



## BYD All-Electric Bus

*Build Your Dreams*

### A Thriving Alternative in Transit Bus Evolution

- ▶ All-electric, BYD Iron Phosphate Battery ("Fe" Battery) powered, zero emissions,
- ▶ In-wheel Motor Drive, optimum energy efficiency, simplified maintenance
- ▶ Regenerative braking, charges the batteries each time the brakes are engaged, less components wear
- ▶ Bi-direction AC Charging & Discharging, fully charged from 0~100% within 5 hrs

**The BYD electric bus** is the world's first mass - produced pure - electric bus. It is also the only electric bus powered by environmentally - friendly, Iron - Phosphate batteries.

This allows the electric bus to travel an unprecedented 150 + miles, this meets roughly 80% of large city transit average daily service routes.

As BYD's first pure zero - emission electric bus, it employs many advanced technologies developed by BYD internally, which makes the all - electric bus a thriving alternative in transit bus evolution.



# BYD All-Electric Bus

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## Longevity

BYD Fe battery technology allows 6000 + lifecycles

## Range

155 + miles per charge, meeting roughly 80% of large city transit average daily service routes

## Eco

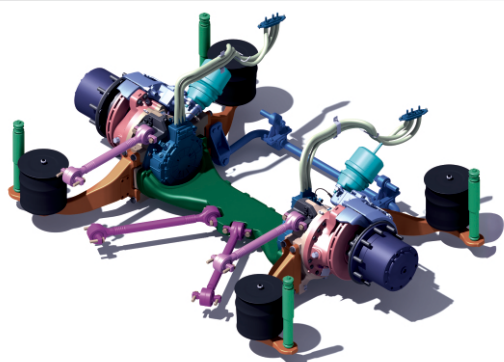
Non - polluting & zero emissions, highly reduced city's GHG emissions; Fe battery re - purposeable for utility energy storage after recycled from electric vehicles

## Saving

Energy consumption amounts to 1.92 kWh/mi, estimated at \$0.21/mi (assume \$0.1/kWh); fewer components replacement than diesel bus, less maintenance cost; low cost AC charging adapter

## Safety

BYD Fe battery "electricity safety" and "heat safety" ensures BYD ebus safety; battery management system (BMS) monitors and balances cell voltage and temperature to audit Fe battery's performance

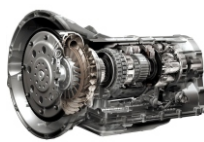


In-wheel motor drive axle

VS



Clutch



Transmission



Engine

## 2013 BYD 40-ft ebus Spec

Length	39.37 ft (12000 mm)
Width	100.39 in (2550 mm)
Height	132.28 in (3360 mm)
Wheelbase	234.25 in (5950 mm)
Curb Weight	30,423.79 lbs (13800 kg)
Gross Weight	36000 lbs (18000 kg)
Seats	25+6+1
Wheelchair Area	2
Top Speed	44 mph (70 km/h)
Max Gradeability	15%
Min Ground Clearance	5.51 in (140 mm)
Range	≥155 miles (≥ 250 km)
Turning Radius	39.37 ft (12 m)
Approach/Departure Angle	8°/8°
Front Axle	ZF low floor front beam axle
Rear Axle	BYD in-wheel drive rear axle
Suspension	Air suspension (ECAS system)
Brakes	Front & rear disc, ABS
Tires	275 / 70R 22.5
Motor Type	AC Synchronous Motor (Brushless) - BYDTYC90A
Max. Motor Power	180 kW (90 kW×2)
Rated Motor Power	150 kW (75 kW×2)
Max. Motor Torque	700 Nm (350 Nm×2)
Battery Type	Iron Phosphate (Fe) battery
Battery Capacity①	324 kWh / 600 Ah (200 Ah×3)
Charging Power	60 kW (30 kW×2, 480V, 3 phase / 5 wires, AC)
Charging Time②	5h

NOTE: ①The battery capacity is initial capacity. It will decrease with time and use.

②The battery age and outside ambient temperature both play a role in charging times.