



Tempo SR
class leading fuel efficiency



Tempo SR - matching great looks with class leading fuel efficiency

The Tempo SR offers more than just good looks. Styled inside and out for maximum passenger appeal, its contemporary design, eye catching, sweeping lines and advanced specification are sure to turn heads.

But behind that elegant profile is a bus built to meet the demands of the most challenging urban environments – and the increasing need for operators to reduce costs and develop a definite competitive edge.

This revolutionary new generation single deck city bus is quieter and smoother, ensuring a truly relaxing travelling experience. It's also the perfect combination: a heavy duty bus with integral frame construction and an incredibly strong yet low-weight body system that instantly sets class leading standards in fuel economy, durability, reliability and performance.

The Tempo SR superbly blends an integrated driveline package with a host of long life, low maintenance features, to maximise uptime and help operators streamline running costs.

To further enhance performance the kneeling-suspension offers an increased recovery speed to give maximum access for passengers whilst maintaining minimum stop times at pick-ups.

We can also offer zero emission full electric, hybrid, bio-methane dual fuel, pure plant oil or used cooking oil drivelines – all designed to fit within the same space envelope as the standard diesel powerpack from Mercedes-Benz.



Step inside and the beauty of the Tempo SR is there for all to see. Its practical, modern interior design includes contemporary fabrics, curved handrails and 'uplighting' throughout the saloon for a more pleasant ambience. A wide range of seating configurations include the option of cantilevered seats, sculpted wheelarch seats and luggage pens, with an optional pivoting wheelchair armrest.

The Tempo SR is testimony to Optare's progressive thinking and pioneering approach. Innovation drives everything we do.

We're the only bus manufacturer to win a Queen's Award for Design. We evaluate every element of our buses in pursuit of the optimum total vehicle package. And we're constantly challenging our design engineers to develop vehicles that will elevate expectations to new levels.

This means that as well as enhancing the travelling experience for passengers, Optare consistently stays one step ahead by delivering more choice and profit potential to operators.

What's more, through innovative design and advanced engineering, we are committed to continue providing buses that set new standards in style, efficiency and fuel economy.

The result is the Tempo SR – a rock-solid investment for the city.





discover the hidden beauty

While the superb styling of the Tempo SR is sure to turn heads, there's far more to this innovative low floor single deck city bus than immediately meets the eye. Firstly, it features Optare's trademark fully integral frame construction in durable stainless steel. A heavy-duty structure which is both very strong and delivers an exceptionally low unladen weight - ultimately reducing fuel consumption and operational costs to class-leading levels.

The Tempo SR incorporates superior heavy duty components throughout, including a six cylinder 210kW (282bhp) Mercedes-Benz SCR engine renowned for its outstanding reliability and performance.

You can also specify the latest ZF6HP500 six speed transmission as an alternative to the standard Allison T310R gearbox – both of which feature integral retarders. The removable driveline package makes maintenance easy. Should a major overhaul become necessary, the engine, gearbox, exhaust system, fuel tank and cooling pack are all mounted on a quick release carrier with self sealing couplings for oils, fuel and coolant.

And the multiplexed electrical system allows for faults to be checked, located and remedied quickly and easily using a simple lap-top based diagnostic programme.



In short, the Tempo SR is ready for any urban challenge. It comes in a range of four lengths between 10.6 and 12.6 metres, seating up to 47 passengers and accommodating up to 28 additional standing passengers in a spacious interior.

Furthermore, because of its innovative integral design, at an overall body width of 2.5 metres, it has a comparable interior space to rival buses which are built to 2.55 metres.

The wide entry/exit door and aisle between the front wheel arches make it possible for all passengers to board and alight with the minimum of fuss - even those with shopping, wheelchairs or pushchairs - while the electronic levelling control of the kneeling suspension system significantly improves recovery speeds and reduces stop times.

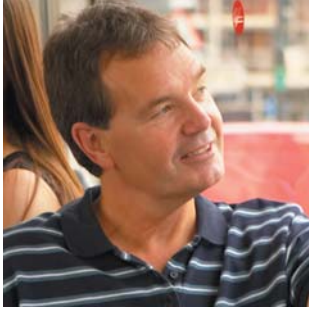
The Tempo SR is quieter too. An optimised sound insulation package ensures lower interior noise levels, and the drive axle is engineered for smoother, quieter running.

And you couldn't ask for a better driving environment. Ergonomically arranged controls and instrumentation combine with an optimum driver/passenger height relationship to make ticketing easier. There's also an adjustable, telescopic, tilt and reach steering column to improve comfort, reduce fatigue and enhance driver performance.

So if you think the Tempo SR's beauty is only skin deep, think again. It really is the ultimate heavy duty, low-weight bus for today's modern metropolis.



Future proof technology



Optare's low weight design already sets the benchmark for fuel economy. Now our EcoDrive dashboard and intelligent Optaremising™ software, which helps your drivers to save fuel and allows you to monitor their driving styles, puts us even further in the lead.



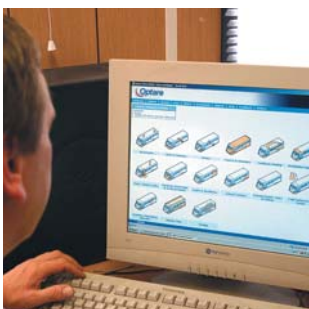
Multiplex wiring systems carry a vast amount of performance monitoring and command data to enable the bus to function. Optare EcoDrive takes this a stage further by gathering and processing it into useful information that can be presented in a simple way to both the driver and the operator, to support them in their efforts to achieve greater fuel efficiency.

There's also the ability to use an optional telematics transmitter to transfer data in real time back to the depot or traffic office via existing telecom network systems so you can instantly see where your vehicle is, diagnose faults, monitor driver performance and much, much more.

To future-proof your operations and maximise fuel economy, fleet efficiency and passenger comfort, we use integrated technologies - feature packed electronic systems that are designed into the vehicle at the point of manufacture. These systems work hand-in-hand with the existing multiplex electronics controlling our vehicles, and as a result provide you with increased reliability, higher performance and greater functionality than bolt-on systems.

We also recognise that with rapidly developing low-carbon technologies, bus operators need vehicles that can be updated to stay ahead.

Our unique demountable power pack means our entire product range is future proof and can be easily upgraded over the life of the bus, whether with more efficient diesel technology, alternative fuel options, or hybrid or zero emission full electric drivelines.



Optare Product Support gives you easy access to total peace of mind



Optare's philosophy of providing customers with a complete package of services is unique in the British bus industry. And through Optare Product Support, we offer a market leading parts and service capability.

A key focus of the Product Support division is to provide the operator with a rapid response to service and maintenance support issues. At our fully equipped and conveniently located service centres, and at our dedicated refurbishment and upgrade centre, we'll provide all the repairs, servicing, maintenance and refurbishments you need.

In addition, our highly trained and fully equipped mobile Service Technicians are ready to visit your premises to provide a range of practical support, including vehicle system diagnostics.

Our central parts operation has more than 40,000 product lines in stock. This extensive inventory of genuine parts and our use of state-of-the-art logistics technology guarantees exceptional quality of service. We've also applied technology to our new online parts information and ordering service, 'Parts Portal', which you can access at www.optareparts.co.uk.

The service allows you to view parts before you order to ensure the correct selection and offers alternatives for any superseded parts. If you don't have a part number, you can click on the relevant part in our exploded diagrams.

Parts Portal makes getting hold of the parts you need quicker and easier. But, however you order, we'll ensure that UK mainland deliveries are made the next day.

Our scheduled maintenance and inspection programme is designed to ensure complete peace of mind – giving you a dependable fleet and helping you to comply with your operator's license requirements. And as daily operation takes its toll on the condition of your vehicles, our mechanical overhaul and complete refurbishment service can extend their working life for significantly less than the cost of a replacement, even for vehicles not built by Optare.

Should you require service or parts support, assistance is just one phone call away. Call 0871 230 1324 for all the help you need to get your vehicle back on the road as quickly as possible. You can also use this number for technical assistance or to arrange comprehensive product training.

With total commitment to providing a comprehensive range of dedicated aftersales support services, Optare Product Support is your first - and only - point of contact for everything you need to keep your buses on the road.

Tempo SR - technical specifications

ENGINE	
Type	Mercedes-Benz OM906LA, Euro 5 (SCR), six-cylinder turbo diesel.
Max power	210kW (282bhp) @ 2200rpm.
Max torque	1120Nm @ 1200-1600rpm.
Capacity	6.37 litres.
ENGINE COOLING	
Rear, right hand side mounted radiator and intercooler with separate coolant header tank. Hydraulically driven, thermostatically controlled cooling fan.	
TRANSMISSION	
Allison T310R, five speed fully automatic with integral retarder, featuring electronic interface with engine and lockup torque converter in gears 3, 4 & 5 and RELS (Reduced Engine Load at Stop) for improved fuel economy.	
SERVICEABILITY	
Engine, gearbox, fuel tank, cooling, induction and exhaust system fitted to demountable frame. Services fitted with "no-loss" couplings for rapid removal.	
AXLES & SUSPENSION	
Front	MAN drop centre low-floor VOK 07B O8.
Rear	Meritor MC13175 single reduction hypoid, 5.29:1 Allison transmission (or 6.14:1 – ZF transmission). Trailing spring 2 bag air suspension.
Max speed	59mph maximum geared speed at 1950rpm (2135rpm with Allison transmission). Optional speed limitation.
STEERING	
Type	ZF 8098 steering gear with integral power assistance. Steering column adjustable for tilt and reach.
WHEELS & TYRES	
Wheels	22.5 x 8.25 ten stud.
Tyres	275/70R x 22.5 tubeless.
BRAKE SYSTEM	
Service	Dual circuit full air operated service brakes, separate system for each axle, front and rear disc brakes, non-asbestos linings and Anti-lock Braking System.
Parking brake	Air released, spring actuated parking brake on rear wheels, controlled by hand valve.
Air dryer	With heated element.

FUEL TANK	
Nominal 220 litre right hand side fill with anti-spill device.	
Nominal 21 litre re-agent tank (SCR engine only)	
ELECTRICAL SYSTEM	
Type	Multiplex electrical system with diagnostic facility.
Voltage	24 volt.
Batteries	2 x 12 volt 135 amp hour, maintenance free.
Alternator	28 volt x 100 amp output. (Optional 2 x 100 amp alternator when air conditioning is specified).
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	
A combination of GFRP and aluminium modular exterior panels for low cost repair or replacement.	
One piece bonded windscreen and quarter windows.	
Driver's signalling window with sliding section.	
Tinted, single glazed saloon side windows bonded to frame.	
INTERIOR	
Moquette trimmed individual passenger seats with ABS backs.	
Wheelchair bay incorporating backrest and pivoting armrest.	
Manual fold out wheelchair ramp.	
Fully adjustable driver's air suspension seat.	
Heavy duty, sealed, slip-resistant sealed 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 perforated acoustic laminate finish for easy cleaning.	
HEATING & VENTILATION	
Roof cove, blown, recirculating warm/cold air heating system using 20% recirculated air for maximum efficiency and system for passenger comfort.	
Two speed high-powered windscreen demister with driver's compartment heating facility.	
Hopper windows for passenger area ventilation. Quantity varies according to length of vehicle.	

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

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.

EQUIPMENT
Palm operated, bright yellow bell pushes together with 'stopping' sign.
Flush fitting, twin-leaf 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 with hinged cab door.
LED destination and route number equipment fitted to front, side and rear.
Halogen high intensity front driving lamps with LED side lights and indicators.
Modular rear LED 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.
SYSTEMS
Fully multiplexed electrical system for rapid fault diagnosis.
Electrically powered horizontal parking windscreen wipers with 2 speeds, plus intermittent.
Modular 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
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).
Easy clean, soft touch, tactile switch membrane for vehicle systems.
Audible warnings for low air pressure, low coolant level, low oil pressure, alternator failure, transmission in gear with handbrake engaged, emergency door open.

Capacities, weights and measurements

MODEL REFERENCE	X1070	X1150	X1200
Seating/standing	35/20*	39/22*	43/24*
Overall length (mm)	10795	11505	12215
Overall width (mm)		2515	
Overall height (mm)		3050	
Wheelbase (mm)	4945	5655	6365
Front overhang (mm)		2870	
Rear overhang (mm)		2980	
Entrance step height – normal/knelt (mm)		340/250	
Turning radius (mm) – between kerbs	8175	9210	10245
Gross vehicle weight – design/plated (kg)		17200/17000	
Front axle weight – design/plated (kg)		6700/6700	
Rear axle weight – design/plated (kg)		10500/10500	

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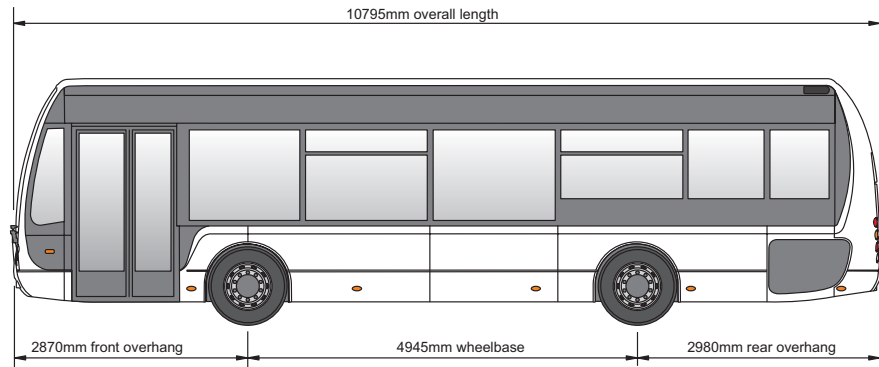
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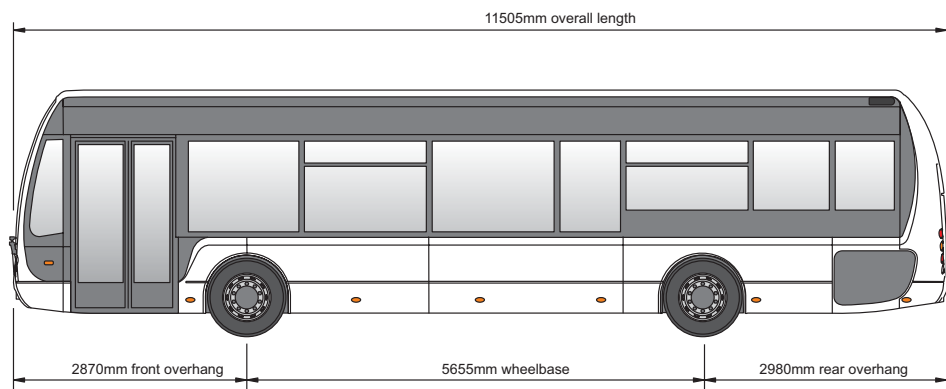
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Tempo SR - typical general arrangements

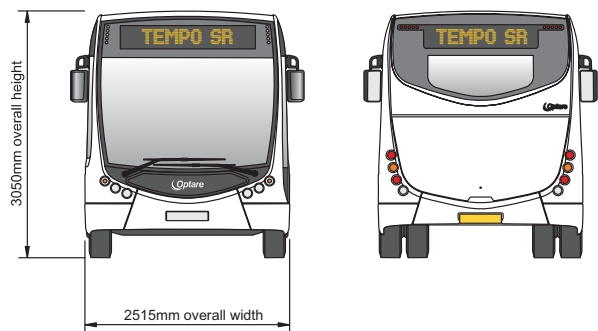
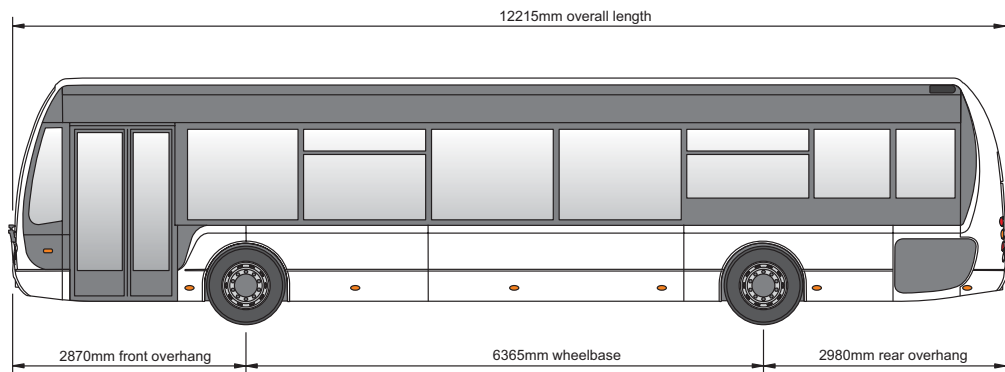
10.8m



11.5m



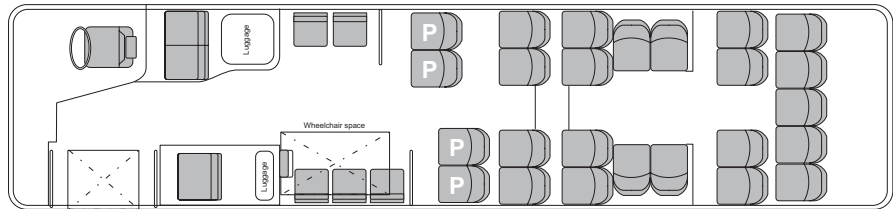
12.2m



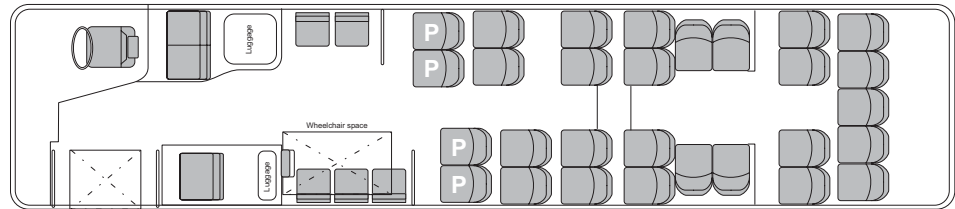
The combination of additional equipment could affect certain aspects of this text.
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Tempo SR - typical seat plans

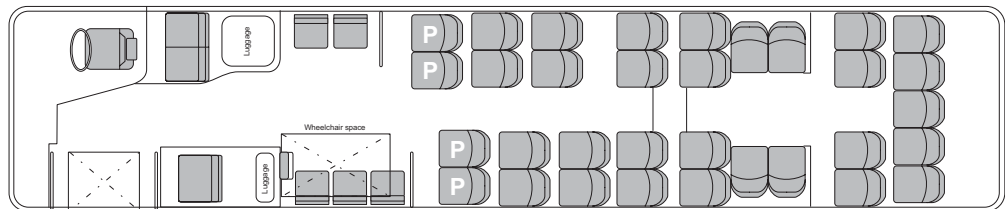
10.8m
typical
seating
capacity - 33



11.5m
typical
seating
capacity - 37



12.2m
typical seating
capacity - 41



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