

Features

Truck	Standard	Options
24V AC asynchronous drive motor	●	
AC controller	●	
Hydraulic power unit	●	
Key switch	●	
Polyurethane drive wheel	●	
Fork length: 1150mm	●	
Distance between fork-arms: 570mm	●	
Fork surface from the ground: 90mm	●	
Height lifting limit of 1.8m	●	
Lifting buffering & Stepless lifting control		○
Additional wheel	●	
Dual load wheels	●	
USB Power Supply		○
Stepless lowering speed control	●	
Turning deceleration	●	
A full range of fork lengths		○
Distance between fork-arms: 600/680mm		○
Various mast lift height (see the table of mast parameters)		○
Load backrest		○
Protective hood of mast		○
Battery side roll out		○
Controls and instruments		
EPS (Electric Power Steering) system	●	
Multifunctional instruments	●	
Non-contact interlock switch	●	
Multifunctional handle	●	
Safety		
Emergency shut-off switch	●	
Horn	●	
Other		
Automatic charger		○

Optional Lead Acid Battery List

Capacity(Ah)
24V/240/280/340Ah

Optional Lithium Battery List

Capacity(Ah)		
EVE	● 24V/150Ah	○ 24V/230Ah

Note: ● Battery; ○ Battery Opt;

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ISO 45001:2018



ISO 14001:2015



ISO 9001:2015



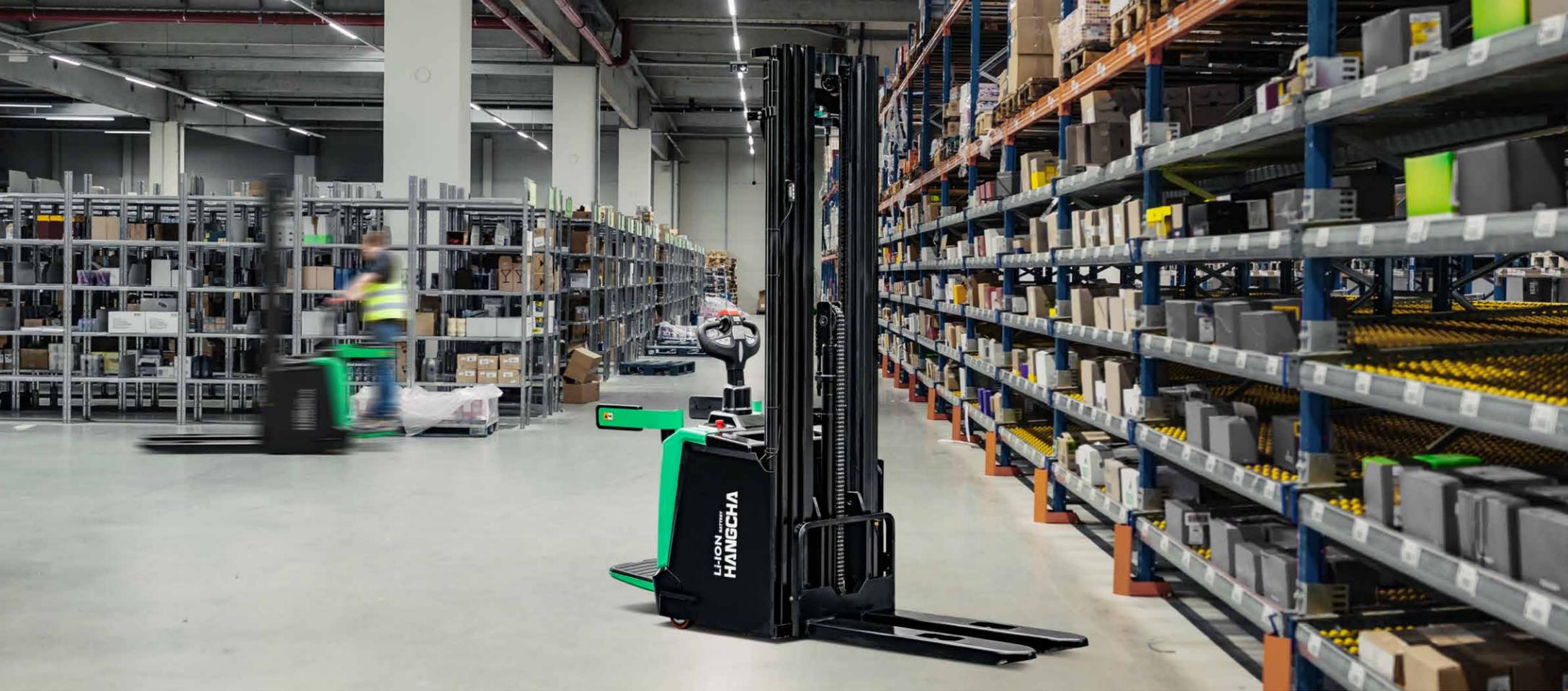
HANGCHA trucks conform to the European Safety Requirements.



XA SERIES

ELECTRIC STACKER

With capacity of 1,200 to 2,000kg



EFFORTLESSLY MAXIMISING PERFORMANCE

- The advanced AC control system ensures precise and stable control with high efficiency.
- The CANBUS bus structure makes the whole stacker communication faster and more reliable.
- Equipped with an AC driving motor, it has excellent acceleration performance, good climbing ability, low heat generation, no brushes, and is maintenance-free.



Standard configuration of a proportional lowering system, making operation smoother and more precise.



XA SERIES ELECTRIC STACKER

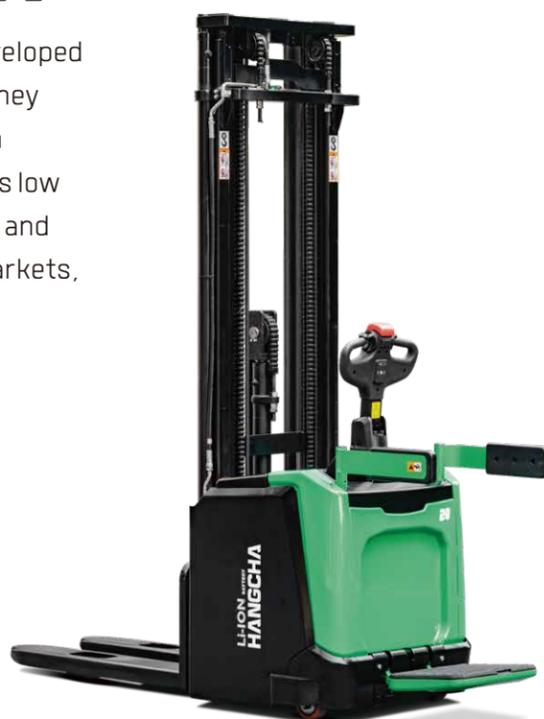
XA series electric stacker are a new generation of products developed by Hangcha specifically for warehouse logistics applications. They feature the latest **AC drive control system**, which is advanced in performance, comfortable to operate, safe and reliable, and has low cost for use and maintenance. They are an ideal tool for loading and unloading and moving palletized goods in warehouses, supermarkets, workshops.



APPEARANCE

The XA series electric stacker adopt a professional appearance design with a family and series consideration, with smooth lines and a dynamic look; they fully consider ergonomics and comply with the latest design trends.

The whole stacker is surrounded by stamped steel plates, which are strong, sturdy, durable, high-grade, and meet environmental protection requirements.



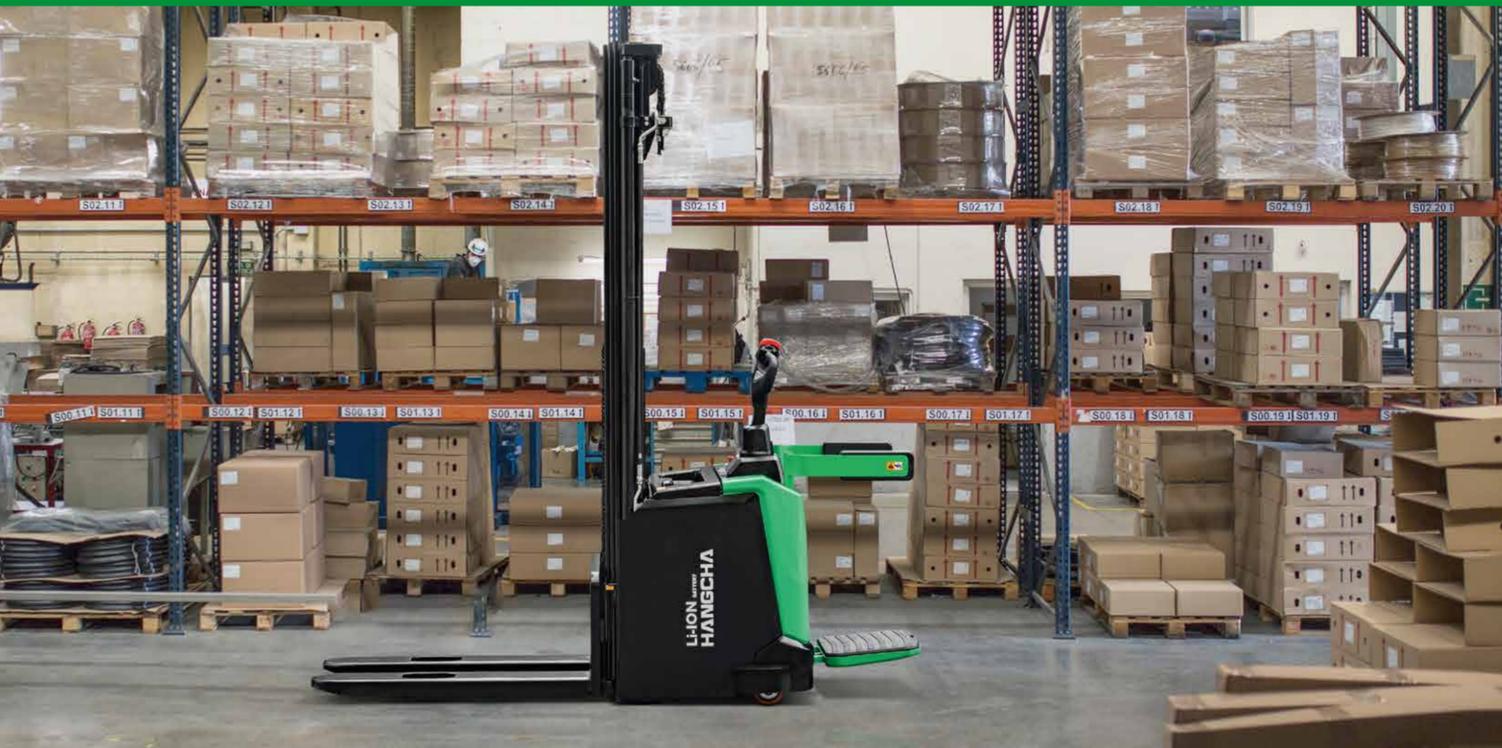
Standard equipment with EPS makes the operation more convenient and flexible.

MAKE ANY JOB LOOK LIKE A WALK IN THE PARK

- The optimized truck structure ensures that the truck has an excellent operating view, making it more convenient to enter and exit pallets.
- The compact body and large corner design make the truck suitable for work in narrow spaces, and the chassis is designed with a wedge shape, greatly improving passability.



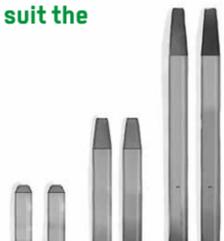
The entire series comes standard with a proportional lowering, making the control of the fork more accurate and the lifting and lowering of the cargo more stable.



The standing pedal is designed with shock absorption, greatly improving the comfort of standing and reducing fatigue from long-term driving.



Different forks are available to suit the handling of various pallets.



The control handle is beauty and simple, with all operating functions easily completed with one hand.



The unique turtle speed function with a red light display makes it more convenient to move the stacker slowly, and even in very narrow spaces, goods can be placed.



RUGGED ON THE OUTSIDE

- The low center of gravity design, with a high-strength steel frame structure, has a large residual load capacity and a long service life.
- The mast is made of H-section steel, which provides better rigidity and stability compared to C-section steel.

The stamped fork has higher strength and impact resistance, and the fork tip guide further improves work efficiency.



Reliability

- The power plug is fixed on the truck body to prevent damage to the plug when lifting the battery.
- Adopting a non-contact proximity switch, it has a long lifespan and reliable operation.
- The battery is securely fixed, and the battery cover is supported by soft materials, reducing the vibration and noise generated during operation.
- The whole series uses waterproof connectors, and all wires and cables have reliable protection, greatly improving the reliability of the electrical system.
- The hydraulic power unit is low noise, low vibration, and the lifting and lowering are stable and reliable.

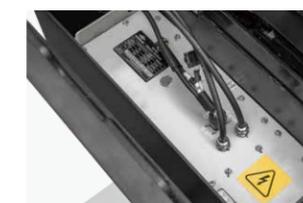


Maintenance

- The AC motor is brushless and maintenance-free, saving usage costs.
- All shafts are equipped with lubricated bushings and oil cups, making maintenance convenient and extending the service life.



The integrated power display, timing, and fault self-diagnosis table are convenient for maintenance.



The rear cover can be completely opened, and the components are clear at a glance, making the maintenance of the truck very convenient.

BETTER SAFE THAN SORRY

With three braking types:

Releasing brake, reversing brake and emergency brake, the driving safety has been ensured.

1



After fork lifting 500mm.



2



Decrease speed when turning



3



Lifting buffering (Opt.) (Lift)



4



Soft Landing (Lowering)



5



ADVANCED SAFETY FEATURES

- 1 The standard feature of automatic speed reduction after the fork lifting by 500mm.
- 2 The standard cornering deceleration function is safer.
- 3 Lifting buffering with stepless lifting control. (Opt.) The option excludes the model equipped with the J1 controller.
- 4 Soft landing system, the speed of lowering is automatically reduced when the fork is less than 100mm from the ground, effectively protecting the safety of the cargo. (only available for duplex mast)
- 5 Standard equipment includes a height limit of 1.8m for lifting, with the ability to continue lifting after the safety barrier is retracted, ensuring convenience for personnel to escape in case of high-altitude cargo falling.

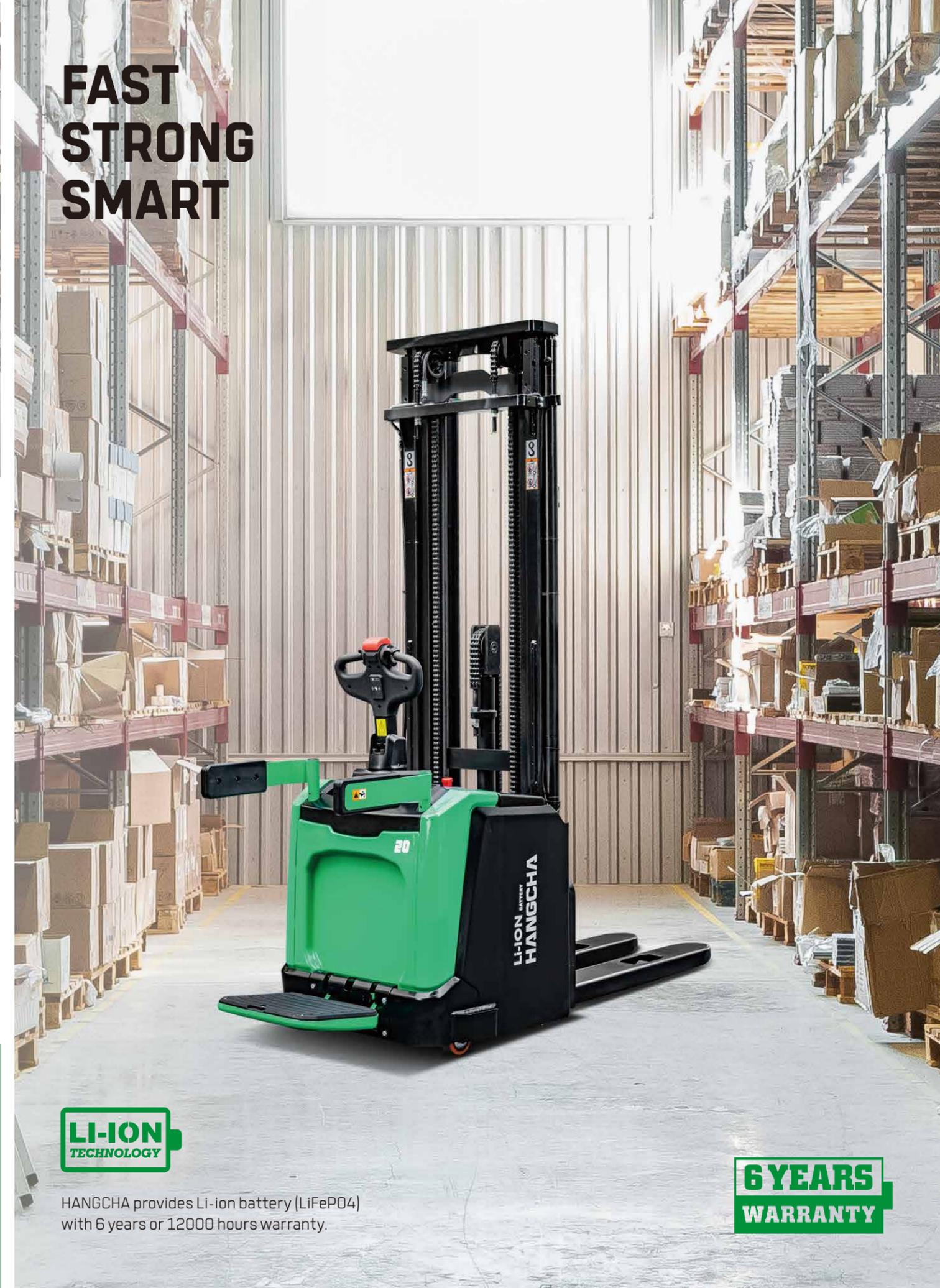


The emergency reverse button at the head of the handle can effectively prevent the operator from being injured when encountering an emergency while driving backward.



It has anti-slip protection on slopes to ensure operation safety.

FAST STRONG SMART



HANGCHA provides Li-ion battery (LiFePO4) with 6 years or 12000 hours warranty.

**6 YEARS
WARRANTY**

LITHIUM POWERED

EMPOWER YOURSELF
WITH THE BEST



Li
Lithium

POWER THE POSSIBILITIES
RELIABLE LITHIUM-ION TECHNOLOGY



LITHIUM BATTERY ADVANTAGES



Long service life

4000 full charging cycles with at least 75% residual capacity.



Return on investment

Add flexibility to your operation, cost-saving in the long term, increased efficiencies.



Maintenance free

No topping up of water or checking acid levels.



High energy density

The high energy density of the Li-Ion battery ensures long working times and increases the high availability.



Cold area application

Li-Ion batteries maintain high performance at temperatures below freezing.



High safety and reliability

Intelligent battery management monitoring every important function, no emission of battery gasses.



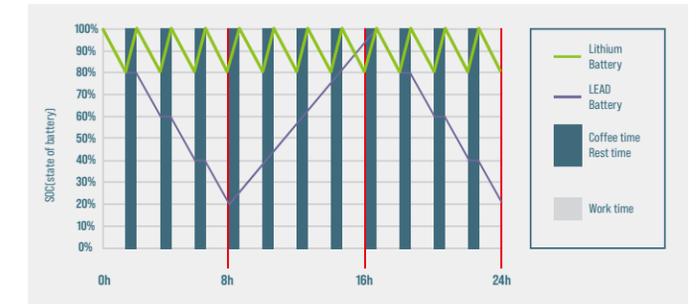
Opportunity charging

Full performance during several shifts thanks to effective interim charging.

FEATURES & BENEFITS THE HANGCHA DIFFERENCE

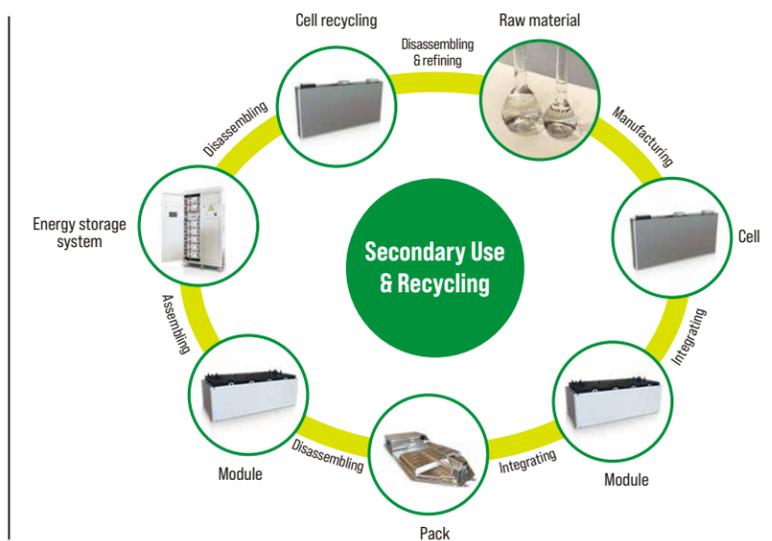
Efficiency

By quick opportunity charging any downtime, such as a lunch break, can be efficiently used and the battery is recharged in a very short period of time. Interim charging does not affect the battery service life.



Safety

- / Intelligent battery management monitoring every important function.
- / Higher user safety, thanks to acid-free use.
- / User friendly due to avoided battery change.
- / No emission of battery gasses.



QUESTION 1

Q: What are the characteristics of lithium batteries, especially when used in high and low temperature environments?

Charging temperature: -30 C - 65 C
Discharge temperature: -30 C - 65 C
Storage environment temperature: -30 C - 65 C

After the truck key switch is closed, the instrument battery condition needs to be checked:

1. Confirm that there is no battery system alarm message on the instrument panel.
2. Please check the remaining power before use. It is recommended to use the SOC between 50% and 100%.
3. If the SOC is lower than 20%, it is not recommended to continue using it. Please charge it as soon as possible.

QUESTION 2

Q: What is the charging time and usage time calculation of forklift lithium battery?

1. Available power of lithium battery (kWh) = rated voltage * rated power * 90% (To avoid over-discharge damaging the battery, the forklift is equipped with low power protection [less than 10%]).
 2. Charging time (h) = rated capacity of lithium battery (Ah) * 90% * charger output current (A).
 3. The power consumed for charging (kWh) = the available power of the lithium battery * 93% (the charging efficiency of the charger is calculated as 93%).
 4. Usage time (h) = available power of lithium battery * energy consumption data.
- For specific energy consumption values, please refer to the technical table on the sharing platform.**

QUESTION 3

Q: How does Hangcha BMS work to ensure the safety of the lithium battery?

HANGCHA BMS (battery management system) can monitor the cells at all times. As a result, hangcha lithium power is the reliable solution.



Battery Safety Management:

- Overcharge/over discharge protection
- Overcurrent/over-temperature/low-temperature protection
- Multi-level fault diagnosis protection
- Double fault monitoring



Battery Parameter Detection:

- Battery voltage detection and analysis
- Battery current detection and analysis
- Battery temperature detection and analysis



Equilibrium Management:

- Equalization based on voltage mode
- Equalization based on time mode
- Equalization based on battery cell SOC
- Active/passive equalization optional



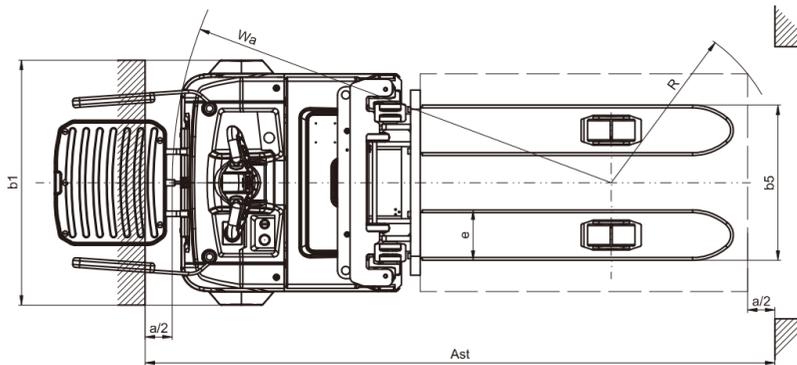
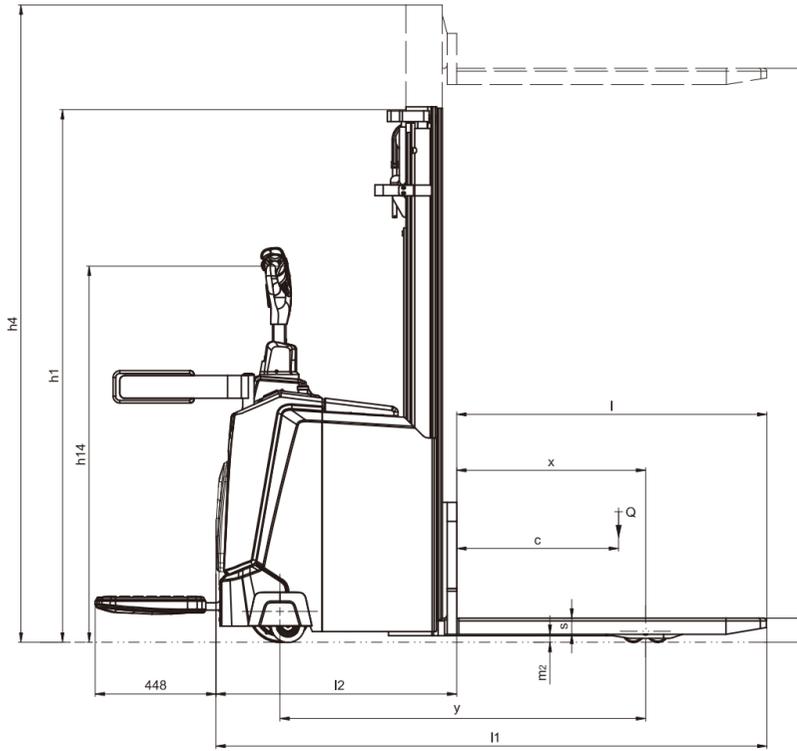
Other Features:

- Low cost, low power consumption
- Historical data record
- Flexible cascade expansion
- CRC data validation

Technical data

Distinguishing mark	1.1	HANGCHA GROUP CO.,LTD.						
	1.2	CD012-XAJ1/01/C1SN-I	CD012-XAJ1/01/C1SN	CD016-XAJ1/01/C1SN-I	CD016-XAJ1/01/C1SN	CD020-XAJ1/01/C1SN-I	CD020-XAJ1/01/C1SN	
1.3	Manufacturer (abbreviation)	Electric	Electric	Electric	Electric	Electric	Electric	
1.4	Manufacturer's type designation	Standing	Standing	Standing	Standing	Standing	Standing	
1.5	Drive: electric (battery type, mains, ...), diesel, petrol, fuel gas	1200	1200	1600	1600	2000	2000	
1.6	Operator type: hand, pedestrian, standing, seated, order-picker	kg	kg	kg	kg	kg	kg	
1.7	Rated capacity/ rated load	600	600	600	600	600	600	
1.8	Load centre distance	c (mm)	700	700	700	700	700	
1.9	Wheelbase	y (mm)	1356	1356	1356	1356	1356	
2.1	Service weight	kg	898/1473	1023/1508	939/1848	1076/1886	985/2225	1121/2264
2.2	Axle loading, laden front/rear	kg	810/361	935/396	821/366	958/404	837/373	974/411
2.3	Axle loading, unladen front/rear	kg	PU	PU	PU	PU	PU	PU
3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane	mm	Ø230-75	Ø230-75	Ø230-75	Ø230-75	Ø230-75	Ø230-75
3.2	Tyre size, front	mm	Ø83-80	Ø83-80	Ø83-80	Ø83-80	Ø83-80	Ø83-80
3.3	Tyre size, rear	mm	Ø125-50	Ø125-50	Ø125-50	Ø125-50	Ø125-50	Ø125-50
3.4	Additional wheels (dimensions)	mm	1x+2/4	1x+2/4	1x+2/4	1x+2/4	1x+2/4	1x+2/4
3.5	Wheels, number front/rear (- = driven wheels)	b10 (mm)	675	675	675	675	675	675
3.6	Tread, front	b11 (mm)	385	385	385	385	385	385
3.7	Tread, rear	h1 (mm)	1840	1840	1890	1890	1990	1990
4.2	Height, mast lowered	h2 (mm)	90	90	90	90	90	90
4.3	Free lift	h3 (mm)	2700	2700	2700	2700	2700	2700
4.4	Lift	h4 (mm)	3190	3190	3240	3240	3340	3340
4.5	Height, mast extended	h14 (mm)	1170/1400	1170/1400	1170/1400	1170/1400	1170/1400	1170/1400
4.9	Height drawbar in driving position min./max.	h13 (mm)	90	90	90	90	90	90
4.15	Height, lowered	l1 (mm)	2043(2491)	2043(2491)	2043(2491)	2043(2491)	2043(2491)	2043(2491)
4.19	Overall length	l2 (mm)	893(1341) ²⁾					
4.2	Length to face of forks	b1/b2 (mm)	900	900	900	900	900	900
4.21	Overall width	s/e/l (mm)	60/185/1150	60/185/1150	60/185/1150	60/185/1150	65/185/1150	65/185/1150
4.22	Fork dimensions DIN ISO 2331	bs (mm)	570	570	570	570	570	570
4.25	Fork spread	m2 (mm)	25	25	25	25	25	25
4.32	Ground clearance, centre of wheelbase	Ast (mm)	2260(2691) ¹⁾					
4.34.1	Aisle width for pallets 1000 • 1200 crossways	Ast (mm)	2310(2741) ²⁾					
4.34.2	Aisle width for pallets 800 • 1200 lengthways	Wa (mm)	1610(2041)	1610(2041)	1610(2041)	1610(2041)	1610(2041)	1610(2041)
4.35	Turning radius	R	0.11/0.16	0.11/0.16	0.155/0.27	0.155/0.27	0.125/0.23	0.125/0.23
5.1	Travel speed, laden/unladen	m/s	0.35/0.26	0.35/0.26	0.28/0.215	0.28/0.215	0.225/0.190	0.225/0.190
5.2	Lift speed, laden/unladen	%	8/16	8/16	5/16	5/16	5/16	5/16
5.3	Lowering speed, lade/unladen	Regenerative	Regenerative	Regenerative	Regenerative	Regenerative	Regenerative	Regenerative
5.8	Max. gradeability, laden/unladen	kW	1.6	1.6	1.6	1.6	1.6	1.6
5.10	Service brake	kW	2.2	2.2	3.2	3.2	3.2	3.2
6.1	Drive motor rating S2 60 min	V/[Ah]orkWh	24/150	24/240	24/150	24/280	24/150	24/280
6.2	Lift motor rating at S3 15 %	kg	63	230	63	245	63	245
6.4	Battery voltage/nominal capacity							
6.5	Battery weight							

Note: 1) According to VDI2198 standard+220mm. 2)According to VDI2198 standard+140mm. 3)Triplex full-free+21mm



1.2t Mast Specification

Type	Max. lifting height h ₃	Ground clearance, fork (h ₃ +h ₁₃)	Lowered height h ₁	Extended height h ₄	Free lift	Load Capacity at 600mm	
						1.2t	kg
Double cylinder duplex wide view	2100 ¹⁾	2190	1540	2590	90	1200	1200
	2500 ¹⁾	2590	1740	2990	90	1200	1200
	2700	2790	1840	3190	90	1200	1200
	3000	3090	1990	3490	90	1200	1200
	3200	3290	2090	3690	90	1200	1200
	3400	3490	2190	3890	90	1170	1170
Duplex full-free wide view	2100 ¹⁾	2190	1540	2590	1070	1200	1200
	2500 ¹⁾	2590	1740	2990	1270	1200	1200
	2700 ¹⁾	2790	1840	3190	1370	1200	1200
	3000	3090	1990	3490	1520	1200	1200
	3200	3290	2090	3690	1620	1200	1200
	3400	3490	2190	3890	1720	1170	1170
Triplex full-free wide view	3600 ¹⁾	3690	2290	4090	1820	1100	1100
	3900 ¹⁾	3990	1660	4080	1195	1100	1100
	4100 ¹⁾	4190	1830	4580	1295	990	990
	4300	4390	1890	4780	1360	800	800
	4500	4590	1960	4980	1425	850	850
	4700	4790	2030	5180	1495	700	700

Not: 1) Optional feature for battery side roll out was necessary. It can make changing the battery easier.

1.6t Mast Specification

Type	Max. lifting height h ₃	Ground clearance, fork (h ₃ +h ₁₃)	Lowered height h ₁	Extended height h ₄	Free lift	Load Capacity at 600mm	
						1.6t	kg
Double cylinder duplex wide view	2000 ¹⁾	2090	1540	2540	90	1600	1600
	2400 ¹⁾	2490	1740	2940	90	1600	1600
	2700	2790	1890	3240	90	1600	1600
	2900	2990	1990	3440	90	1600	1600
	3000	3090	2040	3540	90	1600	1600
	3300	3390	2190	3840	90	1350	1350
Duplex full-free wide view	3500	3590	2290	4040	90	1220	1220
	3800	3890	2440	4340	90	1080	1080
	4000	4090	2540	4540	90	1000	1000
	4200	4290	2640	4740	90	900	900
	4500	4590	2790	5040	90	750	750
	2000 ¹⁾	2090	1540	2540	1020	1600	1600
Triplex full-free wide view	2400 ¹⁾	2490	1740	2940	1220	1600	1600
	2700	2790	1890	3240	1370	1600	1600
	3000	3090	2040	3540	1520	1600	1600
	3300	3390	2190	3840	1670	1350	1350
	3500	3590	2290	4040	1770	1220	1220
	3500 ¹⁾	3590	1660	4020	1160	1220	1220
Triplex full-free wide view	3800 ¹⁾	3890	1760	4320	1260	1080	1080
	4000 ¹⁾	4090	1830	4520	1330	1000	1000
	4200	4290	1890	4720	1390	900	900
	4500	4590	1990	5020	1490	750	750
	4700	4790	2060	5220	1560	700	700
	4800	4890	2090	5320	1590	660	660
5000	5090	2160	5520	1660	600	600	
5200	5290	2230	5720	1730	550	550	
5500	5590	2330	6020	1830	520	520	
6000	6090	2500	6520	2000	450	450	

Not: 1) Optional feature for battery side roll out was necessary. It can make changing the battery easier.

2.0t Mast Specification

Type	Max. lifting height h ₃	Ground clearance, fork (h ₃ +h ₁₃)	Lowered height h ₁	Extended height h ₄	Free lift	Load Capacity at 600mm	
						2.0t	kg
Double cylinder duplex wide view	2050 ¹⁾	2140	1660	2690	90	2000	2000
	2250 ¹⁾	2340	1760	2890	90	2000	2000
	2400 ¹⁾	2490	1830	3030	90	2000	2000
	2700	2790	1990	3340	90	1800	1800
	3000	3090	2140	3640	90	1600	1600
	3200	3290	2240	3840	90	1470	1470
Duplex full-free wide view	3400	3490	2340	4040	90	1340	1340
	3600	3690	2440	4240	90	1200	1200
	3800	3890	2540	4440	90	1130	1130
	4000	4090	2640	4640	90	1050	1050
	4300	4390	2850	5000	90	950	950
	4500	4590	2950	5200	90	860	860
Triplex full-free wide view	2050 ¹⁾	2140	1660	2690	1020	2000	2000
	2250 ¹⁾	2340	1760	2890	1120	2000	2000
	2400 ¹⁾	2490	1830	3030	1200	2000	2000
	2700	2790	1990	3340	1350	1800	1800
	3000	3090	2140	3640	1500	1600	1600
	3200	3290	2240	3840	1590	1470	1470
Triplex full-free wide view	3400	3490	2340	4040	1700	1340	1340
	3600	3690	2440	4240	1800	1200	1200
	3500 ¹⁾	3590	1800	4150	1165	1270	1270
	3800	3890	1900	4450	1260	1130	1130
	4000	4090	1965	4650	1300	1050	1050
	4200	4290	2030	4850	1395	950	950
4500	4590	2130	5150	1495	800	800	
4800	4890	2230	5450	1595	710	710	
5000	5090	2330	5650	1660	650	650	
5500	5590	2465	6150	1830	570	570	
6000	6090	2640	6650	2000	500	500	

Not: 1) Optional feature for battery side roll out was necessary. It can make changing the battery easier.