

ENVIRO 500

towards carbon neutral
greener and cleaner

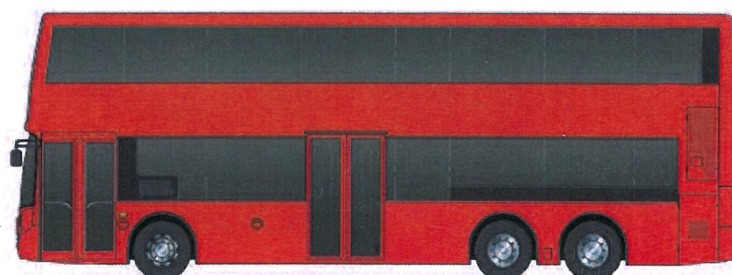
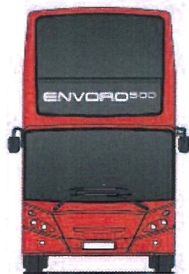
Low Floor High Capacity Double Deck Bus



The Enviro500 reigns supreme as a high capacity 12m double deck bus, carrying around 100 passengers in air conditioned comfort .

Enviro500 is proven in service, working reliably and efficiently across the world including the heat and humidity of Hong Kong, the extreme cold of the Canadian winter and the summer heat of the Nevada desert.

With it's exceptional manoeuvrability, Enviro500 is the optimum high capacity solution for congested city or urban commuter routes and totally outclasses articulated designs.



**ALEXANDER
DENNIS**

Specification

ENVIRO 500

Low Floor High Capacity Double Deck Bus

CHASSIS SPECIFICATION

Engine

Cummins ISL, 6 cylinder turbocharged intercooled diesel engine. Certified to Euro5 emission standard.

Power - 340 PS (246 kW) @ 1900 rpm.
Torque - 1500Nm (1100lbf ft) @ 1200 rpm.
Capacity: 8.9L

Gearbox

Choice of ZF 6HP 604 6 speed automatic or Voith D864.5 4 speed automatic, both fitted with integral retarders.

Front Axle

Dana, NDS80LF Deep drop I beam axle
8,000kg capacity
Lock angle 55°

Rear Axle

Dana, dropped centre. 13,000kg capacity.
Ratio 5.72:1

Tag Axle

Dana, T75ULF - dropped centre, 7,500kg capacity.

Suspension

Front - Two 305 mm air springs, multilink location, anti-roll bar. Two double acting dampers. Rapid kneel facility.

Rear - Four 255 mm air springs, multilink location, anti-roll bar. Four double acting dampers.

Tag Axle - Two 255 mm air springs, location by trailing taper leaf springs and Panhard rod. Two double acting dampers.

Braking System

Dana 410 x 220 'S' Cam brakes on rear axles.
Knorr Bremse disc brakes with pad wear sensor on front axle.
Asbestos-free linings.
Compressor - Knorr Bremse 630 cm³ swept volume
Air Dryer - Knorr Bremse
Service brakes - Full air operated with a separate system for front and tag axles and the rear axle
Parking brake - Air released, spring activated operating on drive and tag axles
ABS with traction control

Wheels and tyres

305/70R x 22.5 XZU2T or XZE2+ tubeless radial tyres, spigot mounted on 8.25 x 22.5 rims.

Steering Gear

ZF 8098 integrally powered, variable ratio steering gear.
457 mm two spoke steering wheel.
Adjustable air operated steering column interlocked with handbrake for added safety.

Cooling System

Rear offside mounted radiator and intercooler with hydraulic fan drive.
Separate header tank with rear offside fill and sight glass.

Exhaust System

Stainless steel with rear discharge, biased to the offside.

Frame

All welded of steel channel and box sections designed for full integration with the body.

Fuel Tank

430 litre capacity single stainless steel fuel tank.

Electrical system

Starter - Delco Remy 38MT
Alternator - 2 x Lucas type AC203 190 amp.
Batteries - 2 x 12 volt 210 Ahr mounted in a roll-out carrier with liner located under the driver's cab.
A centralised solid state power switching system is fitted with load switching of major circuits achieved without relays or fuses. Electrical system faults are detected automatically with built-in diagnostics.
ETA Circuit breakers

Chassis Options

Pozilock fast fill fuel system
Battery Leakage detector
7 pin electrical trailer socket
Automatic engine oil top up system
Ultralog vehicle monitoring system
Ramp interlock
SWF type 511 series ignition switch
Kidde Automatic Fire Extinguishing System

BODY SPECIFICATION

Body type

High capacity "Enviro 500" low floor 12mtr double deck with option for `Denso` full Air Conditioning in upper and lower decks.

Body Construction

3CR12 (or equivalent) stainless steel underframe structure fully integrated with chassis frame.

Extruded aluminium body frame with main exterior body panels in aluminium.

- Flush "direct bonded" glazing provides a continuous shear glass appearance.

Entrance and Exit (One or Two Door Options)

Single step low floor entry with 322mm (250mm when knelt).

Manual one piece entry ramp, PSVAR compliant. (options include "Bonded Components" composite panel or "Compak")

Single step exit from low floor area 322mm step height, with option for a powered entry ramp at the exit door.

"Inward opening" twin leaf glider door (front) with "positive sealing" at bottom of door.

"Outward swing" twin leaf "Plug" door (rear) or the option of a twin leaf "Sliding Plug" door.

Staircase

Straight "forward ascending" staircase offering enhanced safety features.

Heating & Demisting

Twin `blown warm air` heaters in both upper and lower decks, with automatic temperature control.

Driver's area fitted with a separate "warm air" demisting/heating system, with variable outlets at drivers feet and waist levels.

Seating

The E500 body design allows for a choice of seating models and layout options.

"Fixed" or "recline" in the upper deck "fixed" seating in lower deck with "tip-up" seats at wheelchair area if specified.

Fully adjustable air suspension driver's seat. (Choice of driver's seat type available).

Wheelchair Provision

Rearward facing wheelchair compartment in main low floor area, fully compliant with `PSVAR` requirements.

A `Powered Arm` deployed from drivers cab is available as an option for enhanced safety and mobility.

Lighting

Upper and lower decks fitted with integrated modular continuous fluorescent lighting system at ceiling coves.

Optional individual overhead "LED reading lamps" at each seat in upper saloon is available with a full Air Conditioning system.

LED saloon lighting is also available as an option to "fluorescent tubes".

Security System

CCTV monitoring system with cab mounted 7" 4way `high definition` split screen and standard 4 camera system for viewing exit door, upper saloon seating, stairwell and a reversing camera.

Public address amplifier with speakers in both upper and lower saloon.

Options for additional cameras and full "digital recording" facility.

Seating Capacities (typical configurations)

Up to 84 seats (with straight staircase) - 53 fixed seats in upper deck, with 29 fixed seats and 2 "tip-up" seats in lower deck

With available space for 27 standing passengers.

Multi - media system

An optional "on board" multi - media (infotainment) system can be fitted with four 15" monitors, 2 upper saloon and 2 lower saloon housed in purpose designed, stylish GRP cabinets.

Exterior "destination & route" displays

Front, side and rear exterior displays provided, with options on the choice of visual display panels, Flip-Dot, LED, and LCD.

DIMENSIONS

Model	12.1m
Overall length	12,117mm
Wheelbase	5,700mm
Overall Width	2,510mm
Overall Height	4,398mm
Front Overhang	2,489mm
Rear Overhang	2,428mm

WEIGHT DATA

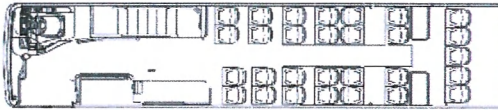
Model	12.1m
Front Axle plated weight	7,100 kg
Drive Axle plated weight	10,000 kg
Tag Axle plated weight	7,100 kg
Gross plated weight	24,000 kg

SEATING CONFIGURATIONS

Typical Capacities

Lower Deck

12.1m (Single Door - UK)



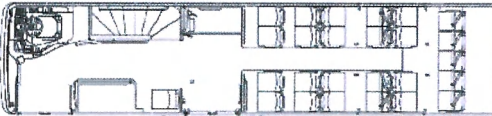
Overall Length - 12.1m • Seated - 31 or 29 +
1 wheelchair

12.0m (Single Door - Hong Kong)



Overall Length - 12.0m • Seated - 31 +
1 wheelchair

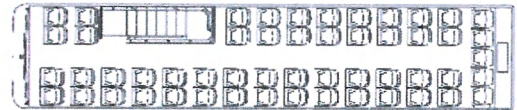
11.3m (Two Door - Hong Kong)



Overall Length - 11.3m • Seated - 26 +
1 wheelchair

Upper Deck

12.1m (Single Door - UK)



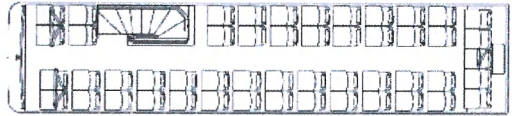
Overall Length - 12.1m • Seated - 53

12.0m (Single Door - Hong Kong)



Overall Length - 12.0m • Seated - 55

11.3m (Two Door - Hong Kong)



Overall Length - 11.3m • Seated - 51

Alternative seating and staircase layouts available which affect seating capacity.

Alexander Dennis Limited

Dennis Way, Guildford,

Surrey GU1 1AF

Tel: +44(0)1483 571271 Fax: +44(0)1483 301697

www.alexander-dennis.com

Email: enquiries@alexander-dennis.com



Alexander Dennis' policy is one of continuous development. The right is reserved to change specifications of the models and items described. For the latest details always consult Alexander Dennis 09/08