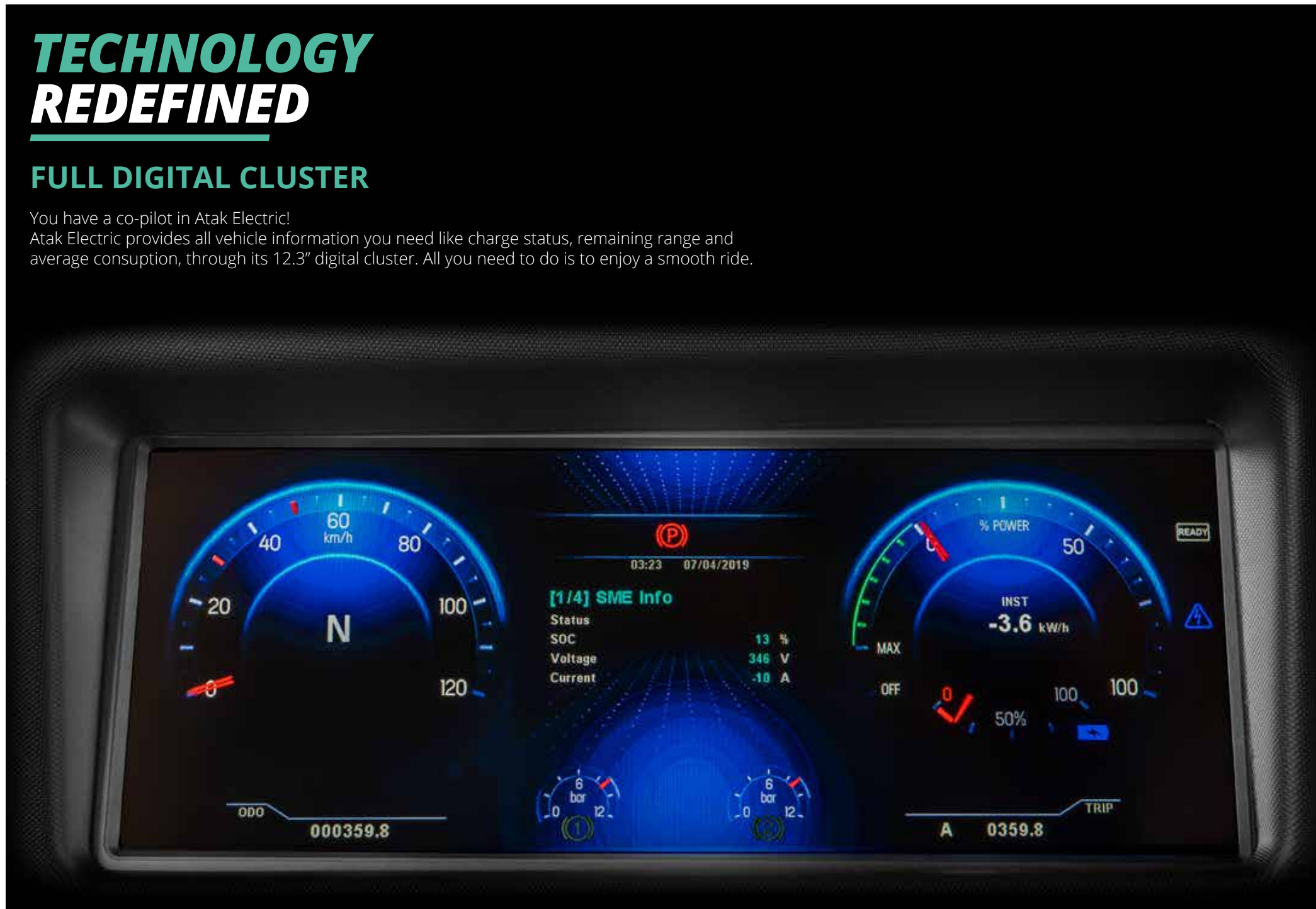


TECHNOLOGY REDEFINED

FULL DIGITAL CLUSTER

You have a co-pilot in Atak Electric!

Atak Electric provides all vehicle information you need like charge status, remaining range and average consumption, through its 12.3" digital cluster. All you need to do is to enjoy a smooth ride.



KEYLESS START & STOP

Technological solutions which make life easier are in Atak Electric. With Keyless Start & Stop, drivers can easily get in the bus with keys in their pocket and simply push the Start & Stop button to activate low voltage battery powered systems.

WI-FI & USB PORTS

Time flies in Atak Electric. Stay connected at all times via Wi-Fi technology and allow your passengers charge their mobile phones with USB ports and travel at home comfort.



10.1" TOUCH SCREEN

To ensure you have a joyful journey, Atak Electric is equipped with a wide touch screen including various functions such as trip computer, tire pressure monitoring, rear camera view, air-conditioning, diagnosis, charging energy flow, multimedia and bluetooth.

Basic controls such as ECAS, lights and defroster are at your fingertips in Atak Electric to create a comfortable journey for your passengers while Atak Electric's high-resolution camera views in additional 7" LCD screen* ensure a safe driving experience.

*Available beginning from May 2020



100% ELECTRIC **0% EMISSION**

Thinking about the future needs cutting-edge technology.
Just like the technology Atak Electric has.

Atak Electric considers the future of nature and humanity with
its 100% electric motor. And its 0% emission level takes
the first steps in forming a greener and cleaner city.



PERFORMANCE REDEFINED

Atak Electric, with electric motor and much stronger than diesel!

The city is full of tough conditions. Atak Electric challenges and overcomes them with its strong 230 kW electric motor. Designed to operate in all climates, Atak Electric adapts itself to every condition, no matter burning summer or freezing winter.

Doesn't matter whether the roads are steep or narrow, if you own Atak Electric you are at ease. Steep or narrow streets cannot challenge Atak Electric, you will always drive at ease.



230 kW
Max. Power



2.500 Nm
Max. Torque



Mechanic warranty is limited to 2 years of 200.00 km.
(Whichever finishes first).

BMW i. BATTERY

Proven BMW Li-Ion batteries vitalize Atak Electric. With Atak Electric, a seamless journey begins in the city from one end to the other. The driver goes on without interruption with Atak Electric's unrivaled range of up to 300 km. This range enables to finish more rounds during the day without losing time charging, thus transforms the public transport with increased ease.



Capacity: 220 kWh
5 battery packs x 44 kWh



Range:
Up to 300 km

Battery warranty is limited for 4 years or 200.000 km (whichever finishes first).

in cooperation with



REGENERATIVE POWER

With regenerative brake system, Atak Electric can recover the kinetic energy during braking and use it to charge its batteries and extend the range. You can select one of the 2 regenerative brake modes according to preference of kinetic energy re-gain amount.

QUICK AND EASY CHARGING

Atak Electric is easily charged through the connection on front right side. Atak Electric can charge its battery in 5 hours by AC or in 3 hours by DC.



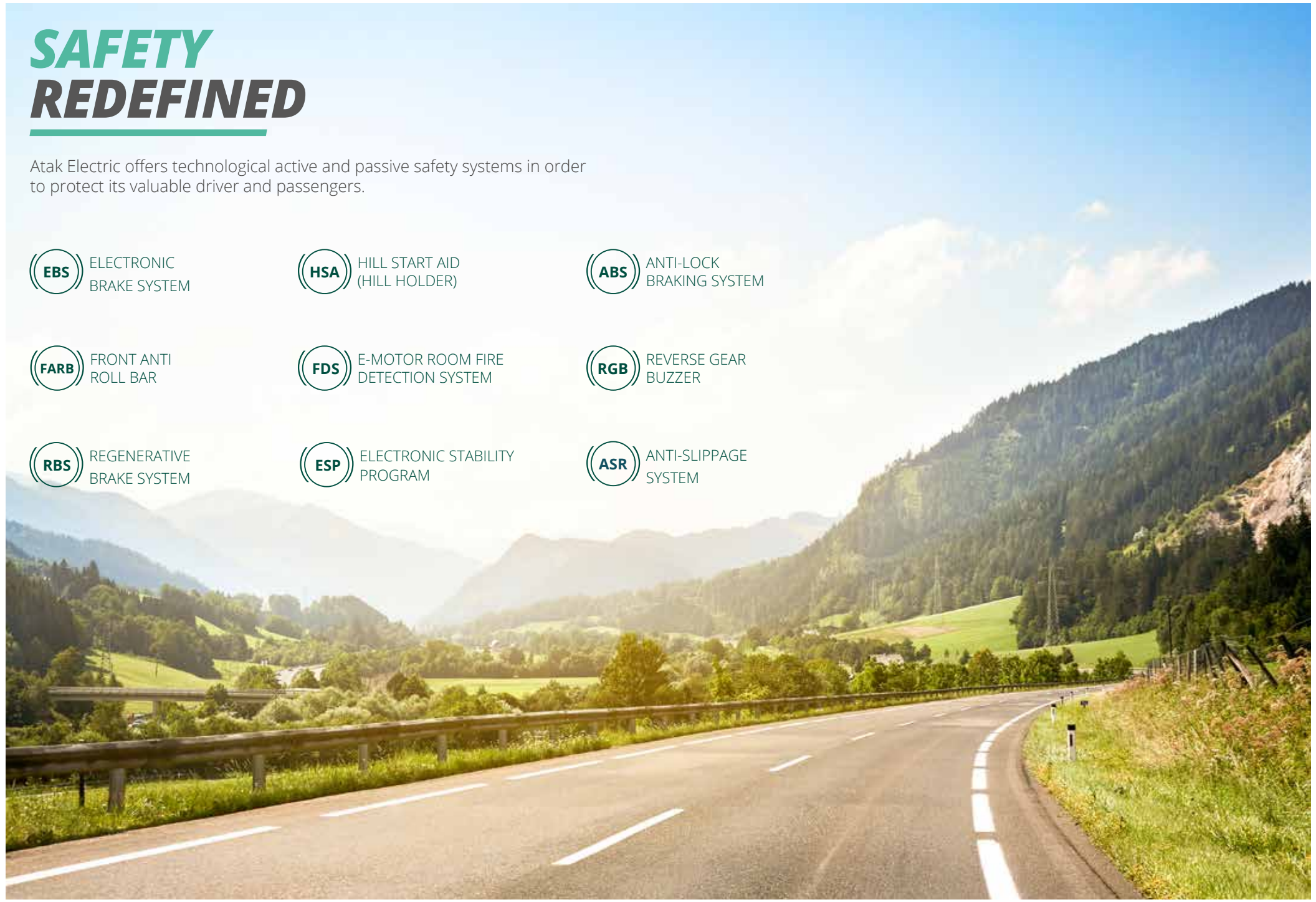
SERVICE REDEFINED

If you have Atak Electric, you serve everyone in the best way possible. Manual ramp enables wheelchairs to get on the vehicle without any hassle. Furnished with various disabled-oriented features, Atak Electric has a wheelchair area which is designed for utmost safety during the journey. Passengers can reach the seats that are mounted on the low floor without any extra steps after getting on the vehicle.

SAFETY REDEFINED

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

- | | | |
|--|---|---------------------------------------|
| (EBS) ELECTRONIC BRAKE SYSTEM | (HSA) HILL START AID (HILL HOLDER) | (ABS) ANTI-LOCK BRAKING SYSTEM |
| (FARB) FRONT ANTI ROLL BAR | (FDS) E-MOTOR ROOM FIRE DETECTION SYSTEM | (RGB) REVERSE GEAR BUZZER |
| (RBS) REGENERATIVE BRAKE SYSTEM | (ESP) ELECTRONIC STABILITY PROGRAM | (ASR) ANTI-SLIPPAGE SYSTEM |



FUTURE AND URBAN TRANSPORTATION REDEFINED



Atak Electric becomes one of the most important element of the city and future you dreamed of. While world population is increasing, natural resources are diminishing day by day. The only way to handle the problems come up with this situation is through sustainable solutions. Respecting historical cities' unique texture with its zero emission level, Atak Electric is here to accompany you. With its compact design, Atak Electric complies with the dynamic of cities with narrow streets and protected historical sites. It doesn't pollute the city and the nature, on the contrary, it sustains a more liveable future.

Beyond advanced technology trends, Atak Electric provides unique solutions like low-floor and disabled ramp for the residents of the city and puts their comfort first. Becoming an essential piece of the livable city with decreasing the need of personal vehicles, it encourages usage of public transport. Moreover, with its 300 km range, Atak Electric reduces the dependency of its user to charging station and it starts a new era for urban transportation allowing to travel longer distances with only one charge in a day.

EXTEND YOUR RANGE



Range:
Up to 300 km

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



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	Low Floor Electric Bus, M3 Category, Class I, LHD
POWERTRAIN SYSTEM	
Drive Type	Direct Drive
Engine	TM4 Electric Motor
Maximum Power (kW)	230
Maximum Torque (Nm)	2.500
PERFORMANCE & ELECTRIC SYSTEM	
Turning Radius (Kerb to Kerb) (mm)	6.312
Range*	Up to 300 km
High Voltage Battery (Type - Capacity)	Li-ion 360V - 220 kWh
	AC Type 2 - 22 kW Single – 10 h**
	AC Type 2 - 44 kW Double - 5 h**
Charging (Type - Power - Time)	DC Combo 2 - 80 kW - 3 h**
BODY	
Body Type	Carbon Steel: Space Frame Steel Tube Structure
Corrosion Resistance	Cataphoresis & Underbody Coating
SUSPENSION	
Suspension	Air Suspension + Electronic Level Control + Kneeling
Front Axle	Independent
Rear Axle	Rigid Drive Axle
BRAKE SYSTEM	
Front & Rear Brakes	Pneumatic Disc Brake System
Steering Wheel	Tilttable & Telescopic Electro Hydraulic Steering Wheel
CAPACITY	
Gross vehicle weight (kg)	11.000
DIMENSIONS	
Overall Length (mm)	8.315
Overall Width (mm)	2.436
Overall Height (mm)	3.090
Front Overhang (mm)	2.040
Rear Overhang (mm)	1.695
Wheelbase (mm)	4.580
Standing Height (mm)	2.370
Step height, Door 1 (mm)	340 (with Kneeling) & 270 (with Kneeling)
Step height, Door 2 (mm)	340 (with Kneeling) & 270 (with Kneeling)
Approaching / Departure Angles (°)	7,8 / 8,8
TIRES	
Front Tire Sizes & Rim Sizes	245/70 R17.5 & 6.75"x J17.5" Single
Rear Tire Sizes & Rim Sizes	225/75 R17.5 & 6"x J17.5" Double

* Range may vary depending on various factors, in particular: individual driving style, route characteristics, outside temperature, heating/air conditioning, seated & standing passenger weight.

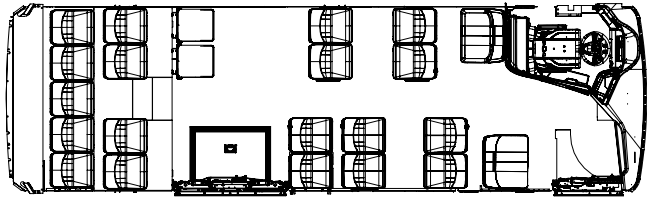
** From 0% to 80% battery capacity in ideal conditions.

PASSENGER CAPACITY ALTERNATIVES

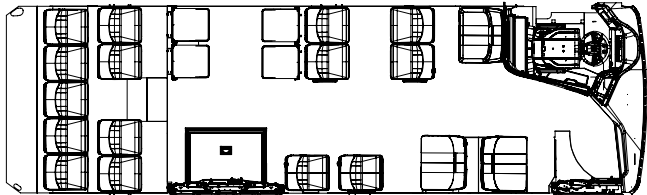
					
	Seated	Max. Standing	Foldable	WheelChair	Max. Total Passenger***
18+4	18	34	-	-	52
	18	28	-	1	47
	18	29	4	-	51
21+2	21	31	-	-	52
	21	25	-	1	47
	21	25	2	-	48

***Passenger capacity depends on selected optional features & wheelchair area utilization.

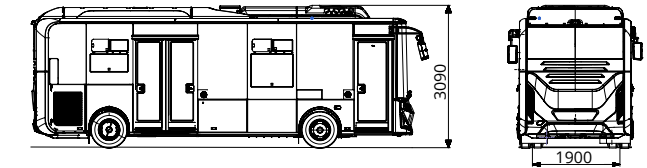
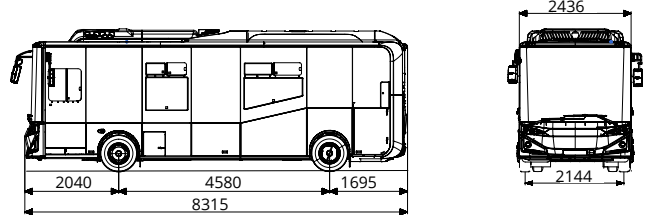
Wheelchair is valid only when foldable seats are not being used.



21+2



18+4



EQUIPMENT FEATURES

STYLE	
Exterior Design	
LED Front & Rear Lights	S
LED Day Time Running Lamps	S
Front Fog Lamp	S
3 rd Stop Lamp	O
Electrical and Heated Mirrors	S
5 Sliding Side Windows	S
Light Tinted Color Side Glass	S
Dark Tinted Color Side Glass	O
7 Sliding Side Windows***	O
Heated Windscreen	S
Sliding Heated Driver's Window	S
Heated Front Door Window	S
Monocolor LED Destination (Front + Side + Rear)	S
Front & Rear 17.5" Steel Wheels	S
Wheel Covers	S
Cataphoresis & Underbody Coating	S
Spare Tire	O
Standard Body Color: White	S
Optional Body Colors: (Opac Colors)	O
Interior Design	
Anti-Slip PVC Floor Cover, Green Patterned	S
Handrail Tubes, Stainless Steel	S
Handrail Tubes, Green	O
Handgrips	S
Stop Signs + Digital Clock + Temperature Indicator	S
Billboard	O
TECHNOLOGY	
Charging Infrastructure	
Single On-Board Charger	S
Double On-Board Chargers	O
Driver Compartment	
12" Full Digital Cluster	S
Rear Park Sensors	S
Ticket Validator Preparation (Front)	S
Smart Tachograph	O
2 x Driver Area Speakers	S
Manuel Locking System	S
Start & Stop Button (Keyless)	S
External Speaker	O
Coat Hook	S
FMS Gateway	S

Audio & Video Systems	
Radio + USB Port + Bluetooth Connections (on Touchscreen)	S
Announcement System for Passenger Area	LP
10.1" Multimedia Touchscreen	S
Rear Camera	S
Wi-Fi Router	LP
Roof Mounted Fixed 19" LCD Screen with USB	LP
DVR (1 TB) ; Front, Driver, Inside, Service Door Cameras (Touchscreen Integrated)	SP1
DVR (1 TB) ; Front, Driver, Inside, Service Door Cameras (7" LCD Screen Integrated)	SP2

COMFORT	
Cooling & Heating	
Passenger A/C with Heating Function	S
Driver A/C with Heating Function	S
Passenger Area Heater 12 kW	S
Passenger Sidewall Heater	S
Driver Compartment	
8-Way Pneumatic Driver Seat with 3-Point Seat Belt (ISRI)	S
Isolated Cabin (Rear as Glass)	S
Full Separated Driver Cabin	O
Driver Side Window Manual Sun Visor	O
Front Manual Sun Visor	S

Passenger Area	
Plastic Type Passenger Seats	S
Plastic Type Passenger Seats (with Pad)	O
Backrest Totem and Wheelchair Designations	S
Manual Wheelchair Access Ramp	S
USB on Sidewalls	S
5 x Passenger Area Speakers	LP
Door Compress Prevention	S

SAFETY	
ESP - Electronic Stability Program	S
EBS - Electronic Brake System	S
ABS - Anti-Lock Braking System	S
ASR - Anti-Slippage System	S
RBS - Regenerative Brake System	S
HSA - Hill Start Aid	S
Front Anti Roll Bar	S
E-Motor Room Fire Detection System	S
Reverse Gear Buzzer	S

S: Standard

O: Option

LP: Luxury Pack

SP1:Surveillance Pack 1

SP2:Surveillance Pack 2

SP1 & SP2 can't be selected together.

Monitoring will be from Touchscreen in SP1 and from 7" LCD in SP2

*** 7 Sliding Side Windows can be selected with Dark Tinted Color Side Glass

Authorized Dealer



KARSAN

All information and images included in this brochure are based on the technical specifications that are applicable on the printing date of the brochure.
All features provided are standard or optional depending on different versions of the vehicles. In the scope of continuous product improvement policy, Karsan always reserves its right to make changes in the specifications without providing any notification to third parties. This brochure does not constitute an offer to sell vehicles.

www.karsan.com