

alkè
high performance utility vehicles

ENGLISH



Electric vehicles
XT320E, XT320EL, XT420E, XT420EL

XTelectric
The Superior Choice

XT models are electric vehicles capable of impressive performance in any environment. A futuristic design, best state of the art technical solutions and 10 years of Alkè experience as first mover on off-road electric vehicles bring this new range of vehicles to absolute excellence.

XT420E and XT420EL are the strongest XT models and they have permanent 4WD, triple differential, reduced mechanical gear, central and rear differential lock.

With their 230Nm exceptional torque supplied by next generation 12kW AC electric motor they have performance envied even by 4WD diesel or gasoline vehicles born specifically for off-road (an example for all the over 50% slope until now unthinkable for any other electric vehicle).

Permanent 4WD drive
Triple differential
Double differential lock



The smaller brothers XT320E and XT320EL with rear drive retain many characteristics of models XT420E/EL and they are perfect for urban or mixed routes.

On all XT models a perfect riding comfort and maximum stability are provided by independent and adjustable air suspension with on board compressor and by the electric power steering.

Air suspension
Electric power steering

Inside the cabin with heating and air conditioning * all functions are monitored on the large 7" digital display present at the centre of the dashboard (over 40 functions shown). From the dashboard can be selected in real time the entire vehicle settings to suit the working conditions required (economy setting, sport, climbing, towing). The driving position is excellent and ergonomically designed for even the tallest users (1.90 - 2.00 m tall).

Remote controlled central locking, electric windows, radio with CD/MP3 player, storage compartment and 12V socket complete the already large number of accessories for this vehicle.

Air conditioning
Display with more than 40 functions
Adjustable performance settings



XT RANGE



XT 586RR

ELECTRIC

4WD

alkè ELECTRIC VEHICLES



Alkè XT series has two different wheelbases with different lengths for the cargo floor of 220 cm ["E" models] or 270 cm ["EL" models]. Great are carrying capacities for these vehicles: up to 1.000 kg on the cargo area and up to 4.000 kg on tow (1.500 kg homologated).

XT vehicles reach a top speed of 63 km/h with up to 200 km of autonomy using the optional on board double battery package. Unlike other types of electric vehicles with the XT you can count on excellent performance even in low temperatures (-20°C) through the use of next generation military quality pure lead batteries.

1.000 kg load capacity
4.000 kg tow capacity
Up to 200 km autonomy

XT vehicles have been designed with a GPRS system that enables the remote diagnosis* of possible problems on electronic parts of the vehicle (motor, batteries, battery charger, controller, electrical system, auxiliary devices, etc.). LED daytime headlight technology drastically increases the autonomy of these vehicles.

There are various load configurations available: chassis version, flat cargo bed, cargo bed with drop sides, with steel mesh sides, with three sides electro-hydraulic tipping, aluminium waste collection body without or with bin lift system, body tarp and box van with 2 shutters on sides.

Specific customisations are available for large fleets.

Warranty coverage it is 2 years.

With XT models we are sure to be in front of a new range of high-performance electric vehicles we'll talk about for a long time.

GPRS remote diagnosis
Lights with LED technology
Wide range of options



| | XT320E | XT320EL | XT420E | XT420EL | Notes |
|--|---|---------|--|---------|---|
| Motor / Performances | | | | | |
| Type | AC electric motor | | | | AC motors allow greater performance, they are extremely quiet and require less maintenance than DC motors |
| Power in standard conditions | 12 kW / 72 V | | | | Available power and torque are really for professional and intensive use |
| Max. power | 24 kW | | | | Max power to face slopes and towing jobs |
| Torque | 230Nm | | | | Motor torque equal, to give an example, to the torque supplied by a Common Rail 1.600cc TDI engine |
| Maximum speed | 63 km/h 40 km/h (reduced gear) | | 63 km/h 32 km/h (reduced gear) | | The mechanical reduced gear allows to make the most of the available torque, greater negotiable slopes and towing power |
| Approved towing capacity | 1.500 kg | | | | Towing capacity approved for road circulation at EU level (trailers used must have repulsion brakes) |
| Maximum towing capacity | 3.000 kg | | 4.000 kg | | Effective maximum towing capacity (not for public road usage inside EU, trailers must have repulsion brakes) |
| Controller type and max output power | CURTIS 360 A | | | | Top quality controller monitored by the 7" on board display |
| Setting vehicle's performances | 4 settings controlled from dashboard (eco, sport, climbing, towing) | | | | Allows setting of vehicle performance directly from the dashboard 4 position specific selector. |
| Remote diagnosis system | Yes, GPRS system (needs specific Alkè remote service pack activated) | | | | Allows remote diagnosis using a GPRS data connection to check status of electronic devices on the vehicle |
| Battery pack | | | | | |
| Type of batteries | Pure lead technology | | | | Pure Lead batteries used on XT are maintenance free military grade batteries they provide great results even at low temperatures (at -20°C you lose 10% performance when standard lead acid lose at least 50%). Thanks to their sealed construction they are certified non-spillable by US DOT and IATA for unrestricted and safe shipping. These batteries are explosion proof and they employ a rugged military construction with same design used in armored vehicles to offer superior vibration resistance and durability. |
| Autonomy with battery completely charged | 100 km 200 km with 26kWh battery pack | | 95 km 190 km with 26kWh battery pack | | Autonomy in standard conditions is an entire working day (standard condition = 20°C, flat asphalted ground). Partial charging is possible, there is no "memory effect". |
| Battery capacity | 13kWh (standard battery pack) or 26kWh (optional) | | | | |
| Battery-charger onboard the vehicle | Yes | | | | With on-board charger the operator can connect anytime and anywhere. |
| Estimated battery charge time | 7 hours with 13kWh battery pack 12 hours with 26kWh battery pack | | | | Powered by a 230V 16A socket. |
| Type of battery-charger | High frequency battery charger with temperature sensor on batteries | | | | This type of charger enables best charging and increases battery life. |
| Number of batteries | 13kWh configuration: 6x 12V pure lead batteries + 1x 12V service battery 26kWh configuration: 12x 12V pure lead batteries + 1x 12V service battery | | | | |
| Removable battery pack | Yes | | | | Removable battery set enables non stop working through the day and night using 1 or more auxiliary battery set. You can switch between different sets with the support of an hand pallet truck (400 mm lift) |
| Transmission | | | | | |
| Type | Electronic speed variation + mechanical reduced gear | | | | Mechanical reduced gear enable higher torque and power. |
| Driving | 2WD (rear driving) | | Permanent 4WD driving with triple differential | | |
| Negotiable slope | 18% standard gear / 40% reduced gear | | 25% standard gear / 55% reduced gear | | XT vehicles provide great performance even in presence of slopes and difficult terrains. |
| Regenerative brake | Yes | | | | Regenerative brake ensures a lower energy consumption as well as high safety standards and perfect descent manoeuvrability. When the accelerator is released, braking starts and batteries recharge. |
| Front differential unit | No | | Yes | | |
| Rear differential unit | With removable semi-axle and differential lock | | | | The unit with removable semi-axle doubles the dynamic load of the vehicle. |
| Central differential unit | No | | Yes, with differential lock | | The third differential allows perfect trajectory without dragging the tyres when cornering |
| Brakes | | | | | |
| Front / Rear | Front hydraulic discs / Rear hydraulic drums | | | | |
| Parking brake | Yes | | | | |

| | XT320E | XT320EL | XT420E | XT420EL | Notes |
|---|---|----------------|--|----------------|---|
| Suspensions | | | | | |
| Front | Double quadrilateral | | | | Double quadrilateral suspension allows higher ride comfort and driving precision even in presence of difficult grounds. |
| Rear | De-Dion bridge + Stabilising bar | | | | De-Dion axle permits softer ride, better axle articulation, better traction on all land-types. |
| Suspension type | Adjustable air suspension with on board compressor | | | | Air suspension offers great driving comfort and constant contact to the ground. Suspension stability can be adjusted by dashboard (soft/rigid suspension). |
| Chassis and body | | | | | |
| Chassis | Steel chassis with anticorrosion treatment and powder coating finish | | | | XT chassis have anticorrosion treatment by cathoporesis and powder coating. They are built to support hard duty operations. |
| Bodywork | Reinforced ABS | | | | Standard colour bodies are pigmented at raw material level so in case of scratches and damages you don't see components below. |
| Front and rear towing hook | Yes. Rear tow hook with sphere attachment approved for road circulation (1.500 kg) | | | | |
| Electronics and lighting system | | | | | |
| Heating | Electric with 3 speeds (standard) / Webasto heating system (optional) | | | | Electric heating with electronic thermostat (1kW heating power). Webasto system (diesel) 2kW power. |
| Air conditioning | Optional | | | | Air conditioning system with electronic thermostat (inverter technology). |
| Audio system | Yes | | | | Audio system with CD/MP3 player. |
| 12V socket on the vehicle | Yes | | | | Enables to plug cell phones, radio, PC and other electric devices (15A / 180W max). |
| Display | 7" LCD with 4 direction arrows, "home" and "escape" keys and 40 functions/alerts monitored | | | | The 7" LCD display provides control and diagnosis functions for the vehicle. When driving main screen indicates with proper icons alerts for: head lights, tail lights, indicators, emergency lights, rear fog lights, Webasto fuel shortage*, doors open, rotating lamp*, brake oil shortage, steering failure, lifted cargo bed*, hand brake, electric motor overheating, suspension failure, rear differential lock*, central differential lock*, standard/reduced gear, forward/backward/neutral gear. Specific digital gauges indicate: motor temperature, performance setting, external temperature, time, data, motor hourmeter, odometer, tachometer, trip meter (total and partial), suspension pressure, battery indicator, eco-meter (indicator for energy consumed / regenerated). |
| Lights | Head lights, tail lights, stop lights, indicators, emergency lights, reverse and rear fog lights, rotating light (optional) | | | | LED technology applied on Daytime Running Lamps (DRL). |
| Horn / Reverse buzzer | Yes | | | | |
| Rear 13 pin connector | Yes | | | | |
| Dimensions, loading capacity and weights | | | | | |
| Length (chassis version) | 3760 mm | 4110 mm | 3760 mm | 4110 mm | |
| Length (with cargo bed) | 3850 mm | 4350 mm | 3850 mm | 4350 mm | |
| Width | 1425 mm | | | | 1520 mm with closed side mirrors, 1700 mm with fully open side mirrors. |
| Height | 2050 mm (with Road tyres) | | 2090 mm | | |
| Wheel base | 1950 mm | 2300 mm | 1950 mm | 2300 mm | |
| Ground clearance | 255 mm centre / 185 mm rear differential | | 280 mm centre / 200 mm rear differential | | |
| Cargo bed dimensions | 2200 x 1430 mm | 2700 x 1430 mm | 2200 x 1430 mm | 2700 x 1430 mm | Height loading platform from the floor 880 mm, height sides 350 mm. |
| Loading capacity | 1.000 Kg (640Kg with 26kWh battery pack) | | | | |
| Empty weight with batteries | 1420 kg | 1470 kg | 1480 kg | 1520 kg | Chassis version values. |
| Steering | | | | | |
| Electric power steering | Yes | | | | |
| Minimum steering radius (internal) | 3030 mm | 3605 mm | 3030 mm | 3605 mm | |
| Tyres | | | | | |
| Front and Rear | 195/70 R15 Road tyres (std) 205/70 R15 Multi-terrain tyres (optional) | | | | |

The mentioned technical specifications (like performance, autonomy, dimensions etc.) can or will be depending on temperature, surface, driving style, options, cargo or usage of the vehicle.

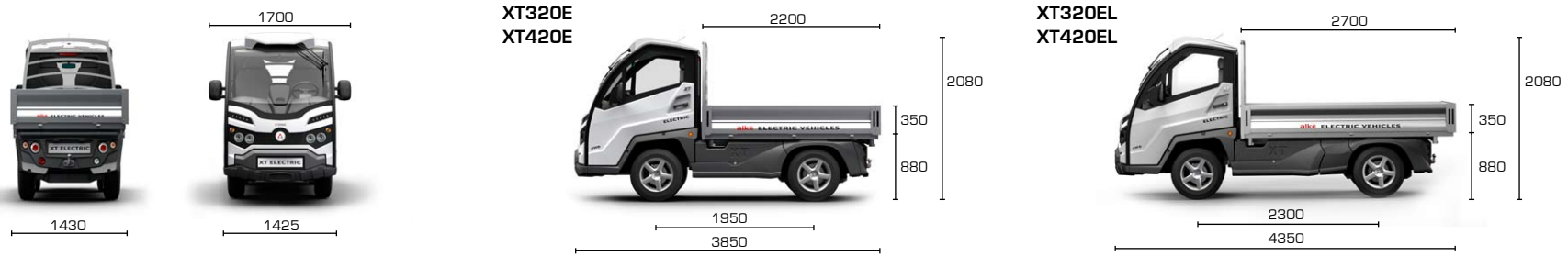
Main Specifications

| | XT320E | XT320EL | XT420E | XT420EL |
|--------------------------------|---|---|--|---|
| Drive | 2WD (rear driving) | | Permanent 4WD with triple differential and double differential lock | |
| Common features | <ul style="list-style-type: none"> · 63 km/h maximum speed · 1.000 kg load capacity · 1.500 kg homologated towing capacity · EU road homologation (N1 category) · 13 kWh pure lead batteries | <ul style="list-style-type: none"> · 12 kW AC electric motor · 360 A controller · high frequency battery charger · 4 performance settings · electric power steering (EPS) | <ul style="list-style-type: none"> · front disc brakes / rear drum brakes · mechanical reduced gear · adjustable air suspension · rear window defroster · audio system with CD/MP3 player | <ul style="list-style-type: none"> · electric windows · remote controlled central lock for doors · electric heating · GPRS remote diagnosis · LED technology for DRL |
| Specific features | 220x143 cm cargo area | 270x143 cm cargo area | 220x143 cm cargo area | 270x143 cm cargo area |
| | <ul style="list-style-type: none"> · 3.000 kg towing capacity (not homologated) · negotiable slope 40% · road tyres (std) / multi-terrain tyres (opt) | <ul style="list-style-type: none"> · autonomy 100km (with standard battery pack) · autonomy 200km (with 26kWh battery pack) | <ul style="list-style-type: none"> · 4.000 kg towing capacity (not homologated) · negotiable slope 55% · multi-terrain tyres (std) / road tyres (opt) | <ul style="list-style-type: none"> · autonomy 95km (with standard battery pack) · autonomy 190km (with 26kWh battery pack) |
| Options and accessories | <p>INTERIOR:</p> <ul style="list-style-type: none"> · right hand drive · air conditioning system · Webasto heating · heated seats <p>BATTERY PACK / MOTOR:</p> <ul style="list-style-type: none"> · 26kWh battery pack · 13kWh auxiliary battery pack + charger · 26kWh auxiliary battery pack + charger | <p>CARGO AREA:</p> <ul style="list-style-type: none"> · flat cargo bed · cargo bed with drop sides · steel mesh sides · three sides tipping for cargo bed · aluminium waste collection body · bin lift system for waste body · body tarp (grey tarp) · custom colour for tarp · box van with 2 shutters on sides · shelves for box van | <p>FRONT AND REAR ATTACHMENTS:</p> <ul style="list-style-type: none"> · rear hydraulic kit · front hydraulic kit · snow blade <p>OTHER OPTIONS:</p> <ul style="list-style-type: none"> · alloy rims · rotating light · road tyres · multi-terrain tyres | <p>MAINTENANCE:</p> <ul style="list-style-type: none"> · GPRS remote service pack |

Colours



Dimensions



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