LI-ION TECHNOLOGY

TRITON

LITHIUM PEDESTRIAN STACKER

Lifting Height: 3000-3500 mm / Load Capacity: 1500 kg

Variable Speed Control

Intelligent & Efficient

Rugged & Durable

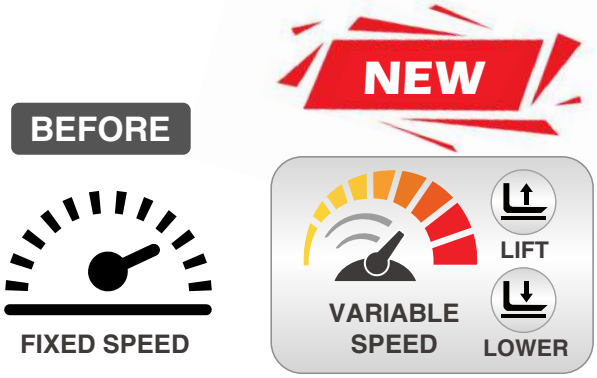
Easy & Comfortable

Variable Speed Control on Lifting & Lowering

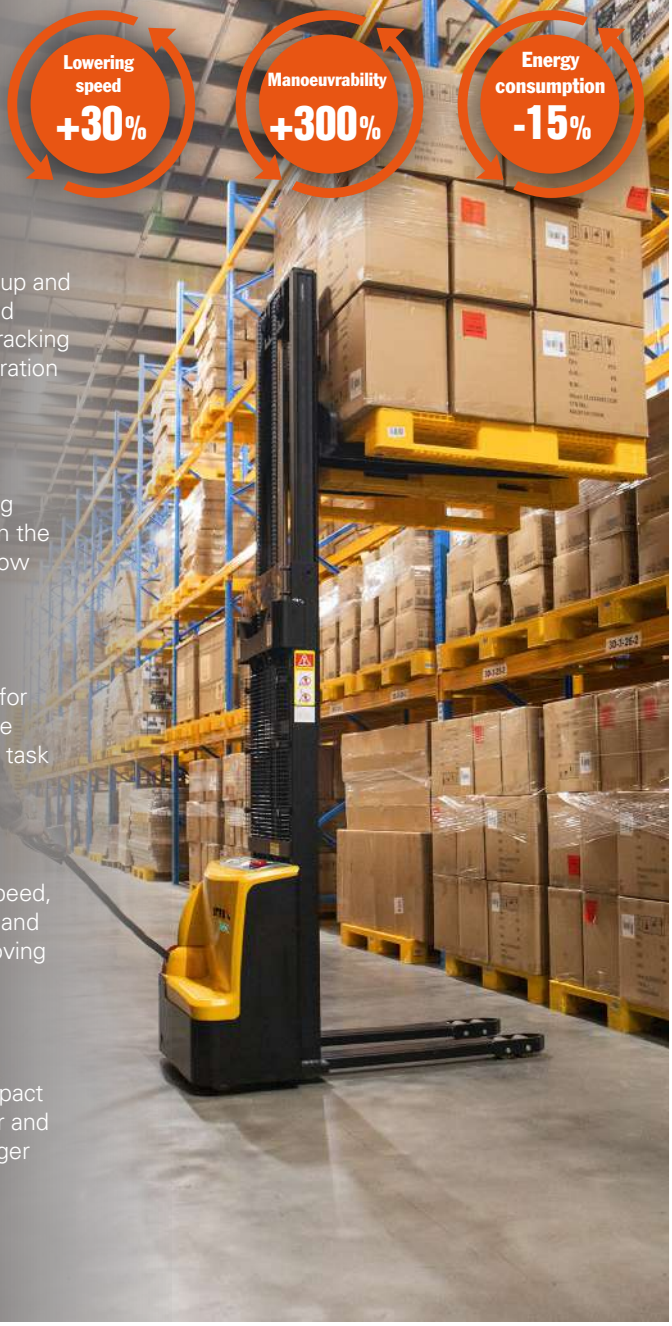
Comfortable and efficient thanks to the patented intelligent handle and control system, ideal for replacing manual & semi-electric stackers, for light use in narrow warehouse environments with efficient and easy pallet stacking.

The proportional lowering brings high efficiency for exact pallet placement and more precise control when compared to the normal fixed speed of lifting & lowering.

Variable speed control by proportional control knob, keeps lifting and lowering smooth, stable, safe and engergy saving.



Precise Control



- **Proportional lifting & lowering**

  The variable speed control ensures the stacker goes up and down smoothly, minimizing the mechanical shock and vibration, ensuring fragile loads are gently placed on racking or the floor, and reducing the impact of noise and vibration on operators.

- **Lowering buffering**

  Automatic lowering speed descent with soft buffering when the fork height is lowered to around 10cm from the ground, effectively protects the safety of the cargo, low noise and small vibration.

- **High efficiency**

  The variable speed control brings accurate response for adjusting the lifting & lowering speed according to the actual situation, the operator can easily complete the task and improve the working efficiency.

- **Energy saving**

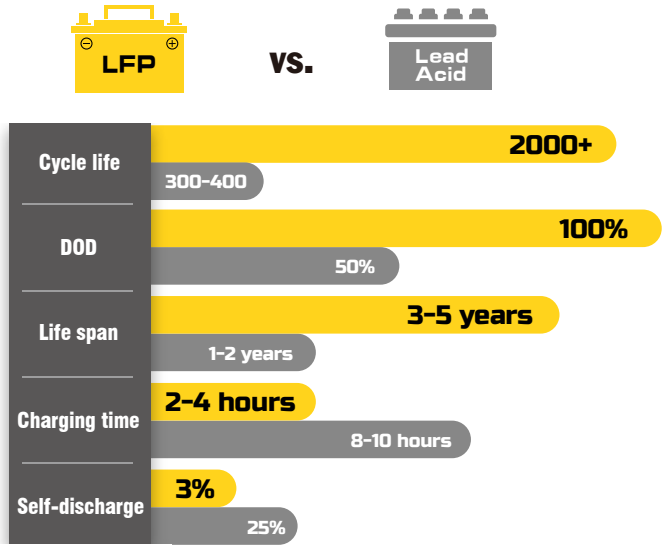
  Compared to the traditional fixed lifting & lowering speed, variable speed can be adjusted according to the load and height by operator, reducing energy waste and improving energy utilization rate.

- **Longer service life**

  Variable speed control can reduce the mechanical impact and friction during lifting & lowering, reduce the wear and tear on the chassis, mast, bearings, and enable a longer service life.

Easy & Comfortable

Lithium Battery vs. Lead-Acid Battery



- **Longer cycle life**

  Lithium batteries typically have a cycle life of over 2000 cycles, whereas lead-acid batteries usually last around 300-400 cycles, lowering replacement and maintenance costs.

- **Faster charging**

  Lithium batteries support rapid charging, allowing them to be fully charged in a shorter period, reducing downtime and increasing efficiency.

- **Low self-discharge rate**

  Lithium batteries have a low self-discharge rate, resulting in minimal energy loss when not in use, making storage more convenient.

- **Wider Operating Temperature Range**

  Lithium batteries perform better across a wider range of temperatures, providing greater adaptability.

- **No Memory Effect**

  Lithium batteries can be charged at any state of charge, which reduces concerns about deep discharge.

- **Effortless, easy to operate**

  Low-mounted longer tiller reduces steering force required.

- **Low mast static height**

  Easy to operate in containers and elevators with less than 3.3m lifting height.

- **The steering angle is designed to be above 180 degrees**

  Small turning radius.

- **Reasonable design of the balancing wheel eccentric distance**

  Flexible direction commutation.

- **Easy to recharge**

  Built-in charger and an external charging cable storage box for convenient charging.

- **Excellent maneuverability**

  Precise and maneuverable operating, high safety and efficiency.

Intelligent & Efficient

Patented multifunctional intelligent tiller handle is unique design for quick fault diagnosis, enabling an easier service, shorter service time and lowered labor costs.

Multifunctional intelligent tiller handle

- Recharging Alert
- Lifting & Lowering
- Fault code display
- Emergency reverse switch
- Forward and backward control knob
- Horn
- Battery power

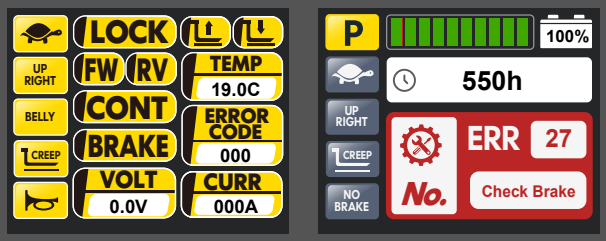
Easy Maintenance

UART

Serial communication technology

Single wiring harness communication from tiller handle to controller system. Simple, Durable and Stable.

- Low after-sales service cost
- Quick & easy fault diagnosis
- Everyone can be an expert



Operation status & fault diagnosis are integrated onto the tiller handle display for easy troubleshooting.

Operator Preferred

Turtle Speed 01

Enable operator to choose different speed modes based on their experience and the specific work environment.

Up-Right Drive 02

Easily maneuvered with the handle in the vertical position by pressing the turtle-speed button.

Engineering Mode 03
(Brake Release)

When truck is down, release the brake to move the unit manually.

Rugged & Durable

Due to a high-strength frame and mast design and solid materials used, the deformation of the frame, mast, and forks is small.

Longer service life

Mast: Standard C+H channel steel
Frame: Steel plate thickness of 5mm
Frame bottom plate: 30mm integrated steel plate.

Double-chain design

Compared with single-chain design, it has higher strength, safer and more stable.

Safe operation

Emergency reverse switch

In case of an emergency, it protects the operator and the surrounding personnel from harm.

Safety travel speed limit

When the fork is lifted to above 500mm, the driving speed automatically reduces to 2km/h to ensure the safety of operating at a high position in case of any misoperation.

Small deformation of forks and masts, stable and durable

More stable when lifting & lowering with loads.

Full coverage protection on mast

Standard equipped with cylinder explosion-proof valve

It can prevent accidents such as uncontrolled descent caused by unexpected rupture of oil pipes, ensuring stable descent of the load and personal safety, and preventing damage to equipment.

Built-in charger

Hidden charging plug, high safety, the whole vehicle is powered off during charging, reducing safety hazards.

High-strength forks

The forks are formed in one piece with a thickness of 8mm steel. High strength and small deformation even under heavy loads.

The battery is fixed at the bottom of the frame

Improved stability.

High lateral and longitudinal stability

Wider wheelbase and longer axle distance.

Adjustable balance wheel

Improved stability and maneuverability, suitable for different working scenarios.

The low ground clearance of 30 mm helps to reduce the risk of foot injuries

Battery low voltage protection

Effectively avoid battery over-discharge, ensuring a longer battery life.

Easy, Safe and Efficient

Feature

- Proportional speed control for lifting and lowering, fast or slow, as you wish; Easy, safe and efficient
- High efficiency, fast lifting and lowering speeds
- Compact size in narrow warehouse environments with efficient and easy pallet stacking
- Intelligent and efficient
- Sturdy, robust, and durable

ES15H-Li-3M

Capacity: 1500kg
Lift Height: 3000mm
Fork size: 560 x 1150mm
Battery: 24V 60Ah
Charger: 15A charger

Work **Faster**
Less time waiting
for Lift & Lower

LIFT TO 3M IN 14s

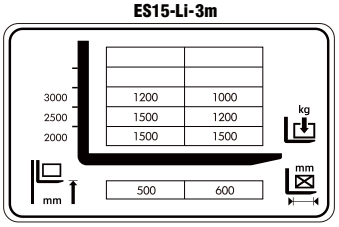
LOWER DOWN IN 17s

ES15H-Li-3.5M

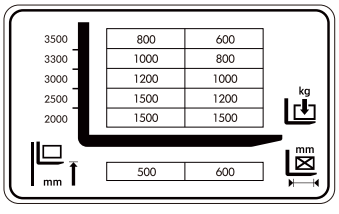
Capacity: 1500kg
Lift Height: 3500mm
Fork size: 560 x 1150mm
Battery: 24V 60Ah
Charger: 15A charger

LOAD CHART

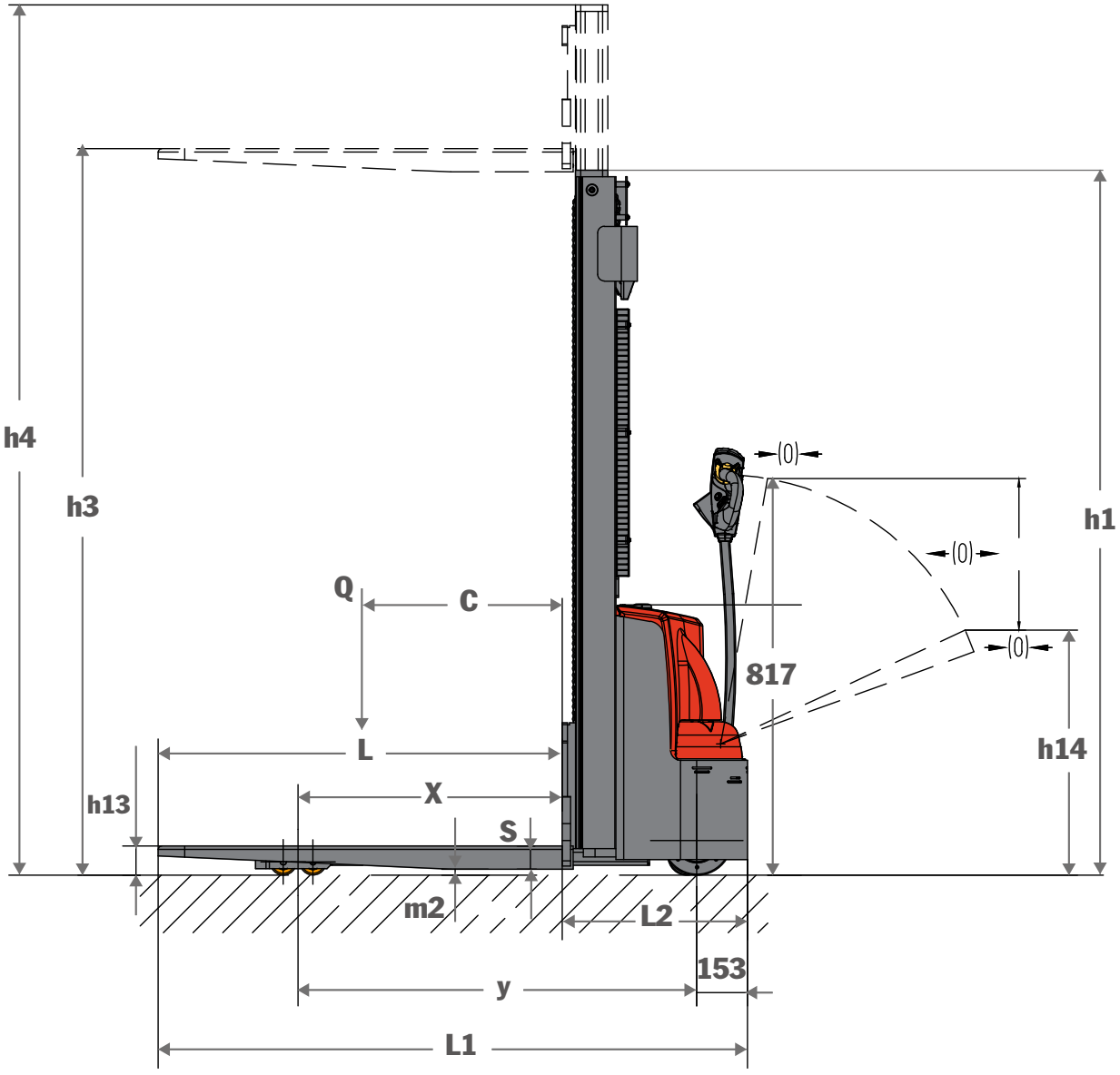
ES15-Li-3m

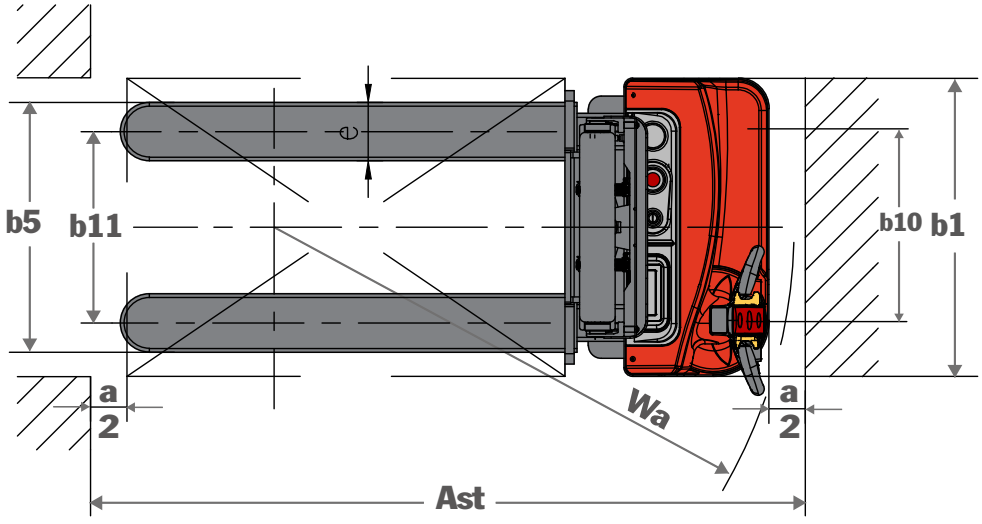


ES15-Li-3.5m



Dimensions





Specifications

	MODEL			ES15-Li-3M	ES15-Li-3.5M	
	DISTINGUISHING MARKS					
1.3	Drive			Battery	Battery	
1.4	Operator type			Pedestrian	Pedestrian	
1.5	Load capacity/rated load	Q	kg	1500	1500	
1.6	Load centre distance	c	mm	600	600	
1.8	Load distance, centre of drive axle to fork	x	mm	800	800	
1.9	Wheelbase	y	mm	1210	1210	
	WEIGHT					
2.1	Service weight (without battery)		kg	556	575	
2.2	Service weight		kg	570	589	
2.3	Axle loading, laden front/rear		kg	618/1441	618/1441	
2.4	Axle loading, unladen front/rear		kg	419/140	419/140	
	TYRES/ CHASSIS					
3.1	Wheels			Polyurethane	Polyurethane	
3.2	Wheel size, front	Ø x width	mm	Ø210x70	Ø210x70	
3.3	Wheel size, rear	Ø x width	mm	Ø80X70	Ø80X70	
3.4	Additional wheels (dimensions)	Ø x width	mm	Ø115X55	Ø115X55	
3.5	Wheels, number front/rear (x = driven wheels)			1x + 1 / 4	1x + 1 / 4	
3.6	Tread, front	b10	mm	550	550	
3.7	Tread, rear(560 fork width)	b11	mm	390	390	
	DIMENSIONS					
4.2	Lowered mast height	h1	mm	1980	2230	
4.3	Free lift height	h2	mm	/	/	
4.4	Lifting height	h3	mm	3000	3500	
4.5	Extended mast height	h4	mm	3435	3935	
4.9	Height of tiller in driving position, min./max.	h14	mm	910/1270	910/1270	
4.15	Height, lowered	h13	mm	90±2	90±2	
4.19	Overall length(1150/1220 fork length)	l1	mm	1730/1780	1730/1780	
4.20	Length to face of forks	l2	mm	560	560	
4.21	Overall width	b1	mm	820	820	
4.22	Fork dimensions	s/e/l	mm	70X160X1150	70X160X1150	
4.25	Width over forks	b5	b5(mm)	560	560	
4.32	Ground clearance, centre of wheelbase	m2	m2(mm)	30	30	
4.34.1	Aisle width for pallets 1000 × 1200 crossways	Ast	Ast(mm)	2268	2268	
4.34.2	Aisle width for pallets 800 × 1200 lengthways	Ast	Ast(mm)	2194	2194	
4.35	Turning radius	Wa	Wa(mm)	1425	1425	
	PERFORMANCE DATA					
5.1	Travel speed, with/without load		km/h	4/4.5	4/4.5	
5.2	Lift speed, without load		mm/s	0-130	0-130	
	Lift speed, with load		mm/s	0-87	0-87	
5.3	Lowering speed, without load		mm/s	22.5-167	22.5-167	
	Lowering speed, with load		mm/s	27.8-137	27.8-137	
5.8	Max. gradeability, with/without load		%	5/10	5/10	
5.10	Service brake			Electromagnetic	Electromagnetic	
	ELECTRIC-ENGINE					
6.1	Drive motor rating S2 60 min		kW	0.75	0.75	
6.2	Lift motor rating at S3 15%		kW	2.2	2.2	
6.4	Battery voltage/nominal capacity (K5)		V/Ah	24V/60Ah Li-battery	24V/60Ah Li-battery	
6.5	Battery weight +/- 5%		kg	14	14	
6.6	Energy consumption according to EN 16796		kWh	0.4	0.4	
	ADDITION DATA					
8.1	Type of drive control			DC seed control	DC seed control	
8.4	Sound level at the driver's ear according to EN 12053		dB(A)	<75	<75	

Note: 1kgs=2.2lbs, 25.4mm=1inch

MAKE YOUR JOB EASIER!

TRITON

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