



Volvo Buses. Driving quality of life

VOLVO 7900 ELECTRIC HYBRID

Listen to your city



Model	Volvo 7900 2-axle low floor single deck electric hybrid citybus
Body specification	Volvo's patented lightweight aluminium body concept. Front and rear wall in composite material and ABS elements. Front and rear structure in anti-corrosion steel. Single or double tinted glazing with hopper and sliding window options. Multilayer exterior paint finish. Easy repair of minor damages. Parts commonality between city and intercity buses to lower maintenance cost. Anti-corrosion treatment of underbody with conservation sealing and silencing agents. Xenon and halogen headlights. LED Daytime running lights. Cornering lights, fog lights and auxiliary lights as options. Electrically adjustable and heated external mirrors.
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 provided by the 600 Volt Energy Storage System. Driveline uses stop/start technology.
Engine	Volvo parallel hybrid system with the Volvo D5K, 5 litre Euro 6 engine rated at 240hp with 150kw electric motor.
Electric motor	150kW / 1200Nm
Transmission	Volvo 12 speed I-shift automatic transmission.
Energy storage system	High capacity 19kWh Lithium-Ion battery, which is water cooled using an active electronic system. Ramp heating with 400 VAC. Battery energy capacity is optimised according to conditions and energy requirements. This enables fast charging and maintains a high passenger capacity.
Charging system	The Volvo conductive opportunity charging system features roof-mounted charging rails centrally mounted above the front axle. Pantograph mounted to a charging station. Fully automatic fast charging sequence.
Rear axle	ZF AV132. Portal, double reduction axle, with optimised ratio.
Brakes	Volvo electronically controlled disc brakes (EBS). Brake Blending function (all). The electric motor functions as a retarder and recovers braking energy.
Steering	Hydraulic steering, electrically driven power steering pump.
Fuel system	Diesel engine
Electrical	I-Start dual battery system which separates batteries into two circuits. Optimised start batteries to increase engine start capability. Optimised consumer batteries for longer lifetime. Automatic shut off of main switch at low voltage level.
Tyres & Wheels	7.5 x 22.5" wheels with 275/70R22.5 tyres.