

CPD15/18/20/25 /30/35/38

A3LiH4-M A7LiH4-S A7XLiH4-S



HELI



H4 SERIES

1.5-3.8 t LITHION

H4 series Lithium-ion Battery Forklift Truck



ANHUI HELI CO., LTD.

Add / No.668, FangXing Road, Hefei, China

Fax / +86-551-63639966

Tel / +86-551-63639068(America); 63639258(Europe);
63639358(Asia); 63662105(Africa & Middle East)

* Our products are subject to improvements and changes without notice.



Linked in



YouTube



Facebook

Lead & Lithium Are Ready To Go.

- / People oriented design concept
- / Inheritance family design concept
- / Seek breakthrough in a appearance
- / Showing dynamic charm in design details



Comfort and energy saving

01~02

The user experience is fully considered, and the superior operating space design provides high driving comfort.



Stable and Reliable

03~04

CAE analysis, component bench test and whole truck strengthening test are used to ensure reliability.



Intelligent security

05

Intelligent control and protection improve the safety of drivers.



Convenient maintenance

06

More convenient maintenance operation improves the maintenance efficiency of after-sale services.

Comfort and energy saving

The user experience is fully considered, and the superior operating space design provides high driving comfort.

Wide view mast design, wide front view

The big handle and the super spacious cab design are suitable for people of different heights.

Steering wheel start steering (optional)

P, E, S three speed regulation

P	Powerful	Multi gear performance mode can be freely selected according to actual working conditions.
E	Economics	
S	Energy saving	

The whole truck is equipped with LED lighting system as standard, with high brightness, long service life and more energy saving

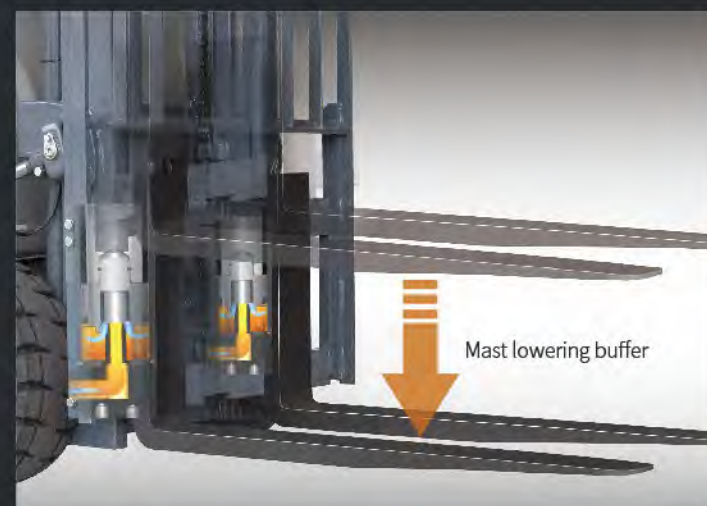
Reversing horn handle (s optional, M standard)



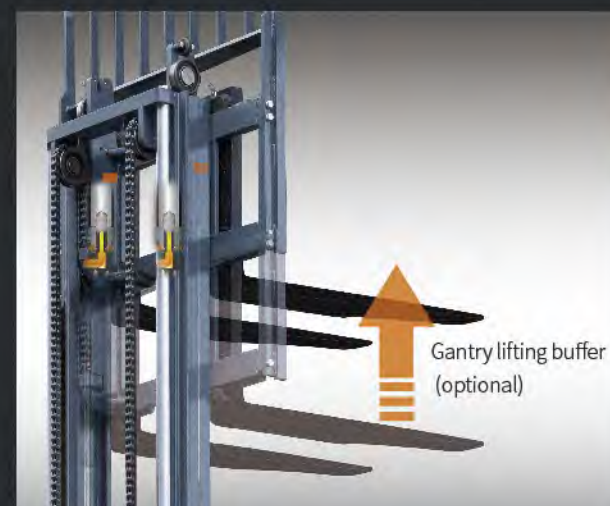
Semi enclosed shock-absorbing seat offers high comfort.



Electric special pattern tyre has low driving damping.



Mast lowering buffer



Gantry lifting buffer (optional)

Right set operating valve stem offers good operation comfort.

Intelligent color screen instrument offers more friendly human-computer interaction.



Graphical interface design / Chinese fault display / integrated handheld unit function / optional integrated vehicle networking function



Full package design of instrument panel; Water cup holder, mobile phone storage space, USB interface (optional for S, standard for M)

Stable and Reliable

CAE analysis, component bench test and whole truck strengthening test are used to ensure reliability.

Reliable components



Steering axle:

Cast axle body, tapered roller bearing



Drive axle:

integral brake drum, integral cast axle housing, half shaft oil seal design, high-precision gear with large coincidence



Mast:

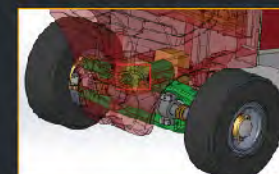
Borrowing the main components of mature mast of internal combustion forklift truck

Sheet metal stamping side cover

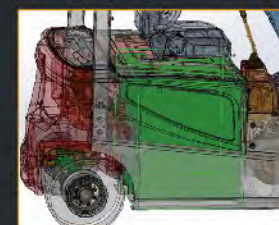
All metal anti-skid pedal



Good lateral stability of the whole truck and guaranteed safety during operation

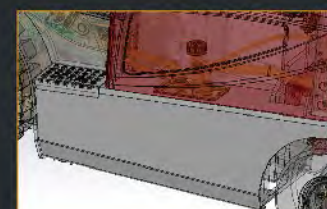


High rotation point steering axle



Middle and sink layout of the battery

Good heat dissipation



Side mounted welded oil tank



Test verification



Rain test

Simulate the operation under 15min rainstorm, reach IPx4 protection grade, and meet the needs of outdoor operation.



Cold storage test

The whole truck can run continuously after 6 hours of alternating operation in the -20 °C cold storage and 12 hours of parking in the cold storage.



Vehicle vibration test

The vibration frequency of the whole truck is tested to optimize and improve the operating comfort.



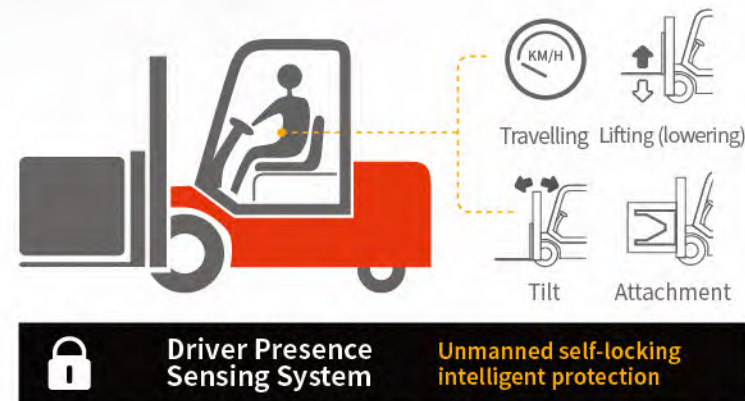
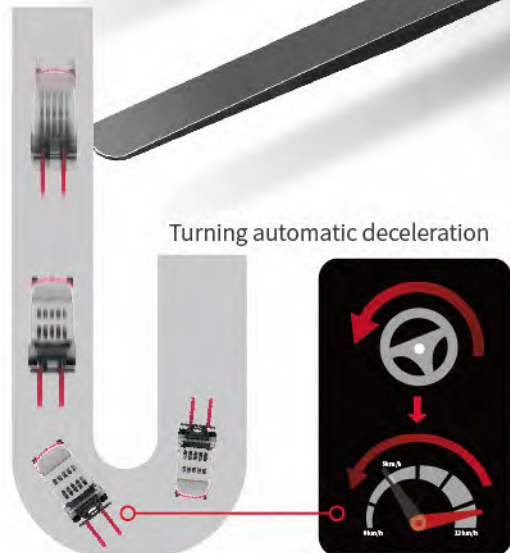
Reliability endurance test

800 hour strengthening of the whole truck (including climbing, rain, bumpy road, etc.).

Intelligent security

Intelligent control and protection improve the safety of drivers.

- Dual core controller
- OPS protection
(standard driving OPS / optional hydraulic OPS)
- Hydraulic burst protection, forward tilting self-locking protection
- Electrical multiple protection
(short circuit protection, overheat protection, low power protection, sequence protection)
- Parking safety reminder
- Reminder through slow sliding on ramp
- Turning automatic deceleration (optional)



- Flexible battery charging mode (can be charged with the truck or replaced)
- Pump, pump motor, controller and other main electrical components are located on the counterweight, which is convenient for maintenance.
- Friendly interface

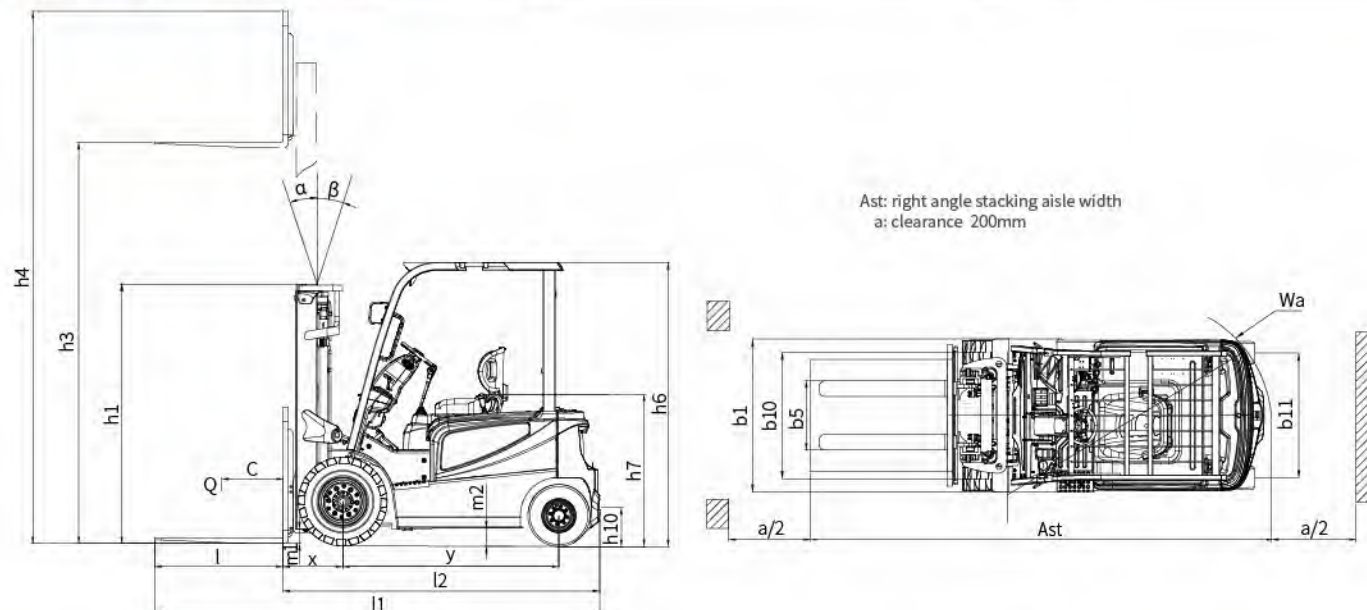


Convenient maintenance

More convenient maintenance operation improves the maintenance efficiency of after-sale services.

Manufacturer and Technical Data(Tabulation 1)

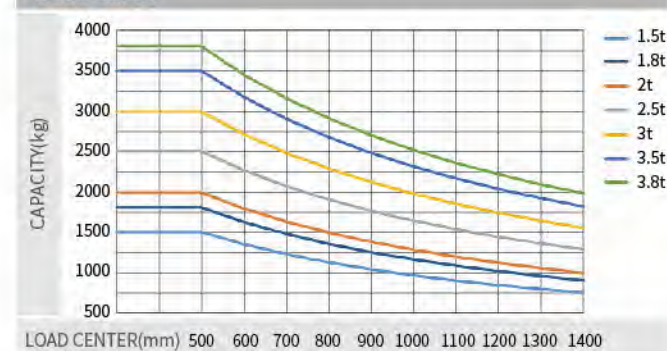
Characteristics									
1.01 Manufacturer									
1.02 Model									
1.03 Configuration number									
1.04 Rated capacity	Q	kg							
1.05 Load center distance	c	mm							
1.06 Power mode									
1.07 Driving mode									
1.08 Front overhang	x	mm							
1.09 Wheelbase	y	mm							
Weight									
2.01 Total weight (with/without battery)		kg							
2.02 Axle load (laden,front/rear)		kg							
2.03 Axle load (unladen, front/rear)		kg							
Tyres									
3.01 Tyre type									
3.02 Tyre size,front									
3.03 Tyre size,rear									
3.04 Wheels, number front/rear (x=driven wheels)									
3.05 Tread, front	b10	mm							
3.06 Tread, rear	b11	mm							
Dimensions									
4.01 Mast tilt angle (forward/backward)	α/β	°							
4.02 Height (mast lowered)	h1	mm							
4.03 Free lifting height	h2	mm							
4.04 Lifting height (standard)	h3	mm							
4.05 Max. height, extended (with backrest)	h4	mm							
4.06 Height of overhead guard	h6	mm							
4.07 Seat height relating to SIP (to ground)	h7	mm							
4.08 Towing coupling height	h10	mm							
4.09 Overall length (with fork)	l1	mm							
4.10 Overall length (without fork)	l2	mm							
4.11 Overall width	b1	mm							
4.12 Fork size:thickness x width x length									
4.13 Fork carriage, according to ISO2328	s/e/l	mm							
4.14 Distance across fork-arms, Max./Min.	b5	mm							
4.15 Ground clearance (at mast)	m1	mm							
4.16 Ground clearance (center of wheelbase)	m2	mm							
4.17 Right angle stacking aisle width for pallet 1000 x1200mm crossways	Ast	mm							
4.18 Right angle stacking aisle width for pallet 800 x1200mm lengthways	Ast	mm							
4.19 Min. outside turning radius	Wa	mm							
Performance data									
5.01 Travel speed (laden/unladen)		km/h							
5.02 Lift speed (laden/unladen)		m/s							
5.03 Lowering speed (laden/unladen)		m/s							
5.04 Max.drawbar pull (laden)	N								
5.05 Max.gradeability (laden/unladen)	%								
5.06 Acceleration time(10 m)(laden/unladen)	s								
Battery									
6.01 Battery voltage/Capacity	V/Ah								
6.02 Battery weight	kg								
Motor and controller									
7.01 Driving motor powering (S2-60min)	kW								
7.02 Lifting motor powering (S3-15%)	kW								
7.03 Driving motor controlling mode									
7.04 Lifting motor controlling mode									
Addition data									
8.01 Service brake/Parking brake									
8.02 Operating pressure for attachments	Mpa								



Manufacturer and Technical Data(Tabulation 2)

Characteristics									
1.01 Manufacturer									
1.02 Model									
1.03 Configuration number									
1.04 Rated capacity	Q	kg							
1.05 Load center distance	c	mm							
1.06 Power mode									
1.07 Driving mode									
1.08 Front overhang	x	mm							
1.09 Wheelbase	y	mm							
Weight									
2.01 Total weight (with/without battery)		kg							
2.02 Axle load (laden,front/rear)		kg							
2.03 Axle load (unladen, front/rear)		kg							
Tyres									
3.01 Tyre type									
3.02 Tyre size,front									
3.03 Tyre size,rear									
3.04 Wheels, number front/rear (x=driven wheels)									
3.05 Tread, front	b10	mm							
3.06 Tread, rear	b11	mm							
Dimensions									
4.01 Mast tilt angle (forward/backward)	α/β	°							
4.02 Height (mast lowered)	h1	mm							
4.03 Free lifting height	h2	mm							
4.04 Lifting height (standard)	h3	mm							
4.05 Max. height, extended (with backrest)	h4	mm							
4.06 Height of overhead guard	h6	mm							
4.07 Seat height relating to SIP (to ground)	h7	mm							
4.08 Towing coupling height	h10	mm							
4.09 Overall length (with fork)	l1	mm							
4.10 Overall length (without fork)	l2	mm							
4.11 Overall width	b1	mm							
4.12 Fork size:thickness x width x length									
4.13 Fork carriage, according to ISO2328	s/e/l	mm							
4.14 Distance across fork-arms, Max./Min.	b5	mm							
4.15 Ground clearance (at mast)	m1	mm							
4.16 Ground clearance (center of wheelbase)	m2	mm							
4.17 Right angle stacking aisle width for pallet 1000 x1200mm crossways	Ast	mm							
4.18 Right angle stacking aisle width for pallet 800 x1200mm lengthways	Ast	mm							
4.19 Min. outside turning radius	Wa	mm							
Performance data									
5.01 Travel speed (laden/unladen)		km/h							
5.02 Lift speed (laden/unladen)		m/s							
5.03 Lowering speed (laden/unladen)		m/s							
5.04 Max.drawbar pull (laden)	N								
5.05 Max.gradeability (laden/unladen)	%								
5.06 Acceleration time(10 m)(laden/unladen)	s								
Battery									
6.01 Battery voltage/Capacity	V/Ah								
6.02 Battery weight	kg								
Motor and controller									
7.01 Driving motor powering (S2-60min)	kW								
7.02 Lifting motor powering (S3-15%)	kW								
7.03 Driving motor controlling mode									
7.04 Lifting motor controlling mode									
Addition data									
8.01 Service brake/Parking brake									
8.02 Operating pressure for attachments	Mpa								

Load curve



Note:

The vertical axis stands for load capacity and the horizontal axis stands for load center which is calculated from the front surface of the forks to the gravity of the standard load. the standard load means a cubic with 1000mm edge length. When mast is tilted forward, using non-standard forks or loading large goods, the load capacity will be reduced. The load capacity of standard mast at different load center can be known from this load chart.

3t/3.5t/3.8t Mast parameters																	
Mast type	Mast model	Max.lifting height (mm)	Load capacity (lode center 500mm)(kg)			Height (mast lowered) (mm)			Free lift (with backrest) (mm)			Service weight (kg)					Mast tilt angle α/β (°)
			3t	3.5t	3.8t	3t	3.5t	3.8t	3t	3.5t	3.8t	3t-S	3t-M	3.5t-S	3.5t-M	3.8t-S	
2-stage standard Mast	M200	2000	3000	3500	3800	1570	1620	1680	155	160	160	4404	4454	4704	4754	5134	6/10
	M250	2500	3000	3500	3800	1820	1870	1930	155	160	160	4452	4502	4757	4807	5187	6/10
	M300	3000	3000	3500	3800	2070	2120	2180	155	160	160	4500	4550	4810	4860	5240	6/10
	M330	3300	3000	3500	3800	2220	2270	2330	155	160	160	4529	4579	4842	4892	5272	6/10
	M350	3500	3000	3500	3800	2320	2370	2430	155	160	160	4548	4598	4863	4913	5293	6/10
	M370	3700	3000	3300	3800	2420	2470	2530	155	160	160	4567	4617	4884	4934	5314	6/6
	M400	4000	2850	3150	3700	2620	2670	2730	155	160	160	4647	4697	4968	5018	5398	6/6
	M425	4250	2750	3050	3550	2745	2795	2855	155	160	160	4671	4721	4994	5044	5424	6/6
	M450	4500	2600	2900	3400	2870	2920	2980	155	160	160	4695	4745	5021	5071	5451	6/6
	M500	5000	2200	2450	3000	3120	3170	3230	155	160	160	4743	4793	5074	5124	5504	6/6
M550	5500	1950	2300	2700	3420	3470	3530	155	160	160	4841	4891	5178	5228	5608	6/6	
M600	6000	1300	1450	1600	3670	3720	3780	155	160	160	4889	4939	5231	5281	5661	6/6	
2-stage full free mast	ZM200	2000	3000	3500	3800	1570	1620	1680	340	443	503	4432	4482	4728	4778	5158	6/10
	ZM250	2500	3000	3500	3800	1820	1870	1930	590	693	753	4482	4532	4781	4831	5211	6/10
	ZM300	3000	3000	3500	3800	2070	2120	2180	840	943	1003	4532	4582	4835	4885	5265	6/10
	ZM330	3300	3000	3500	3800	2220	2270	2330	990	1093	1153	4564	4614	4868	4918	5298	6/10
	ZM350	3500	3000	3500	3800	2320	2370	2430	1090	1193	1253	4584	4634	4889	4939	5319	6/10
	ZM370	3700	3000	3200	3800	2420	2470	2530	1190	1293	1353	4604	4654	4910	4960	5340	6/6
	ZM400	4000	2850	3200	3700	2620	2670	2730	1390	1493	1553	4682	4732	4990	5040	5420	6/6
	ZM425	4250	2650	3050	—	2745	2795	2855	1515	1618	—	4708	4758	5017	5067	—	6/6
	ZM450	4500	2500	2850	—	2870	2920	2980	1640	1743	—	4736	4786	5046	5096	—	6/6
	ZM500	5000	2100	2450	—	3120	3170	3230	1890	1993	—	4790	4840	5102	5152	—	6/6
3 stage full free mast	ZM550	5500	1950	2200	—	3420	3470	3530	2190	2293	—	4889	4939	5205	5255	—	6/6
	ZM600	6000	1300	1350	—	3670	3720	3780	2440	2543	—	4942	4992	5261	5311	—	6/6
	ZSM360	3600	2850	3250	3800	1870	1870	1930	640	640	693	4643	4693	4921	4971	5354	6/6
	ZSM400	4000	2750	3100	3700	2020	2020	2055	790	790	843	4684	4734	4962	5012	5395	6/6
	ZSM435	4350	2550	2950	3500	2120	2120	2180	890	890	943	4713	4763	4991	5041	5424	6/6
	ZSM450	4500	2450	2850	3400	2170	2170	2230	940	940	993	4728	4778	5006	5056	5439	6/6
	ZSM470	4700	2400	2850	3100	2230	2230	2295	1000	1000	1053	4746	4796	5024	5074	5457	6/6
	ZSM480	4800	2350	2750	3100	2270	2270	2330	1040	1040	1093	4756	4806	5034	5084	5467	6/6
	ZSM500	5000	2150	2350	3000	2370	2370	2430	1140	1140	1193	4783	4833	5061	5111	5494	6/6
	ZSM540	5400	1950	2200	2700	2470	2470	2555	1240	1240	1293	4813	4863	5091	5141	5524	6/6
ZSM600	6000	1250	1300	2200	2670	2670	2780	1440	1440	1493	4917	4967	5103	5153	5628	6/6	
ZSM650	6500	950	1000	2500	2870	2870	—	1640	1640	—	4972	5022	5250	5300	—	6/6	
ZSM700	7000	1800	2000	—	3045	3045	—	1815	1815	—	5022	5072	5300	5350	—	6/6	

Note: *Indicates the rated load capacity of the front wheel with twin tyres; When the front wheels of 3-3.5t are twin tyres (pneumatic tyres) and twin tyres (solid tyres), the service weight is increased by 140kg and 208kg respectively according to the table data; When the front wheels of 3.8t are twin tyres (pneumatic tyres) and twin tyres (solid tyres), the service weight is increased by 103kg and 251kg respectively according to the table data

2-stage full free mast: 3t: When there is no backrest, the free lifting height increases by 477mm; 3.5t-3.8t: When there is no backrest, the free lifting height increases by 407mm.

3-stage full free mast: 3t: When there is no backrest, the free lifting height increases by 427mm; 3.5-3.8t: When there is no backrest, the free lifting height increases by 407mm.

Optional item			S
Basic items	Model		
	Pneumatic tyre*		●
	Solid tyre		○
	Single tyre (front wheel)		●
	Twin tyre (front wheel)**		○
	Two piece valve		●
	Three or four piece valve		○
	Basic type: 3M lifting height mast		●
	Other type and other height series mast***		○
	Standard series fork		●
	Non standard series forks and attachments		○
	Standard exterior color (blue grey + Heli red)		●
	Other exterior colors (customized)		○
Safety items	Turning speed limit		○
	Reversing armrest with horn switch		○
	Overspeed 5km / h alarm		○
	Overspeed 8km / h alarm		○
	Overspeed 10km / h alarm		○
	Travelling + lifting + tilting + equipped with OPS function (without lowering)		●
	Full set of OPS functions		○
	Seat belt switch		○
	Multi way valve overload		●
	Dry powder fire extinguisher (0.5kg)		○
	Dry powder fire extinguisher (2kg)		○
	Carbon dioxide fire extinguisher (2kg)		○
Comfort items	Reversing buzzer		●
	Reversing Chinese speaker		○
	No universal key		●
	With universal key		○
	Electronic lifting upper buffer		○
	Central wide-angle rearview mirror		●
	Both side rear-view mirrors + center wide-angle rear-view mirror		○
	Reversing radar (4 probes)		○
	Reversing image (1 Camera + 4 radar probes)		○
	Semi enclosed seat		●
	Fully suspended seat		○
	Instrument panel with 1 USB interface (5V / 1A)		○
Cab / Windshield / Air conditioner / Heater	Steering wheel starts steering		○
	Synchronous steering		○
	Steering wheel with handle ball		●
	Steering wheel without handle ball		○
	Electric fan		○
	panel mounted cab (including fan + wiper)		○
	Heater		○
	Single cooling air conditioner		○
	Single cooling air conditioner + heater		○
	Front windshield (including wiper)		○
	Rear windshield		○
	Top windshield (excluding fan)		○
Non standard overhead guard	50mm increased of overhead guard height		○
	50mm reduced of overhead guard height		○
	Overhead guard (with protective net)		○
Lights	LED rear work light (1)		○
	Rear LED red / Blue spotlight (1)		○
	Rear and lateral red / blue bar lights		○
	Fixed LED flashing warning light		○
	Fixed LED rotary warning lamp		○
	Fixed LED rotary buzzer warning light		○
Others	Metric thread		●
	Tilt cylinder jacket		○
	Steering cylinder jacket		○
	REMA 320 charging port		●
	Onboard charger		○
	FICS standard type (for China)		○

Note:

●*Standard ; ○*Optional ;

Some non-standard options need to be customized. Please consult local sales personnel or product development technicians before purchasing.

*3-3.8t rear wheel is equipped with solid tyre as standard.

**The small 2t truck is not equipped with twin tyres.

***There are restrictions on the type and height of small 2t and 3.8t mast. See the table of mast parameters for details.