



Volvo Buses. Driving quality of life

VOLVO B5LH

Low on emissions and fuel, high on reliability and choice



Model	Volvo B5LH 2-axle low floor double deck hybrid citybus
Body specification	Wrightbus Gemini 3, ADL MMC, MCV Evoseti. Body options are available with one door provincial specification or two door London specification.
Hybrid driveline	Volvo parallel hybrid system. Traction power supplied by either the diesel engine or electric motor working independently or together. Power for the electric motor power is supplied by a 600 volt battery. Driveline uses stop/start technology.
Engine	Volvo D5K 240 4cyl 5.1 litre Euro 6 engine rated at 240hp @2200 rpm with maximum torque of 918Nm at 1200-1600rpm. Engine emission control uses SCR, EGR, DPF & DOC technology
Electric motor	I-SAM 600 volt ac permanent magnet water cooled electric motor mounted between engine and gear-box. Motor is rated at 160hp/800Nm max and 94hp/400Nm continuous. Motor acts as a generator to recharge 600 volt batteries during braking.
Transmission	Volvo AT2412E I-Shift fully automated 12 speed gearbox. 3 button gear selector control.
Energy storage system	Lithium-Ion battery with battery management unit, isolation resistance and battery disconnect unit. Water cooled and heated with independent system.
Rear axle	ZF drop centre portal axle with a 4.72:1 ratio. Electronically limited max speed options of 70km/h, 80km/h and 90km/h are available.
Brakes	The EBS 5 brake system is an electronically controlled pneumatic system. The front and rear disc brakes incorporate integral automatic brake adjusters. The chassis mounted screw compressor is electrically driven by 600 volt motor. The anti-lock braking system features traction control, door brake interlock, brake temperature warning and lining wear indicator.
Steering	ZF hydraulic power assisted steering. Steering pump is electrically driven. The steering wheel position is adjustable for height and rake.
Suspension	Electronically controlled air suspension. Beam front axle, with front axle kneeling and ferry lift. Full squat available as an option with two door variants.
Electrical	The chassis electrical system is of multiplex design (BEA 3) and is a 24 volt negative earth system with two 12 volt, 225 amp hour, heavy duty lead acid batteries (maintenance free as standard) mounted in a swing out carrier. 1 x Bosch 120 amp alternator is fitted. 24 volt chassis electrical system is also supplied via DC/DC converter from the hybrid 600 volt system. Electronic monitoring of oil and coolant levels is fitted as standard.
Fuel system	A 205 litre aluminium fuel tank fitted over O/S/F wheel arch. The fuel filler is located on the right hand side (offside) of the body; this can be offered with Posi lock or Identic fast filling systems as an option.
Tyres & Wheels	10 stud 22.5" wheels with 275/70R22.5 tyres.

