



# Solo

SPECIFICATION



OUTSTANDING FUEL EFFICIENCY

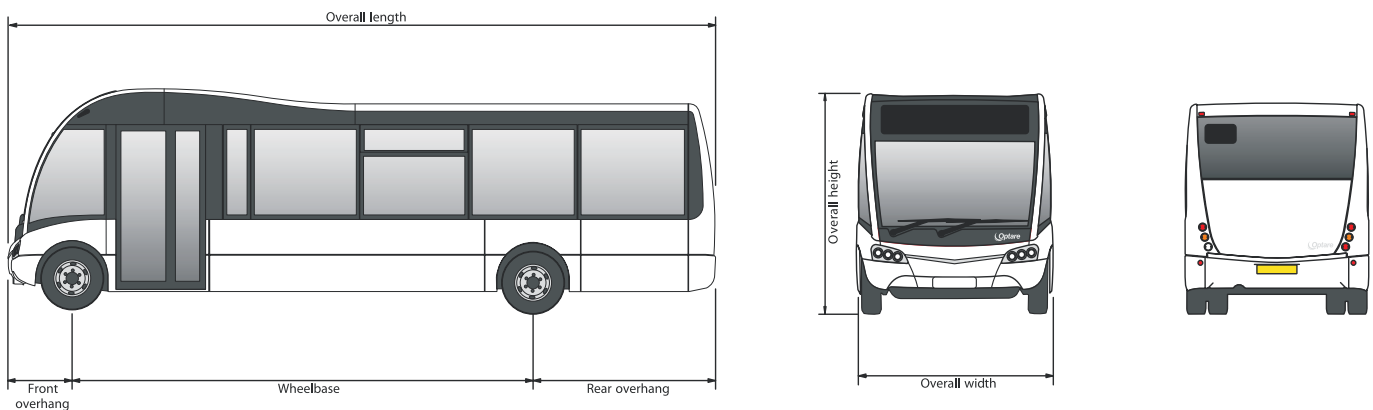
# Solo

## Specification and seating

Body length options	Slimline		Slimline/Standard	
Overall length (mm)	7870	8570	9260	9960
Overall width (mm)	2340		2340 (slimline) 2500 (standard)	
Overall height (mm)	2885*			
Wheelbase (mm)	4485	5185	5875	6575
Front overhang (mm)	815			
Rear overhang (mm)	2570			
Gross vehicle weight design/plated (kg)	11300/10780**			
Front axle weight design/plated (kg)	3800/3740			
Rear axle weight design/plated (kg)	7500/7040			

\* Dependent on tyre size

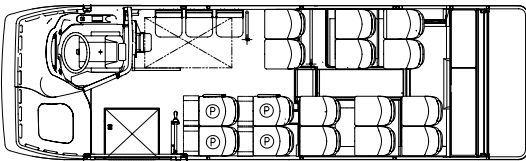
\*\* Assumes 10% tyre bonus with 215/75R x 17.5 tyres, which limits the vehicle to 50mph



Overall length (mm)	7870	8570	9260	9960
Seats (maximum)	24	28	32	36
Total (maximum)	35*	41*	58*	58*

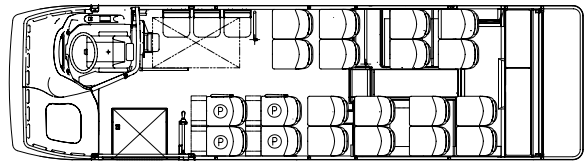
\*Capacities are subject to overall vehicle weight, which may be affected by optional equipment specified

## Seating plans



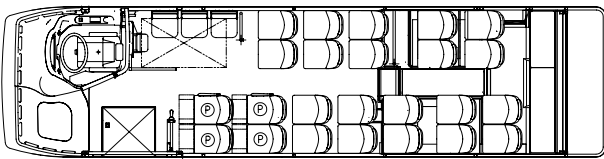
**7.9m Slimline**

Typical seating layout for 7870mm slimline



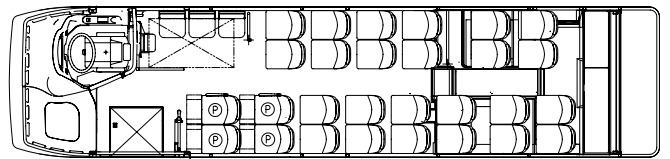
**8.5m Slimline**

Typical seating layout for 8570mm Slimline



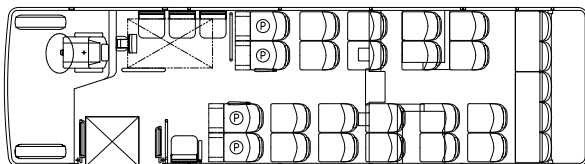
**9.2m Slimline**

Typical seating layout for 9260mm Slimline



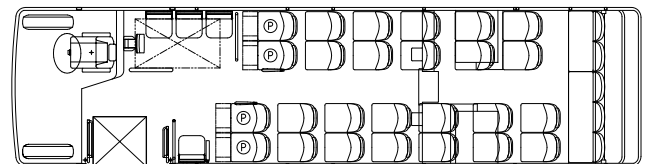
**9.9m Slimline**

Typical seating layout for 9960mm Slimline



**9.2m Standard**

Typical seating layout for 9260mm Standard



**9.9m Standard**

Typical seating layout for 9960mm Standard

## Solo

### Driveline options

ENGINE OPTIONS	TRANSMISSION
<p><b>Euro 6 112kW Cummins ISB 4.5 litres</b>  <i>Four-cylinder turbo diesel (150bhp @ 2000rpm)</i>            Exhaust Gas Recirculation (EGR)            Selective Catalytic Reduction (SCR) through use of re-agent            Max Torque 580Nm @1200-1700rpm</p>	<p><b>Allison T2100 xFE,</b>  <i>Five speed fully automatic</i></p> <p>Full CAN electronic interface with engine, integral oil filtration system and lockup torque converter in gears 3, 4 &amp; 5 for improved fuel economy.</p>
<p><b>Euro 6 115kW Mercedes OM934LA 5.13 litres</b>  <i>Four-cylinder turbo diesel (154bhp @ 2200rpm)</i>            Exhaust Gas Recirculation (EGR)            Selective Catalytic Reduction (SCR) through use of re-agent.            MaxTorque 650Nm @ 1200-1600rpm</p>	
<p><b>Euro 6 130kW Mercedes OM934LA 5.13 litres</b>  <i>Four cylinder turbo diesel (174bhp @ 2200rpm)</i>            Exhaust Gas Recirculation (EGR)            Selective Catalytic Reduction (SCR) through use of re-agent.            MaxTorque 750Nm @ 1200-1600rpm</p>	<p><b>Allison T3270R xFE</b>  <i>Five speed fully automatic.</i>            Full CAN electronic interface with engine, integral oil filtration system and lockup torque converter in gears 1, 2, 3, 4 &amp; 5 for improved fuel economy.</p>
<p><b>250 kW Full Electric</b>            Max Torque 3168Nm</p>	

RETARDER	Available in	
	Slimline	Standard
<b>Electro-magnetic Retarder</b> <i>External</i>  Automatically actuated through brake pedal providing minimal maintenance, smoother retardation, lower power consumption and greater reliability.	✓ Low Carbon Option*	✓ Low Carbon Option*
	✓ Low Carbon Option*	✓ Low Carbon Option*
<b>Integral Retarder</b>	✓	✓ Low Carbon Option*
<b>Regenerative Braking</b>	✓	✓

\*Low Carbon certification subject to weights and passenger capacity

MODEL OPTIONS	FRONT AXLE	REAR AXLE	WHEELS	TYRES	TYRE OPTION
<b>Solo Slimline</b>	Albion F36N	Rear Albion 7.20 single reduction hypoid, 5.13:1 ratio.	17.5 x 6in 113.5mm offset (125 HDS)	215/75R x 17.5	
<b>Solo Standard</b>	Albion F36	Rear Albion 7.20 single reduction hypoid, 5.13:1 ratio.	17.5 x 6.75in 126.5mm offset (138 HDS)	235/75R x 17.5	215/75R x 17.5

# Solo

## General specification

### FRONT SUSPENSION

2 bag air suspension with leading taper leaf springs and Panhard rod.

### REAR SUSPENSION

4 bag air suspension on parallel linkage.

### STEERING

ZF 8090 steering gear with integral power assistance. Steering column adjustable for rake and reach.

### SERVICABILITY

All power packs are fitted to a demountable frame. Services fitted with "no-loss" couplings for rapid removal.

### BRAKE SYSTEM

Service Wabco PAN17 dual circuit air disc brakes with non-asbestos linings and Anti-lock Braking System.

Parking brake air released, spring actuated acting on rear wheels.

Air dryer with optional heated element.

### SPEED SPECIFICATIONS

Max Speed up to 59 mph.

Optional speed limitation

### STRUCTURE

All welded heavy-duty box section integral construction using a combination of stainless and high-grade carbon steel to effect a long life.

Anti-rust protection system applied to exposed structural components.

### EXTERIOR

Combination of GFRP and aluminium modular exterior panels for low cost repair or replacement.

Modular pressed alloy side panels locked into waist-rail section and retained by screw fasteners for ease of replacement.

One piece gasket glazed windscreen with bonded quarter windows. Driver's signalling window with sliding section.

Tinted, bonded, single glazed saloon side windows. Optional double glazing.

### INTERIOR

Moquette trimmed individual passenger seats with tubular steel frames and ABS backs.

Wheelchair bay incorporating backrest and gangway stanchion.

Manual fold out wheelchair ramp.

Fully adjustable driver's air suspension seat.

Heavy duty, sealed, slip-resistant floor covering system and flush fitting step nosings with yellow inserts, colour contrasting with floor covering.

35mm diameter smooth tube, anti-slip handrails with colour co-ordinated finish. Vacuum formed ABS profiles at windows and cove panels with centre roof in ABS finish for easy cleaning.

## EQUIPMENT

Wireless palm operated, contrasting bell pushes together with "stopping" sign.

Flush fitting, glider entrance door with full-length glazing, electro-pneumatic operated with exterior and interior safety controls.

Moulded driver's compartment for durability and ease of cleaning.

LED destination and route number equipment fitted to front, side and rear.

LED rear lamps.

Twin halogen, high intensity front driving lamps.

LED side marker lamps.

Reversing horn with night-time override facility.

Optional EcoDrive telematic transmitter providing the ability to transfer vehicle system data in real time back to the depot or traffic office.

## INSTRUMENT PANEL

EcoDrive™ low maintenance, easy clean driver's instrument panel with TFT screen providing direct feedback to the driver; monitoring acceleration, deceleration, cornering, fuel economy and driver's skill score.

Gauges: Speedometer, economy dial, front and rear air pressure. TFT display shows fuel level, engine coolant temperature, re-agent (SCR engines only)/ battery charge level (EV only).

Easy clean, soft touch, tactile switch membrane for vehicle systems.

Audible warnings for low air pressure, DC-DC converter failure emergency door open.

## DEMISTER AND VENTILATION

Fuel fired (diesel), low emission combustion heater with thermostatically controlled blown, recirculating warm air heating system for passenger comfort.

Three speed high-powered windscreen demister with driver's compartment heating facility.

Hopper windows for passenger area ventilation. Quantity varies according to length of vehicle.

Optional air conditioning.

## SYSTEMS

Electrically powered horizontal parking windscreen wipers with 2 speeds, plus intermittent.

Modular LED interior saloon lighting running continuously from front to rear on both sides for even light distribution. Each side separately switched providing dual level facility.

## Solo

### Diesel engine only

#### ENGINE COOLING

Electric cooling pack

#### ELECTRICAL SYSTEMS

Centralised, fully multiplexed electrical system for quick, easy fault finding through diagnostics facility.

Voltage 24 volt.

Batteries 2 x 12 volt 145 amp hour, maintenance free.  
Twin alternator 28V x 150 amp output (Cummins engine option - 28V x 120amp output).

#### FUEL TANK

Nominal 200 litre side fill tank located beneath driver's seat, with anti-spill device. Nominal 20 litre (Optional 40 litre) rear fill re-agent tank.

#### HEATING OPTIONS

Thermostatically controlled blown, recirculating warm air heating system for passenger comfort.

Option - diesel low emission combustion heater to augment the standard heating system.

### Electric driveline only

#### ENERGY STORAGE SYSTEM

Power 240kW

Max Torque 3168Nm

Driveline: conventional beam axle, permanent magnetic motors and reduction gear box

Forecast range on a single charge, dependent on duty cycle and equipment options: 150 miles+(250Km+) in winter with electric heating 190 miles maximum.

44kW integrated on-board charger connects to standard commercial three phase AC supply. Charge time approx 5 hours from zero to full.

100kW remote DC fast charger delivering 88kW, charge time approx 3 hours

#### DRIVE SYSTEM COOLING

Cooling system fully integrated with battery pack.

#### ELECTRICAL SYSTEMS

Centralised, fully multiplexed electrical system for quick, easy fault finding through diagnostics facility.

Voltage 24 volt.

Batteries 2 x 12 volt 105 amp hour, maintenance free.

#### HEATING OPTIONS

Electric heating system with vehicle pre-heat as standard.

This document reflects the standard base models only. A wide range of alternative seating configurations and optional equipment can be accommodated. Please contact us for further information.

Optare Group Ltd reserve the right to alter this specification without notice. Document reference: 201810UKSS