

ALONG WITH GREEN

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ECO ESS
e-BUS



Global 500 New
Energy Enterprise



Top 500 Manufacturing
Enterprise in China



Quality Leading
Enterprise



CE Certificate
Product



ECO ESS Energy Running Horse e-Bus

Taking the shape of a running horse, it embodies the combination of speed, strength and dynamics. It could be used in public transportation such as city loops, express way, main roads or inter-city routes.



Speed



Strength



Dynamics

Bionic Design Galloping Experience

The appearance of the bus adopts bionic horse design that manifests power and force, delivering visual aesthetic from the union of strength and speed.



Dragon-eye headlights design

The fiery headlights embody the "dazzling pearl" concept, adding to the attractiveness of the bus.



Horsetail lamp design

The rear lamps adopt horsetail shape design, which adds to the dynamics of the bus.

Steering ahead Exploring the fun of driving

Multifunctional instrument panel on board integrates multiple commands in a few buttons, allowing drivers to explore the fun of driving while steering ahead. With enclosing design, anti-glare LCD screen, and CCTV monitor, this bus truly guarantees a trouble-free driving experience for drivers.



Integral instrument panel

An instrument panel with visible CAN bus instrument and functional buttons provides for easy control.



Anti-glare LCD instrument

Anti-glare LCD instrument can display information much more clearly, which can reduce visual fatigue resulting from long hour driving.



All-enclosed driver's cabin

The driver's cabin is fully enclosed to protect drivers from outside disturbances, which at the same time allows passengers to monitor the driver's condition at all times.



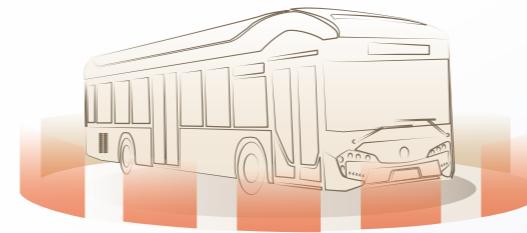
CCTV system

A CCTV system is installed on the bus with a 10 inch monitoring screen to display interior and exterior image of the bus, leaving no blind spots unchecked.



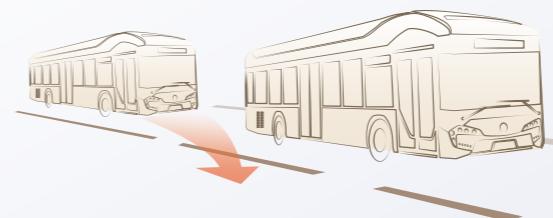
Intelligent systems To guarantee safety

The vehicle employs state-of-the-art intelligent drive assist safety system and devices and multiple electronic safety technologies to achieve informatization management of the vehicle data. Combined with standard safety equipments, these technologies can guarantee passenger and driver safety at all fronts.



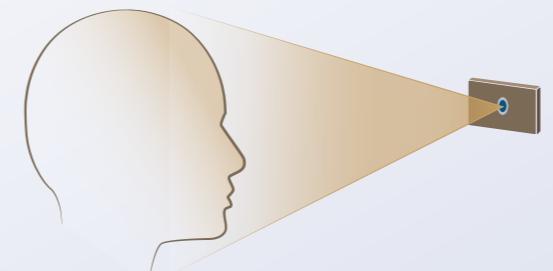
360°panoramic view system

The vehicle system has an ultra wide angle image transmitter that collects the surrounding images of the vehicle, which was then processed by the image processing unit. With the help of ruler guide, it could locate obstacles and detect their distance, assisting drivers in parking and passing complicated road conditions, reducing the possibility of scrapping, bumping and sinking.



Lane departure and front collision warning system

Based on the visual and radar information fusion sensor system, this system can recognize all types of lanes and detect curb conditions, monitoring road conditions ahead of vehicles. The system can predict different potential dangers and send out warning through buzzers and warning light, helping drivers to avoid or reduce the possibility of collisions.



Driver fatigue monitor system

This system is equipped with high precision visual sensor, which could scan and analyze the driver's condition at all times through image recognition analysis. When sensing dangerous driving behaviors, it could send out warnings and transmit data and video to terminal management platform, helping operators to take effective measures to avoid accidents.



Safe energy-conserving system

Through visual sensing system, it can detect information such as the relative distance and speed of the vehicle ahead, which helps to optimize the energy management strategy of the bus while guaranteeing safety. This could help to reduce energy consumption and increase brake energy recycling, achieving energy conservation without undermining safety.

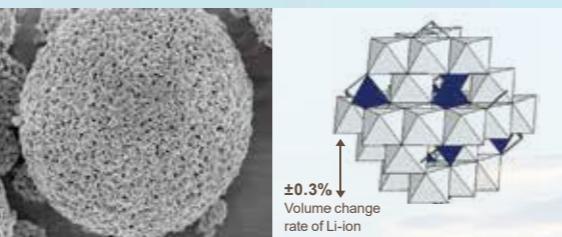
Excellent horsepower Speedy arrival

The bus is powered by Yinlong self-developed LTO power batteries, which features high safety, fast charge and discharge, wide working temperature, and long service life, and can fully meet the operational requirement of electric buses.

Advantages of LTO batteries:

The LTO material breaks through the limitation of the traditional graphite anode's 2D layer structure, and has a stable 3D crystal structure. During the charging and discharging process, the material structure hardly changes, and is called "zero strain material".

3D Structure Nano LTO

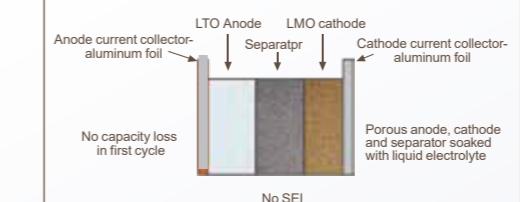


High safety

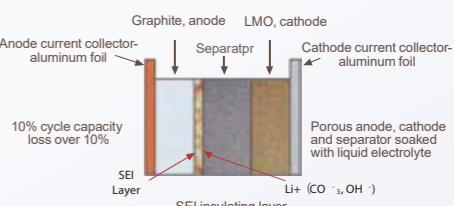
No fire or explosion occurred during various destructive tests.

The reactivity between LTO and electrolyte is much lower, and the SEI layer is hardly formed, which improves the stability and safety of the battery.

Nano LTO battery structure



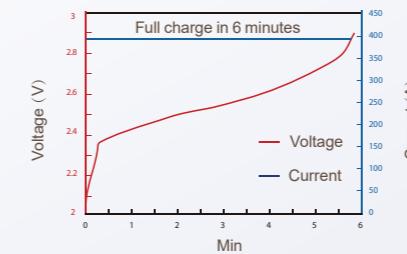
Other Lithium-ion battery structure



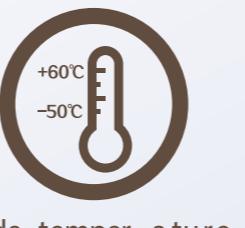
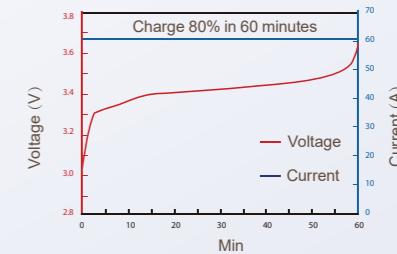
Fast charge

Fully charged in 6-15 minutes

Nano LTO battery's fast charge curve



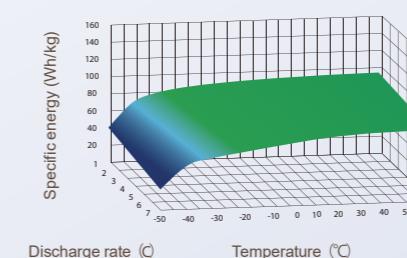
Other Li-ion battery's charge curve



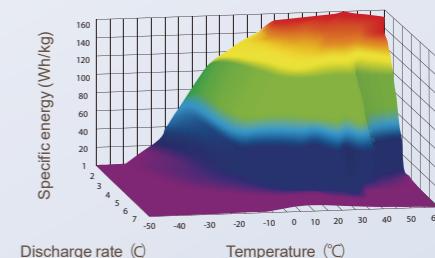
Wide temperature

Normal charge and discharge in wide temperature range from -50°C—60°C.

Performance of Nano LTO battery



Performance of graphite lithium battery



Long service life

LTO battery retained over 80% capacity after more than 30000 times of cycle testing, which means 30 years of service life cycle.

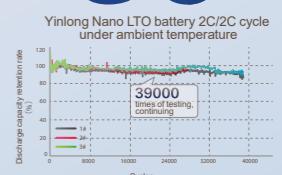
10^年 + 20^年 = 30^年



They are used as power batteries for newenergy vehicles in the first 10 years.



In the last 20 years, they are used as energy storage batteries for household energy storage and industrial energy storage system.



Caring design Throughout the ride

The vehicle adopts one-step boarding for easy access. It's also installed with special foldable seats for the disabled and USB sockets, offering humanized and convenient service for passengers.



Environmentally friendly interior

The interior is made of superior sound-proof and heat insulating materials, which can effectively reduce structural noise and makes a quiet and comfortable trip.



Large view window

The vehicle adopts large view window to provide a better view for passengers to enjoy the beauty of the city.



Onboard USB sockets

The vehicle provides onboard USB sockets for charging mobile phones, tablet computers and other portable digital devices, which is convenient and solves any battery crisis en-route.



One-step low floor for easy boarding

Instead of multiple steps, the entrance adopts one step boarding design, which is easy to get on and off.



Flip ramp for wheelchair access

A manually controlled flip ramp is installed for passage of wheelchairs, which greatly increases accessibility for inconvenient passengers.



Foldable seats

Foldable seats are installed on the vehicle with labels indicating special use, which can provide space for wheelchairs and baby strollers when folded. Convenience comes from reasonable space allocation.

Technical Parameters



Vehicle	Total length(mm)	12000
	Total width(mm)	2550
	Total height(mm)	3330
	Curb weight (kg)	12935/13200
	G.V.W(kg)	19000
	Rated passenger Capacity(person)	78 (total passengers)/34 passenger seats
	One step height of passenger door(mm)	≤340
	Net height of low floor area inside the vehicle	2400
Power	Motor power(kW)	145/245
	Motor Torque (N.m)	1100/3329
	Battery type	LTO
	Total power capacity	114kWh
	Electric power steering pump	Electric power steering pump(ED.KAM-OP, 3kW, 16-22L/min)
	Electric air pump	Air pump (ED.KAM-AP, 3-4kW, 310-340L/min)
	Electric A/C	Electric air conditioning, 20kW cooling capacity, heating (heat pump 18kW, PTC10kW). Driver has separate AC ports above him and in front of him.
Chassis	Front axle	ZF
	Rear axle	ZF
	Suspension	Air spring with ECAS
	Steering system	Electric power steering, THP90
	Braking system	Front and rear disc. EBS braking
	Tyre	6pcs, 275/70R22.5, rim: 8.25*22.5, aluminum alloy.
Vehicle body	Passenger seat	34 ergonomic molding plastic seats, 4 priority seats. Seats for disabled people are equipped with raising armrest. Armrest color-Yellow
	Instrument panel and instrument	Intelligent integrated instrument panel
	Air duct	Aluminum alloy air duct, panoramic advertisement light box, LED bar light.
Electrical equipment	Fire extinguisher	Motor control hatch and battery hatch are equipped with automatic fire extinguishing system.
	24V low voltage battery	Maintenance-free battery (100Ah*2).
	Monitoring device	Reversing monitor and middle door monitor + 10-inch display screen, reserve location for on-board CCTV system installation and 6-way probe line position.