

**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 60% 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, mountain, 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



ELECTRIC

4WD

XT-586RR

alkè ELECTRIC VEHICLES

XT



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
<b>Motor / Performances</b>					
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, mountain, 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
<b>Battery pack</b>					
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)
<b>Transmission</b>					
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	30% standard gear / 46% reduced gear		32% standard gear / 64% 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
<b>Brakes</b>					
Front / Rear	Front hydraulic discs / Rear hydraulic drums				
Parking brake	Yes				

	XT320E	XT320EL	XT420E	XT420EL	Notes
<b>Suspensions</b>					
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).
<b>Chassis and body</b>					
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 painted 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)				Heavy duty front and rear hooks are standard. Rear tow hook approved for road circulation.
<b>Electronics and lighting system</b>					
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.
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				
<b>Dimensions, loading capacity and weights</b>					
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	1300 kg	1340 kg	1360 kg	1400 kg	Chassis version values.
<b>Steering</b>					
Electric power steering	Yes				
Minimum steering radius (internal)	3030 mm	3605 mm	3030 mm	3605 mm	
<b>Tyres</b>					
Front and Rear	195/70 R15 Road tyres (std) 205/70 R15 Multi-terrain tyres (optional)		205/70 R15 Multi-terrain tyres (std) 195/70 R15 Road tyres (optional)		

\* if installed

**Main Specifications**

	XT320E	XT320EL	XT420E	XT420EL
<b>Drive</b>	2WD (rear driving)		Permanent 4WD with triple differential and double differential lock	
<b>Common features</b>	<ul style="list-style-type: none"> <li>· 63 km/h maximum speed</li> <li>· 1.000 kg load capacity</li> <li>· 1.500 kg homologated towing capacity</li> <li>· EU road homologation (N1 category)</li> </ul>	<ul style="list-style-type: none"> <li>· 12 kW AC electric motor</li> <li>· 360 A controller</li> <li>· 13 kWh pure lead batteries</li> <li>· high frequency battery charger</li> <li>· 4 performance settings</li> </ul>	<ul style="list-style-type: none"> <li>· electric power steering (EPS)</li> <li>· front disc brakes / rear drum brakes</li> <li>· mechanical reduced gear</li> <li>· adjustable air suspension</li> <li>· rear window defroster</li> </ul>	<ul style="list-style-type: none"> <li>· electric windows</li> <li>· remote controlled central lock for doors</li> <li>· electric heating</li> <li>· GPRS remote diagnosis</li> <li>· LED technology for DRL</li> </ul>
<b>Specific features</b>	220x143 cm cargo area	270x143 cm cargo area	220x143 cm cargo area	270x143 cm cargo area
	<ul style="list-style-type: none"> <li>· 3.000 kg towing capacity (not homologated)</li> <li>· negotiable slope 46%</li> <li>· road tyres (std) / multi-terrain tyres (opt)</li> </ul>	<ul style="list-style-type: none"> <li>· autonomy 100km (with standard battery pack)</li> <li>· autonomy 200km (with 26kWh battery pack)</li> </ul>	<ul style="list-style-type: none"> <li>· 4.000 kg towing capacity (not homologated)</li> <li>· negotiable slope 64%</li> <li>· multi-terrain tyres (std) / road tyres (opt)</li> </ul>	<ul style="list-style-type: none"> <li>· autonomy 95km (with standard battery pack)</li> <li>· autonomy 190km (with 26kWh battery pack)</li> </ul>
<b>Options and accessories</b>	<p><b>INTERIOR:</b></p> <ul style="list-style-type: none"> <li>· right hand drive</li> <li>· air conditioning system</li> <li>· Webasto heating</li> <li>· audio system with CD/MP3 player</li> </ul> <p><b>BATTERY PACK / MOTOR:</b></p> <ul style="list-style-type: none"> <li>· 26kWh battery pack</li> <li>· 13kWh auxiliary battery pack + charger</li> <li>· 26kWh auxiliary battery pack + charger</li> </ul>	<p><b>CARGO AREA:</b></p> <ul style="list-style-type: none"> <li>· flat cargo bed</li> <li>· cargo bed with drop sides</li> <li>· steel mesh sides</li> <li>· three sides tipping for cargo bed</li> <li>· aluminium waste collection body</li> <li>· bin lift system for waste body</li> <li>· body tarp (grey tarp)</li> <li>· custom colour for tarp</li> <li>· box van with 2 shutters on sides</li> <li>· shelves for box van</li> </ul>	<p><b>FRONT AND REAR ATTACHMENTS:</b></p> <ul style="list-style-type: none"> <li>· rear hydraulic kit</li> <li>· front hydraulic kit</li> <li>· snow blade</li> </ul> <p><b>OTHER OPTIONS:</b></p> <ul style="list-style-type: none"> <li>· alloy rims</li> <li>· rotating light</li> <li>· road tyres</li> <li>· multi-terrain tyres</li> </ul>	<p><b>MAINTENANCE:</b></p> <ul style="list-style-type: none"> <li>· GPRS remote service pack</li> </ul>

**Colours**

Red (RAL 3002)



White (RAL 9010)



Metallic Grey (RAL 9006)



Orange (RAL 2011)



Green (RAL 6005)



CUSTOM colour



**Dimensions**



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