



Tempo - a rock solid investment for the city

OPTARE



Tempo - more than just a pretty face

The Tempo 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.

Optare's revolutionary new generation single decker is quieter and smoother, ensuring a truly relaxing travelling experience. It's also the perfect combination: a heavy duty bus with an integral frame construction and an incredibly

strong yet low-weight body system that instantly sets new standards in fuel economy, durability, reliability and performance.

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

And, to enhance performance further, kneeling-suspension with an increased recovery speed gives maximum access for passengers, whilst maintaining minimum stop times at pick-ups.



Step inside and the beauty of the Tempo 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. While a wide range of seating configurations include the option of cantilevered seats, sculpted wheelarch seats and luggage pens, with an optional pivoting wheel-chair armrest.

The Tempo 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 business 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 - a pioneering Optare bus design that's a rock-solid investment for the city.



Discover the hidden beauty

While the superb styling of the Tempo is sure to turn heads, there's far more to this innovative low floor single decker 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 not only incredibly strong but also delivers an exceptionally low unladen weight - ultimately reducing fuel consumption and operational costs.

The Tempo incorporates superior heavy duty components throughout, including a

six-cylinder 180kw (241bhp) Mercedes-Benz engine, renowned amongst operators for its outstanding reliability and performance.

You can also specify the latest Allison T310R 5 speed transmission, as an alternative to the standard ZF6HP500 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 and cooling pack are all mounted on a quick release carrier with self sealing couplings for oils, fuel and coolant.



Modern contemporary styling with LED rear lights for longer life



Kneeling suspension and fold out ramp for easier boarding



Ergonomically designed driver's environment



Swing out headlight cluster for rapid bulb replacement



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

In short, the Tempo is ready for any urban challenge. It comes in a range of four lengths between 10.6 and 12.6 metres, seating up to 46 passengers and accommodating up to 28 additional standing passengers in a spacious interior. Furthermore at 2.5 metres wide, it has a comparable interior space to rival buses which are 2.55 metres.

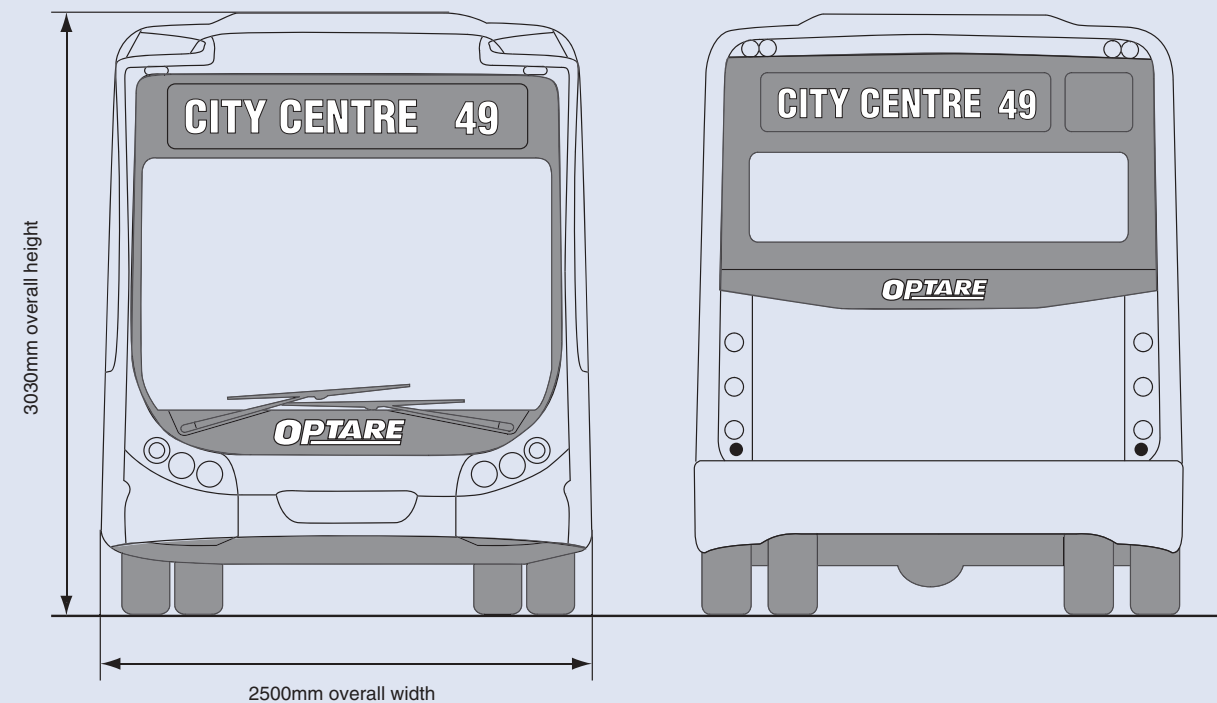
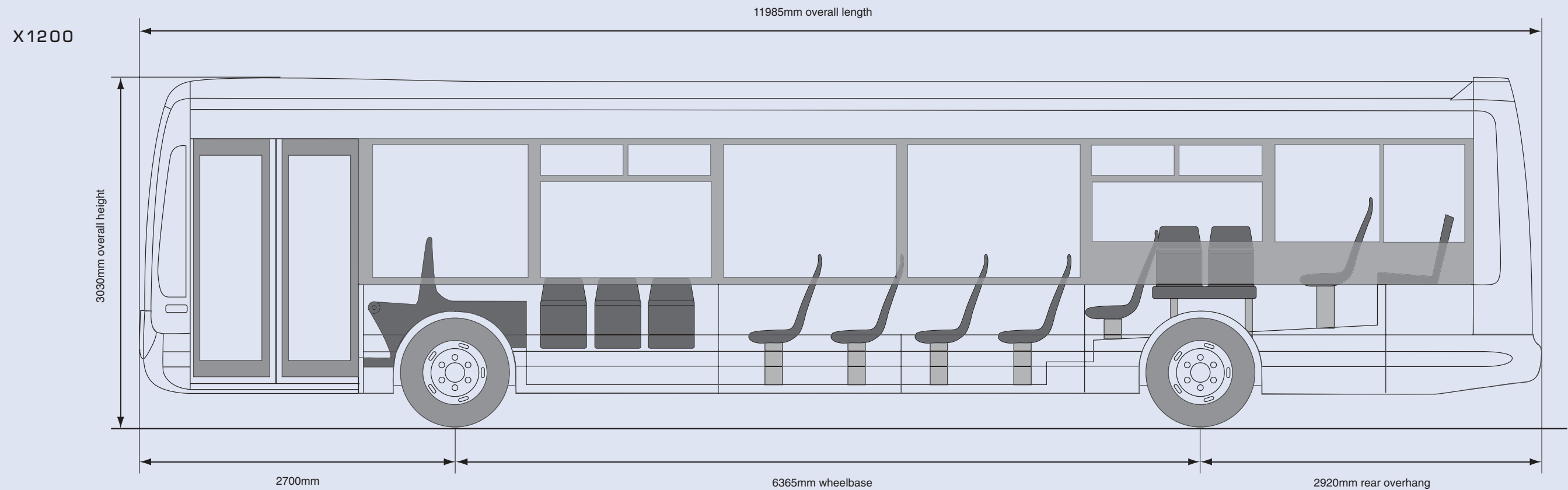
The wide entry/exit door and aisle between the front wheel arches make it possible for all passengers to board and alight with the minimum of fuss (even those with shopping, wheelchairs or pushchairs). While the electronic level control of the kneeling suspension system significantly improves recovery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

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

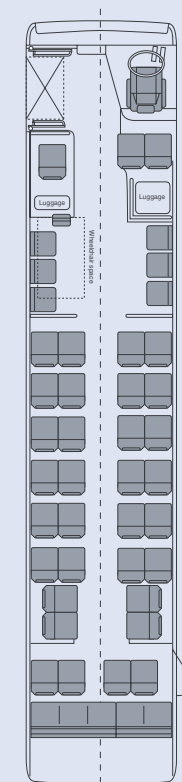
And you couldn't ask for a better driving environment. Ergonomically arranged controls and instrumentation combine with optimum driver/passenger height relationship to make ticketing easier. There's also an adjustable, telescopic, tilt and reach steering column to improve comfort, reduce fatigue and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

So if you thought the Tempo's beauty was skin deep, think again. It really is the ultimate heavyduty low-weight bus for today's modern metropolis.

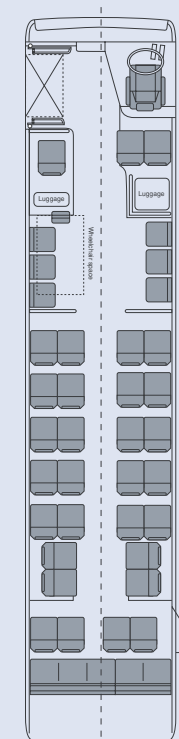




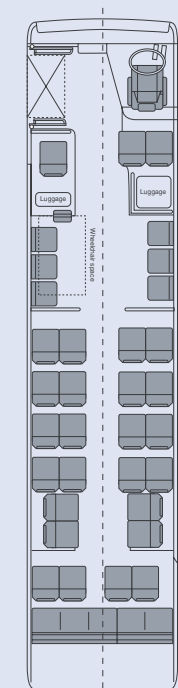
Body length options



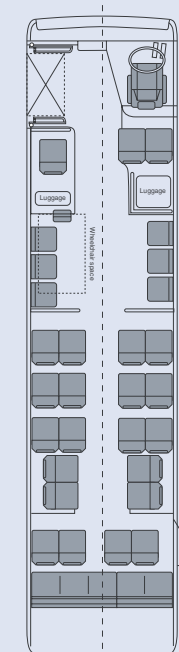
12605mm
X1260



11985mm
X1200



11275mm
X1130



10565mm
X1060

The combination of additional equipment could affect certain aspects of this text. All weights and measurements are approximate. Optare Group Limited reserve the right to alter this specification without notice. This document reflects the standard base model only. A wide range of alternative seating configurations and optional equipment can be accommodated. Please contact us for further information.

Technical Specifications

ENGINE	
Type	Mercedes-Benz OM906LA, Euro 3, six-cylinder turbo diesel.
Max power	180kW (241bhp) or (optional) 205 kW (275bhp) @ 2200rpm.
Max torque	900Nm or (optional) 1100Nm @ 1200 rpm.
Capacity	6.37 litres.
Cooling	Rear mounted radiator and intercooler with separate coolant header tank. Hydraulically driven, thermostatically proportional controlled cooling fan.

TRANSMISSION	
ZF6HP500 Ecomat 2, six speed fully automatic with integral retarder, featuring electronic interface with engine and lockup torque converter in gears 3, 4, 5 & 6 and NBS (Neutral at Bus Stop) for improved fuel economy.	

OPTIONAL	
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, 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 V9-65L-03. Front kneeling system with electronic level control.
Rear	RABA A209 single reduction hypoid, 6.143:1 (5.375:1 ratio with Allison transmission). 4 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 7.5 ten stud offset.
Tyres	275/70R x 22.5 tubeless.

BRAKE SYSTEM	
Service	Dual circuit full air operated service brakes, separate system for each axle. Automatic "S" Cam slack adjusters with 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	
Volume	200 litre right hand side fill.

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)

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 with cavity wax injection in specified areas.	
Heavy duty underseal treatment using the Dinol process.	

EXTERIOR	
A combination of GFRP and aluminium modular exterior panels for low cost 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	
Seating capacity (max)	X1060 Seating 34 Standing up to 23* X1130 seating 38 Standing up to 25* X1200 seating 42 Standing up to 27* X1260 seating 46 Standing up to 28*
Moquette trimmed individual passenger seats with ABS backs.	
Wheelchair bay incorporating backrest and gangway stanchion or optional pivoting armrest.	
Manual fold out wheelchair ramp.	
Fully adjustable driver's 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, track mounted handrails with colour co-ordinated finish.	
Vacuum formed ABS profiles at windows and cove panels with centre roof in 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.	

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.
Halogen high intensity front driving lamps with LED side lights.
Modular rear LED lamps.
Manually operated destination and triple route number equipment mounted in front header.
Manually operated side destination and route number equipment mounted to top of first nearside window bay.
Manually operated route number equipment fitted above rear window.
Reversing horn with night-time override facility.

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

GAUGES
Speedometer.
Water temperature gauge.
Air pressure gauges.
Oil pressure gauge.

WARNING LAMPS
Low maintenance LED drivers instrumentation.
Low oil pressure warning.
Engine amber warning - Caution, seek assistance at earliest opportunity.
Engine red warning - Seek immediate assistance.
Engine temperature warning.
Gearbox oil temperature warning.
CAN network fault warning.
Shift inhibit active warning.
Air filter blocked warning.
Brake air pressure low warning.
Handbrake indicator.
Retarder actuated.
ABS Fault warning.
Kneeling suspension actuated warning.

WARNING LAMPS continued
Rear fog lamps indicator.
Battery charging/alternator failure warning.
Main beam indicator.
Direction indicator.
Engine door open warning.
Ramp deployed warning.
Ramp circuit fault warning.
Bell push actuated indicator.
Wheelchair bay bell push actuated indicator.

AUDIBLE WARNING
Low air pressure warning lamp and buzzer.
Low coolant level warning lamp and buzzer.
Emergency door open warning lamp and buzzer.
Low oil pressure warning.
Battery charging/alternator failure warning.
Transmission in gear with handbrake engaged warning – Auto shut-down for additional safety.
Run away protection (Forced idle from brake/retarder).
Forced neutral with ramp extended.

CAPACITIES, WEIGHTS AND MEASUREMENTS				
MODEL REFERENCE	X1060	X1130	X1200	X1260
Seating/standing	34/23*	38/25*	42/27*	46/28*
Overall length (mm)	10565	11275	11985	12605
Overall width (mm)	2500			
Overall height (mm)	3030			
Wheelbase (mm)	4945	5655	6365	6985
Front overhang (mm)	2700			
Rear overhang (mm)	2920			
Entrance step height – normal/kneel (mm)	333/245			
Turning radius (mm) – between kerbs	7905	8900	9895	10763
Gross vehicle weight – design/plated (kg)	17200/17000			
Front axle weight – design/plated (kg)	6700/6700			
Rear axle weight – design/plated (kg)	1050/1050			

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

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Optare - new routes overseas



LHD vehicle in development

At Optare our influence spreads far and wide.

To remain at the cutting edge of bus and coach provision, we're constantly analysing and anticipating world transport trends, from metropolitan environments to rural communities and the specialist needs of mobility transport.

Having pioneered the UK low-floor revolution, Optare is also establishing a formidable presence in the global market, where an increasing demand for more accessible, user-friendly buses with easier boarding and alighting has never been greater.

We have already delivered significant numbers of vehicles into the USA where variants of our revolutionary Solo model can be seen in a number of major cities.

Our International Division is making strong inroads into continental Europe too, with a dealership now established in Denmark, providing sales and service support for Scandinavia, plus there's also a dedicated sales office in Holland to serve the Benelux countries.

With the vision to foresee the needs of markets worldwide, every vehicle we produce demonstrates our desire to satisfy the specific needs of our customers - and their passengers.



Unitec - our service doesn't stop

Optare's philosophy of providing customers with a complete package of services is unique in the British bus industry. And through Unitec - a wholly owned division of Optare - we offer a market leading parts and service capability.

A key focus of the Unitec division is to provide the operator with a rapid response to service and maintenance support issues. At our fully equipped and conveniently located Rotherham and London service centres, we'll provide all the repairs, servicing, maintenance and refurbishments you need.

Our central parts operation in Rotherham has more than 40,000 product lines in stock. This extensive inventory of genuine parts and our 'Picomat' warehouse system gives us the technology to guarantee quality and excellent "first time pick" levels. Our use of the latest logistics technology ensures that UK mainland deliveries are made either same day or by noon the next working day. From the London centre, the in-house parts department is providing the same dedicated supply to the capital, the South East and home counties.



In addition, Unitec's team of field-based, fully trained and equipped mobile Service Technicians are ready to attend premises to assist in providing national support for an ever increasing customer base.

Unitec's 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 your vehicle's condition, even if it wasn't built by Optare, our mechanical overhaul and complete refurbishment services can extend its working lives for significantly less than the cost of a replacement.

Should you require warranty support, our Speedline assistance service is just one phone call away. Freephone 0800 028 5626 for all the help you need to get your vehicle back on the road as quickly as possible.

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





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