

BT levio

1.3 – 3.0 tonnes
Electric Powered Pallet Trucks





W-series



W-series



P-series



S-series



R-series

BT Levio – the *complete* range of powered pallet trucks

Fast and powerful, but safe and easy-to-use, BT Levio powered pallet trucks cater for all your horizontal pallet transport needs. Compact and lightweight units, walk-with and ride-on trucks, all with the optimum drive system and design strength to ensure trouble-free operation. All standard models are also designed to work effectively within chilled operations.

W-series models are pedestrian trucks with load capacities from 1300 up to 2500 kilograms. The smallest model — the LWE130 — is ideal for carrying on-board a vehicle as an alternative to a hand pallet truck, whilst the largest — the LWE250 — makes safe handling of the heaviest palletised loads easy. The BT Levio W-series models are built for durability, and are simple to use, with safety a key factor.

For more intensive applications, BT Levio **P-series** models come equipped with a flip-down operator platform, making them suitable for longer-distances and more demanding operations.

For the most intensive applications the BT Levio **S-series** 'stand-in' and **R-series** seated cab models deliver maximum productivity while maintaining the highest safety standards.

By offering a complete range of powered pallet trucks, Toyota Material Handling enables you to select the optimum machines to help drive down costs in your operations.

BT Levio W-series 1300 kg load capacity

BT Levio's W-series starts with the LWE130 – a compact truck that provides safe, easy horizontal pallet movement in low-intensity applications. Whether transporting goods in an office, retail store, print shop or similar operation, the BT Levio LWE130's low 250 kg weight, compact size and 1300 kg load capacity make it ideally suited for a wide range of uses.

The easy-to-use controls, ergonomic steering and maintenance-free batteries with built-in charger are designed for operators with all levels of experience. Optional in-vehicle charging also makes this electric pallet truck perfect for use on lorries.

The LWE130 features castor wheels that rotate within the truck's body profile. They provide smooth and easy operation on ramps with reduced the risk of wheel damage.



The 208° steering makes the BT Levio LWE130 an exceptionally manoeuvrable truck, perfect for use in confined areas



The LWE130 is well suited for use on a lorry and for handling loads on a rear mounted lorry platform



The emergency stop button and the lead for the built-in charger are easily accessible to the operator



The LWE130 has a five-point chassis for optimum stability and control, with castors that rotate within the profile of the truck







BT Levio W-series 1400 kg–2500 kg load capacity

simplicity leads to productivity

Powered pallet trucks are versatile machines put to a wide range of uses: vehicle loading and unloading, order picking and general pallet transport. They are relied on, not just in warehouses, but also in retail premises where safety and manoeuvrability are particularly important. The BT Levio W-series is designed to let its operator get on with the job – simply and safely.

Compact and manoeuvrable

The first thing you will notice about the BT Levio W-series is how compact it is. Its short body length means it needs less space in which to turn, so you'll spend less time manoeuvring.

Smooth and easy, but powerful

BT Levio W-series incorporates the BT Powerdrive system, ensuring smooth, progressive control at all times. The tiller arm is easy and comfortable to use, with fingertip lift and lower buttons, and simple forward/reverse control.

Exceptional visibility

These trucks are designed to ensure that the operator always has a clear view of the fork tips or the load, allowing accurate and fast placement. We call it 'total view'.

Features for the real world

All W-series models come with useful storage compartments and an optional 'E-bar' allows mounting of a writing table and shrink wrap holder, as well as powered ancillary equipment such as PCs, radio-data terminals and barcode scanners.

The 2000 kg model (LPE200) can be specified with flip-down operator platform for applications demanding longer travel distances.



Fork tips are clearly visible from the operating position for added safety and ease of use



The control arm incorporates BT Powerdrive technology and offers easy, intuitive operation

BT Levio W-series 1400 kg–2500 kg load capacity

safety

A truck that's easy to use is much less likely to be involved in accidents. The safety of BT Levio W-series is also enhanced by a host of design features to protect the operator and other workers.

Keep your distance

Designed specifically for pedestrian trucks, the W-series' ergonomic control arm is the optimum length, providing easy control and excellent fork-tip visibility, while keeping the operator a safe distance from the truck.

Adaptable performance

The acceleration, top speed and braking characteristics can be programmed to suit individual operators, or to suit the demands of the application. PIN-code start-up means that the truck knows who is operating it and it will assume the appropriate pre-programmed settings. The W-series has a 'turtle' button for temporary speed reduction, and the 'Click-2-Creep' function, which allows the truck to be manoeuvred with the handle upright – ideal in confined spaces.

Protection for the operator

BT Levio W-series features two emergency controls: a cut-off button and a 'belly' button. The cut-off button immediately disconnects the drive power (but leaves the display running so error codes can be read) and applies the brake. The belly button is on the handle tip. It reverses the direction of travel to prevent an operator being trapped by the truck.

The W-series' chassis skirt is just 35 mm from the ground and rounds away from the operator's feet, providing the perfect balance of foot protection without compromising the truck's manoeuvrability on ramps and other slopes.



BT Levio W-series' rounded profile helps it get round the tightest corners



The Click-2-Creep function allows the truck to be manoeuvred with the handle upright

... and durability

An easy-to-use truck means less risk of mistakes and less risk of damage or breakdown. Combine this with Toyota's built-in quality and the BT Levio's advanced design and the result is more uptime, which means more work done for less cost.

Designed to simply keep going

The BT Levio W-series has been developed and is manufactured using the highly regarded Toyota Production System (TPS). To ensure high levels of quality and reliability, TPS applies continuous improvement (**kaizen**) throughout the entire production process, from product development through to production, delivery and after-sales service.

In line with this philosophy, the W-series' AC drive motors have fewer wearing parts than DC equivalents and many of the truck's bushings are made of a Teflon-coated composite material that improves their working life and eliminates the need for greasing. Sealed connectors, non-contact switches, leak-free hydraulic connectors and CAN-Bus wiring all add up to maximum reliability. BT Levio W-series is designed to be serviced only once a year in typical single-shift operations.



The hood is secured by two bolts for fast access



The fixed motor has no moving cables

BT Levio P-series

performance as standard

The concept of a flip-down driver platform was a BT innovation that has been recognised throughout industry as vital within intensive horizontal transportation systems. Today the BT Levio P-series continues to set the standard, delivering the highest levels of productivity, due to performance combined with manoeuvrability – therefore driving down costs.

BT Powerdrive, which is built into BT Levio P-series trucks from the ground up, benefits productivity in two ways. Firstly, its essential simplicity means truck availability is maximised. Secondly, the trucks are easy to operate safely and smoothly.

High performance – small size

The 2-tonne capacity LPE200 has a maximum speed of 8.5 km/h with the optional folding sideguards, or 6 km/h without. The 2.4 tonne LPE240 can travel at 12 km/h. Performance parameters are fully programmable to suit each operator and application.

Lift/lower performance is equally impressive, meaning less time spent stationary and more time moving loads

Smooth and easy, but powerful

Simple CAN-bus wiring connects a central processor, which monitors and controls all performance aspects of the truck, to a powerful and efficient motor.

Smooth, powerful performance is assured in all operating conditions, due to the combination of the motor and the switchless control system. Acceleration and maximum travel

speed is virtually unaffected by load weight.

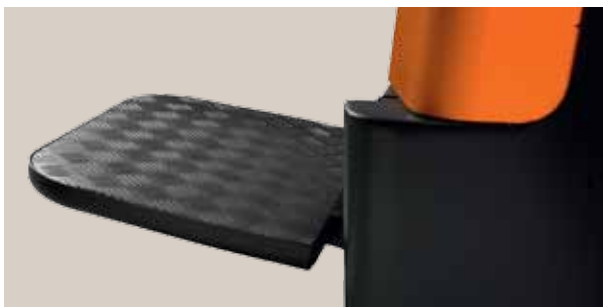
Low energy consumption and regenerative braking mean that BT Levio can achieve more work cycles per battery charge than conventional powered pallet trucks.

Optimised Truck Performance — OTP

OTP is an advanced electronic concept that combines safety in operations with the highest productivity. This is achieved thanks to its features: speed control when cornering and soft driving in pedestrian mode. During regular operations on the platform, the maximum speed is controlled and reduced depending on the steering angle, offering perfect stability for the driver and the load. When the driver steps down from the platform, the truck behaviour becomes softer and easier to handle. This increases productivity and safety in demanding situations.

Easily adaptable

All models are available with the E-bar mounting rail for ancillary equipment such as writing tables and shrink wrap holders. It can also incorporate a power supply for items such as PCs, radio-data terminals and barcode scanners.



BT Levio P-series models' flip-down platforms aid productivity in long distance applications without compromising manoeuvrability



The E-bar is a convenient mounting rail for ancillary equipment



BT Levio P-series *a safe choice...*

BT Levio P-series' ease-of-use is a great benefit to overall safety but the trucks also come with a range of specific safety features to ensure that operator, load and site remain safe.

A choice of guards

The LPE200 and LPE240 models are fitted with folding sideguards but are also available with full fixed sideguards. Alternatively they can be specified with a rear backrest. The folding sideguards on both models (optional on the LPE200) offer protection to the operator without compromising the advantages of the flip-down platform to manoeuvrability, meaning that the operator can dismount and control the truck as a pedestrian in the tightest corners.

A choice of platforms

Various types of driver platform are available on BT Levio P-series trucks, to suit different applications. For example, the platform can be of 'flip-down' design if the truck is mostly pedestrian-operated. A 'stay-down' platform suits ride-on operation better. A steel mesh platform is available for safe non-slip operation in coldstores.

Always in control

The ergonomic handle provides an intuitive interface between operator and machine. Designed to be equally accessible to the right and left hand, its butterfly controls provide forward/rearward acceleration. Other essentials such as lift/lower, and horn are all within fingertip reach.

Adaptable performance

Truck performance is fully programmable to suit the application, with easy access to various parameters via the digital display and controls on the handle. Maximum speed (with and without sideguards), acceleration rate, and automatic speed reduction facility can be set to suit the conditions of each application or operator's skill level. A time at which the truck should shutdown can also be programmed. The handle also allows access to the trucks' on-board fault diagnosis and logging system, via its digital display.



Folding sideguards allow the LPE200 to be used at its maximum speed of 8.5 km/h

BT's unique Click-2-Creep option allows the operator to reduce the truck's speed for careful fine positioning. Creep speed is activated by simply clicking the speed control switch twice.



Excellent manoeuvrability due to foldable sideguards and small turning radius in confined areas

Access control

BT Powerdrive offers access control by PIN-code as standard or, as an option, "Smart access", where the driver uses a personal electronic key or card to access the truck. For both systems up to 10 driver profiles can be stored for automatic activation upon log-in.

Protection for the operator

A large emergency button is located at the tip of the handle. This ensures that the truck's direction will be reversed immediately if the handle encounters an obstacle, preventing the truck from crushing the operator.

To further ensure operator safety, all models feature skirting that offers full protection to the feet.



The P-series' low skirt protects the operator's feet without impeding access to ramps and gradients

... over the long term

BT Levio P-series is manufactured using the highly regarded Toyota Production System (TPS). To ensure high levels of quality and reliability, TPS applies continuous improvement (*Kaizen*) throughout the entire production process, from product development through to production, delivery and after-sales service.

Fewer parts

The total number of components in the BT Powerdrive system has been significantly reduced in relation to conventional electric trucks, leading to greater reliability and efficiency. On-board fault diagnosis and easy access to internal parts maximise uptime.

High-quality construction

All BT Levio trucks are built with the highest quality components. For example, all bushings on the LPE240 are constructed from bronze, with lubrication points, for a long and reliable life.

Inox version

For applications requiring the highest standards of hygiene, or exceptionally corrosive environments, the BT Levio LPE200 is available in a stainless steel INOX version (LPE200I).



BT Powerdrive reduces components to a minimum



The LPE200I uses stainless steel for long-lasting performance in corrosive environments

BT Levio Productivity*

This new value package ensures that BT Levio P-series has the edge in today's demanding logistics operations. With a choice of foldable sidegates, fixed guards or backrest, plus the concept of Optimised Truck Performance (OTP), Productivity* includes performance, driveability and safety features that add up to class leading powered pallet trucks that deliver the highest levels of productivity.

BT Levio Productivity* (LPE200)

- Maximum driving speed raised to 8,5km/h
- Automatic speed reduction on cornering
- Easy controllable response in pedestrian mode
- Choice of foldable sidegates, fixed guards or backrest

BT Levio Productivity* (LPE240)

- Electronic power steering
- Automatic speed reduction on cornering
- Easy controllable response in pedestrian mode
- Choice of foldable sidegates, fixed guards or backrest





BT Levio S-series *with 'stand-in' cab design*

For more intensive applications BT Levio S-series LSE200 offers the highest levels of comfort and safety thanks to its 'stand-in' design, which offers full protection for the operator.

The truck retains compact dimensions, however, and thereby excellent manoeuvrability. It is ideal for loading/unloading applications and those demanding long travel distances, such as cross-docking. Its load capacity is 2000 kg.

Narrow chassis

Its overall width of just 770 mm ensures manoeuvrability and makes it more than suitable for use on-board vehicles and containers. The driver stands transversely, meaning that he or she can comfortably drive in both fork and cab directions without changing position. As an option, the control console can be placed at 45° to the operator (away from the forks), favouring applications demanding long travel distances. The backrest is fully adjustable, to accommodate all sizes of operator.

Electronic steering

The S-series is easy to control – whatever the load – thanks to its 'spinner wheel' 180° electronic steering. Braking is also electronically controlled and is regenerative. The parking brake is activated automatically when the truck is stationary.

The forks on the LSE200 have bogie wheels and can be elevated to 235 mm. This makes it ideal for handling roll cages and work on gradients and uneven surfaces.



The LSE200's 180° steering makes it easy to drive



All S-series models offer excellent protection for the operator

BT Levio R-series *rider-seated range*

Based up on the advanced BT Reflex reach truck, R-series models are designed for long-distance handling of multiple loads weighing up to 3000 kg at speeds of nearly 20 km/h. Operator's enjoy the highest levels of protection from the seated-cab design.

LRE200

This BT Levio R-series model, with its load capacity of 2000 kg, offers performance and comfort. The seat and pedals are adjustable, and the electronic steering provides fingertip control for the highest levels of manoeuvrability. Controls and instruments are well laid-out and include a combined battery condition indicator/hour meter. The battery is easily changed in multishift operations via a built-in rollerbed system. The LRE200 offers excellent servicing features and easy access to all parts and components thanks to its BT Reflex heritage.

LRE300 / LRE300T

The ultimate powered pallet trucks, the LRE300 and LRE300T are designed for heavy-duty, intense operations, particularly those demanding the longest travel distances. Offering a full 3000 kg capacity, with fork length up to 3590 mm (enough for three roll cages), the trucks can carry multiple loads with ease.

Maximum travel speed for LRE300 is 15.1 km/h without load, allowing fast and efficient load transportation. The LRE300T has twin motors in order to manage a speed of 19.9 km/h without load. The driver sits high in the 'T' model, with a commanding view for maximum safety.

Both models offer excellent driver ergonomics, with fully adjustable seat, pedals and steering wheel. The door and high profile behind the driver seat offer maximum protection. The cab is mounted with six rubber cushions that reduce vibrations to provide excellent comfort and safety for the operator.

BT Access Control

Performance parameters can be programmed and easily selected upon start-up. Up to 100 PIN codes are available to control access, restricting operation to only authorised drivers. Electronic regenerative braking is programmable to suit the driver – when accelerator is released, and/or when change of travel direction is applied.



360° steering ensures maximum manoeuvrability and control with minimal effort



The E-bar universal mount for warehouse management devices such as PCs, terminals, bar code readers





Materials handling

Toyota Material Handling has a strong European presence with its Toyota and BT brands, establishing close geographic links with its customers in order to better respond to their needs. Toyota has operations in more than 30 countries, and production centres in Ancenis (France), Bologna (Italy) and Mjölby (Sweden).

Toyota Production System

The Toyota Production System (TPS) empowers team members to optimise quality by constantly improving processes and eliminating unnecessary waste of resources. TPS includes a common set of knowledge, values and procedures, entrusts employees with well-defined responsibilities in each production step, and encourages each staff member to strive for overall improvement. Today, TPS is the acknowledged reference among automotive manufacturers and related industries. Our methods enable businesses to achieve sustained gains in productivity while satisfying customer expectations for quality and reliability.

Research & Development

Toyota Material Handling benefits from Toyota's vast experience in the automotive industry, especially in engine development. By taking full advantage of the group's massive R&D facilities and engineering expertise, Toyota has developed a number of world class technologies. Intelligent use of electronic and computer controlled devices has also made a significant contribution to creating more ergonomic and user-friendly operator environments, contributing to safety in the workplace.

Empowering your business

Our services and solutions are designed to provide different

levels and types of support in response to individual customer's needs. This approach gives our customers the power to focus on their core business.

Our commitment to the environment

Toyota believes that getting the job done should never be at the expense of our environment. Our long-term commitment is to develop and deliver environmentally friendly and economically viable materials handling solutions that respect present and future energy needs. Toyota strives to reduce environmental impact throughout the product life cycle, from design, manufacturing and operation through to recycling at end-of-life. Toyota's production centres are all ISO 14001 certified. A declaration of the emissions and waste during the manufacturing process and typical life cycle is available on request.

With its emphasis on eliminating waste, TPS also helps to reduce the environmental impact of our manufacturing activities. CO₂ emissions, water consumption, waste-water generation and landfill quantities have all been reduced, while recycling levels for packaging, water and scrap have been raised. Hazardous substances and air pollutants have also been reduced. Moving towards the creation of a recycling-oriented society, Toyota seeks to continuously improve the recyclability levels of its products.

Choose the features that suit your needs

● standard ○ option

	BT Levio LWE190	BT Levio LWE140	BT Levio LWE160	BT Levio LWE180	BT Levio LWE200	BT Levio LWE250	BT Levio LPE200	BT Levio LPE240	BT Levio LSE200	BT Levio LRE200	BT Levio LRE300
Truck features											
Bogie fork wheels	○	○	○	○	○	●	○	●	●	●	●
BT Powerdrive		●	●	●	●	●	●	●			
BT Castorlink	●	●	●	●	●	●					
Climber wheels	●	●	●	○	○		○	○			
High-capacity battery models				○	○	○		●			
High performance models											●
Powertrak traction system							●	●			
Spring-loaded drive wheel							●	●			
Twin drive tyres											○
Driving features											
180°+ steering		●	●	●	●	●		●			
200°+ steering							●				
208° steering	●										
360° progressive steering											●
Automatic deceleration		●	●	●	●	●	●	●	●	●	●
Electronic braking system	●	●	●	●	●	●	●	●	●	●	●
Electronic regenerative brakes (motor)		●	●	●	●	●	●	●	●	●	●
Electronic speed control	●	●	●	●	●	●	●	●	●		
Flip-down driver platform					○		●	●			
Optimised Truck Performance (OTP)							○	○			
Controls and instruments											
Click-2-Creep		●	●	●	●	●	○*				
Drive motor temperature warning		●	●	●	●	●					
Electronic controller temperature warning		●	●	●	●	●					
Electronic fingertip controls	●	●	●	●	●	●	●	●	●		
Hour meter (working hours)	○	●	●	●	●	●	●	●	●	●	●
Information display		●	●	●	●	●	●	●	●	●	●
Power/Electronic steering								○	●	●	●
Steering direction indicator											●
Temporary speed reduction ('turtle' button)		○	○	○	○	○					
Tiller arm steering	●	○	●	●	●	●	●	●			
Weighing scale		○	○	○	○	○					
Safety features											
Automatic parking brake	●	●	●	●	●	●	●	●	●	●	●
BT Access Control (PIN codes)		●	●	●	●	●	○	○			
Smart Access (electronic cards/fobs)		○	○	○	○	○	○	○			
Clear-view overhead guard										○	
Driver detection system							●	●	●	●	●
Emergency collision button	●	●	●	●	●	●	●	●	●	●	●
Emergency cut-off	●	●	●	●	●	●	●	●	●	●	●
Fixed sideguards							○	○			
Folding sideguards							○	●			
Load support	○	○	○	○	○	○	○	○		○	
Parking brake	●	●	●	●	●	●	●	●	●	●	●
Pedals as in a car										●	●
Programmable performance		●	●	●	●	●	●	●			
Rear backrest/guard							○	○			
Operator features											
Adjustable backrest									●		
Adjustable seat										●	●
Adjustable steering wheel										●	●
E-bar		○	○	○	○	○	○	○		○	○
Low step-in									●		
On-board data terminal mount		○	○	○	○	○	○	○		○	○
Shrinkwrap holder			○	○	○	○					
Storage compartments	●	●	●	●	●	●			●		
Writing table			○	○	○	○	○	○	○	●	●
Maintenance features											
Easy access for maintenance	●	●	●	●	●	●	●	●	●	●	●
Fault diagnosis facility	●	●	●	●	●	●	●	●			
Historic fault log		●	●	●	●	●	●	●		●	●
Lubrication points	●						○	●			
Battery management features											
Battery change facility							○	○		○	
Battery status indicator	○	●	●	●	●	●	●	●	●	●	●
Battery discharge prevention system		●	●	●	●	●	●	●			
Built-in charger	●	○	○	○	○	○	○				
Heavy-duty battery compartments								●			
In-vehicle charging	○										
Sideways battery change					○	○	○	○	○	●	●
Special applications											
Coldstore version							○	○		○	
EEx version (ATEX)		○	○	○	○	○	○	○	○	○	○
Corrosive environment version							○				
Reel/drum handling		○	○	○	○	○					

* = Only for LPE200 6 km/h



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TP-Technical Publications

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MATERIAL HANDLING

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