

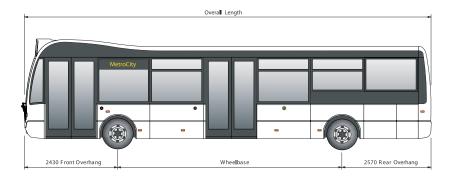
SPECIFICATION





Specification

Body length options	MC 10130	MC 10820	MC 11520
Overall length (mm)	10130	10820	11520
Overall width (mm)	2470		
Overall height (mm)	2850		
Wheelbase (mm)	5130	5820	6520
Front overhang (mm)	2430		
Rear overhang (mm)	2570		
Gross vehicle weight design/plated (kg)	13000/12960		
Front axle weight design/plated (kg)	4500/4480		
Rear axle weight design/plated (kg)	8000/8480		





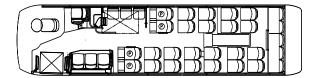


Seating capacity

Overall length (mm)	10130mm 1 door	10130mm 2 door	10820mm 1 door	10820mm 2 door	11520mm 1 door
Seats (maximum)	36	25*	40	29*	44
Total (maximum)	60	60	60	60	60

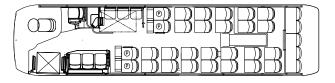
^{*}Capacity limited to Transport for London (TfL) specification

Seating plans



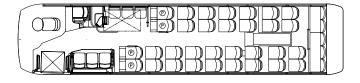
10130 provincial

Typical seating layout for 10130mm provincial specification



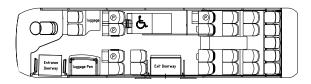
10820 provincial

Typical seating layout for 10820mm provincial specification



11520 provincial

Typical seating layout for 11520mm provincial specification



10130 TfL

Typical seating layout for 10130mm TfL specification



10820 TfL

Typical seating layout for 10820mm TfL specification



Driveline Options

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

FRONT AXLE Albion F48 REAR AXLE Rear Albion 8.20 single reduction hypoid. 5.13:1 ratio. WHEELS 19.5 x 6.75in 133mm offset TYRES 245/70R x 19.5

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.

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.

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

RETARDER	LOW CARBON
Electro-magnetic Retarder External Automatically actuated through brake pedal providing minimal maintenance, smoother retardation, lower power consumption and greater reliability.	Option Option
Integral Retarder	✓ Option
Regenerative Braking	

*Low Carbon certification subject to weights and passenger capacity

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.

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 coordinated 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, electropneumatic operated with exterior and interior safety controls.

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

 $\ensuremath{\mathsf{LED}}$ 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.

DEMISTER AND VENTILATION

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.

INSTRUMENT PANEL

EcoDriveTM 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.

Diesel engine only

ENGINE COOLING

Rear, right hand side mounted radiator and intercooler with separate coolant header tank. Electrically driven, thermostatically controlled cooling fan.

ELECTRICAL SYSTEMS

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

Voltage 24 volt.

Batteries 2×12 volt 145 amp hour, maintenance free. Twin alternator $28V \times 150$ amp 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, permenant 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 2×12 volt 105 amp hour, maintenance free.

HEATING OPTIONS

Electric heating system with vehicle pre-heat as standard.