



HELI

CPCD 50/60/70 /80/90/100 W2K2/QCK2



5-10 t

K2 series Internal Combustion
Counterbalanced Forklift Truck



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*TRAVEL STEADILY TO
REACH THE FUTURE*

LIFT HEAVY LOADS WITH EASE



ECONOMIC AND ENERGY SAVING

01~02



SAFE AND RELIABLE

03~04



SMART AND COMFORTABLE

05~06



CONVENIENT MAINTENANCE

07~08

ECONOMIC AND ENERGY SAVING



Classic engine, energy saving and reliable



Standard LED lamps, energy saving, more brighter, long service life



Load sensing steering and dual pump confluence technology, energy consumption reduce by 10%



SAFE AND RELIABLE



The independently developed gearbox has experienced nearly 30 years of technical innovation and market validation



TCast steel driving axle housing ensure reliable structure; Standard drum brake, wet brake as optional.



Rain test



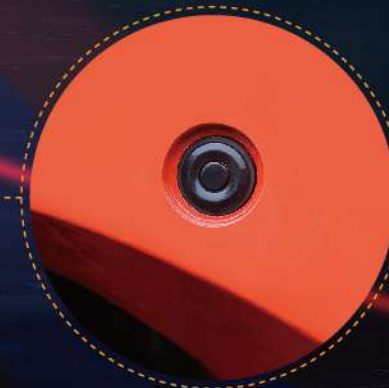
Impact test of overhead guard



Frame type upper beam, more reasonable structure, enhance the rigidity and strength



Large diameter hydraulic pipe, Standard 24 degrees conical seal.



Optional configurations for safety: Three sides lights, Rear working lamps, Blue light, Extinguisher, Warning light, Reversing radar and camera.

SMART AND COMFORTABLE

The rubber hose is hidden behind the chain to achieve good front view.



Standard cup seat. Option USB connector



Ratchet type hand brake



Electro-hydraulic direction changing device



Cabinet with lock



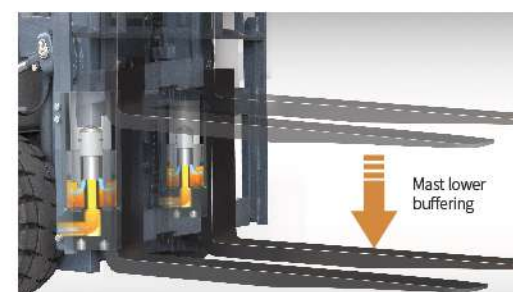
Integrated light switch

RELIABLE SPECIAL DESIGNED INSTRUMENT



Reliable special meter displays the whole truck's working condition, fault detect and other important information completely which makes the operator master the whole truck condition directly and conveniently.

*: Some model options.



Standard mast lower buffering, while lift buffering is fitted for full free mast to achieve better operation experience.



Standard semi-enclosed seat, which is more comfortable for drivers.



Large steering angle axle is equipped to get smaller turning radius.



The rear view is more larger by optimizing the structure of counterweight.

CONVENIENT MAINTENANCE



Large opening
angle hood

Removable triangular
side cover

Two-stages opening
cabin door (optional)

80°

70



Floor board with checking hole, which is convenient to gearbox maintenance.



Standard 9 inch air filter with iron shell is helpful to extend maintenance period.



Integrated electrical cabinet, dustproof and waterproof, easy to check



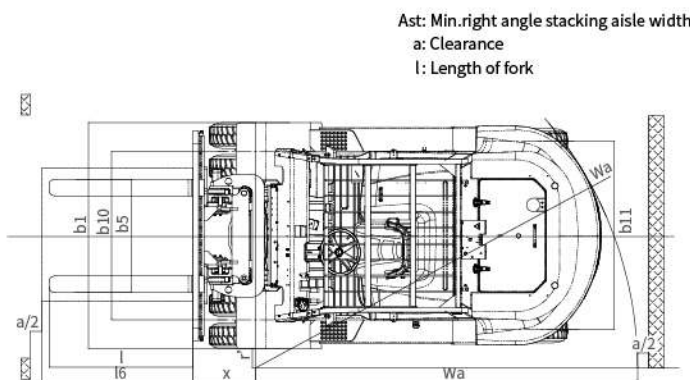
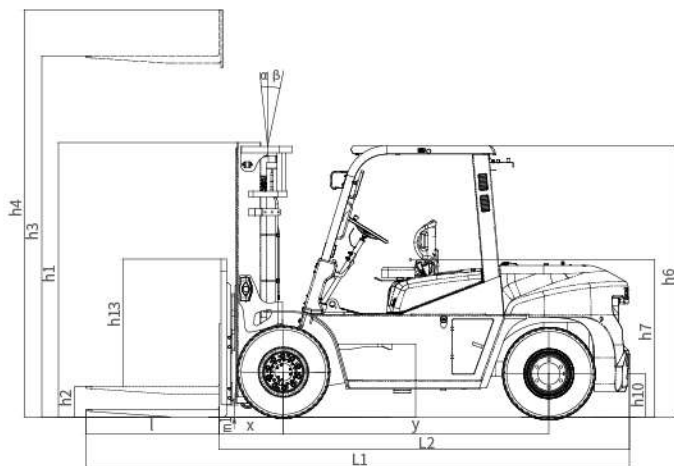
Radiator cover with supporting rod can open to 80 degrees. It is convenient to check.



Standard steering axle cylinder sleeve, which is more reliable for harsh working condition. Reasonable grease fitting layout makes lubrication more easy.

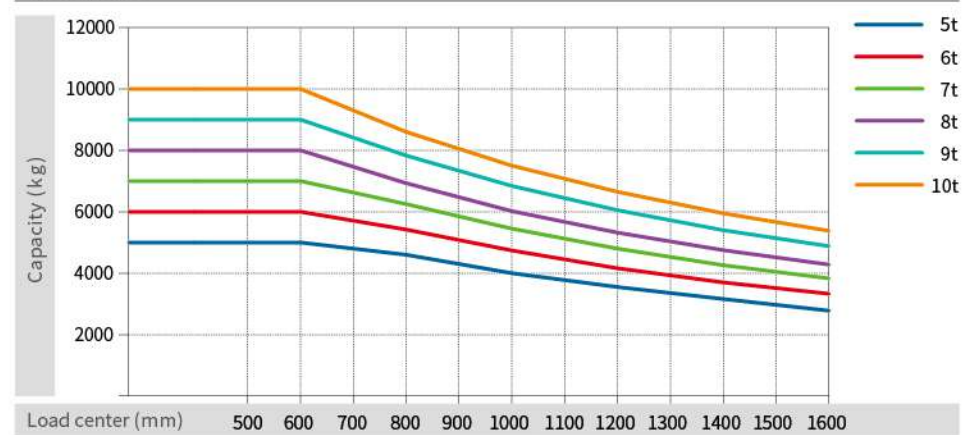
MANUFACTURER AND TECHNICAL DATA

1.0	Manufacturer								
2.0	Model			CPCD50	CPCD60	CPCD70	CPCD80	CPCD90	CPCD100
3.0	Configuration number								
	Characteristics								
4.01	Rated capacity		kg	5000	6000	7000	8000	9000	10000
4.02	Load center distance		mm				600		
4.03	Power mode						Diesel		
4.04	Driving mode						Seat-type		
4.05	Front overhang	x	mm	575	580	585	695	685	700
4.06	Wheelbase	y	mm		2400		2400	2550	2850
4.07	Total weight		kg	8000	8570	9170	10040	11450	12300
	Dimension parameter								
5.01	Mast tilt angle (forward/backward)	α/β	°				6/12		
5.02	Height (mast lowered)	h1	mm		2480		2547	2700	2850
5.03	Free lifting height	h2	mm	155	160	165	170	190	200
5.04	Lifting height (standard)	h3	mm				3000		
5.05	Max. height,extended (with backrest)	h4	mm		4400		4467	4250	4415
5.06	Height of overhead guard	h6	mm		2450		2510	2560	
5.07	Seat height relating to SIP (to ground)	h7	mm		1430		1490	1540	
5.08	Towing coupling height	h10	mm		390		450	475	
5.09	Ground clearance (between mast)	m1	mm		180		245	250	
5.10	Backrest height (Calculated from the surface of the fork)	h13	mm	1360	1350	1345	/	/	/
5.11	Overall length (with fork)	L1	mm	4770	4850	4890	5020	5180	5440
5.12	Overall length (without fork)	L2	mm	3550	3630	3670	3800	3960	4220
5.13	Overall width	b1	mm		2044		2124	2164	
5.14	Fork adjustable range (the external of the fork)(Max./Min.)	b5	mm		300-1845		370-1750	470-1990	470-2100
5.15	Fork size:thickness x width x length	s/e/l	mm	55x150x1220	60x150x1220	65x150x1220	70x150x1220	80x175x1220	
5.16	Tread, front	b10	mm		1520		1520	1600	1600
5.17	Tread, rear	b11	mm		1700		1700	1700	1700
5.18	Right angle stacking aisle width for pallet 1000 x1200mm crossways	Ast	mm	5230	5280	5350	5470	5740	6060
5.19	Min. outside turning radius	Wa	mm	3250	3300	3350	3400	3630	3940
	Performance Data								
6.01	Travel speed (laden/unladen)		km/h	25/29	25/29	25/29	25/29	25/29	25/29
6.02	Lift speed (laden/unladen)		mm/s	500/530	500/530	500/530	450/480	390/420	330/350
6.03	Lowering speed (laden/unladen)		mm/s				WITHOUT LOAD $\geq$ 300 WITH FULL LOAD $\leq$ 600		
6.04	Max.drawbar pull (laden)		kN	60	60	60	60	60	60
6.05	Max.gradeability (laden/unladen)		%	35/20	32/20	30/20	38/20	25/20	20/20
	Tyres								
7.01	Wheels,number front/rear (x=driven wheels)						4X/2		
7.02	Tyre type front/rear						Pneumatic-tyre		
7.03	Tyre size,front				8.25-15-14PR		8.25-20-14PR	9.00-20-14PR	
7.04	Tyre size,rear				8.25-15-14PR		8.25-15-14PR	9.00-20-14PR	
	Combustion-engine								
8.01	Engine manufacturer/Moel						ISUZU 6BG1QC-02		
8.02	Rated power/Speed		Kw/rpm				82/2000		
8.03	Max. torque/Speed		Nm/rpm				415/1400-1600		
8.04	Cylinder number-bore x stroke		/L				6-105X125/6.5		
8.05	Fuel tank capacity		L				140		
	Other								
9.01	Transmission type						Hydraulic transmission - mechanical shift(electro-hydraulic directional change optional)		
9.02	Transmission number of speed (fwd/bwd)						2/2		
9.03	Service brake						Powered brake-pedal type		
9.04	Parking brake						Mechanical-hand brake lever type		
9.05	Operating pressure for attachments		mpa		20.5		23	20.5	20.5
9.06	Battery voltage/Capacity		V/Ah				2X12/80		



Ast: Min.right angle stacking aisle width
a: Clearance
l: Length of fork

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 1200mm 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.

Optional engine model and truck main specifications

Truck specifications		CPCD50	CPCD60	CPCD70	CPCD80	CPCD90	CPCD100
Model							
Max. Travelling speed(laden/unladen)	km/h	28/31	28/31	28/31	28/31	28/31	28/31
Lifting speed(laden/unladen)	mm/s	500/530	500/530	500/530	450/480	390/420	330/350
Lowering speed(laden/unladen)	mm/s	WITHOUT LOAD $\geq$ 300 WITH FULL LOAD $\leq$ 600					
Max. Draw bar(laden)	kN	62	62	62	62	62	62
Max. Gradeability (laden/unladen)	%	38/20	35/20	32/20	30/20	25/20	23/20
Total Weight	kg	8000	8570	9170	10040	11450	12300
Engine specifications							
Engine manufacturer /mode		QUANCHAI 4J1(CHINA STAGE III)					
Rated power/Speed	Kw/rpm	85/2200					
Max.torque/Speed	Nm/rpm	500/1600					
Cylinder number-bore × stroke	/L	4-105 × 124/4.3					
Configuration NO.		QCK2					

8T MAST PARAMETERS

Mast type	Mast model	Max.lifting height (mm)	Load capacity (lode center 600mm)(kg)	Height (mast lowered)(mm)	Free lift height (with backrest) (mm)	Service weight (kg)	Mast tilt angle α/β (°)
Wide View Standard Mast	CPCD80	CPCD80	CPCD80	CPCD80	CPCD80	CPCD80	CPCD80
	M220	2200	8000	2147	170	10136	6°/12°
	M250	2500	8000	2297	170	10174	6°/12°
	M270	2700	8000	2397	170	10201	6°/12°
	M300	3000	8000	2547	170	10240	6°/12°
	M330	3300	8000	2697	170	10279	6°/12°
	M350	3500	8000	2797	170	10305	6°/12°
	M375	3750	8000	2922	170	10338	6°/12°
	M400	4000	8000	3097	170	10471	6°/12°
	M425	4250	8000	3222	170	10503	6°/12°
	M450	4500	8000	3347	170	10536	6°/12°
	M475	4750	7850	3472	170	10569	6°/6°
Full Free 2-Stage Mast	CPCD80	CPCD80	CPCD80	CPCD80	CPCD80	CPCD80	CPCD80
	M500	5000	7700	3597	170	10602	6°/6°
	M530	5300	7500	3797	170	10653	6°/6°
	M550	5500	7300	3897	170	10766	6°/6°
	M600	6000	7000	4147	170	10832	6°/6°
	ZM250	2500	8000	2277	1020	10096	6°/12°
	ZM270	2700	8000	2377	1120	10111	6°/12°
	ZM300	3000	8000	2527	1270	10141	6°/12°
	ZM330	3300	8000	2677	1420	10166	6°/12°
	ZM350	3500	8000	2777	1520	10196	6°/12°
	ZM375	3750	8000	2902	1645	10206	6°/12°
	ZM400	4000	8000	3077	1820	10311	6°/12°
Full Free 3-Stage Mast	CPCD80	CPCD80	CPCD80	CPCD80	CPCD80	CPCD80	CPCD80
	ZM425	4250	8000	3202	1945	10336	6°/12°
	ZM450	4500	8000	3327	2070	10371	6°/12°
	ZM475	4750	7850	3452	2195	10391	6°/6°
	ZM500	5000	7700	3577	2320	10411	6°/6°
	ZM550	5500	7300	3877	2620	10561	6°/6°
	ZM600	6000	7000	4127	2870	10601	6°/6°
	ZSM360	3600	6700	2402	1100	10778	6°/6°
	ZSM400	4000	6700	2527	1225	10837	6°/6°
	ZSM435	4350	6700	2652	1350	10892	6°/6°
	ZSM480	4800	6700	2807	1505	10967	6°/6°
	ZSM500	5000	6700	2872	1570	10995	6°/6°
Full Free 3-Stage Mast	CPCD80	CPCD80	CPCD80	CPCD80	CPCD80	CPCD80	CPCD80
	ZSM540	5400	6500	3007	1705	11060	6°/6°
	ZSM600	6000	6100	3202	1900	11243	6°/6°
	ZSM650	6500	5500	3472	2170	11354	6°/6°
	ZSM700	7000	5000	3577	2275	11405	6°/6°

Note:1) 8t:free lift without backrest. 2) With internal sideshift, the lifting weight is reduced by 200kg.

5T/6T/7T MAST PARAMETERS													
Mast type	Mast model	Max.lifting height (mm)	Load capacity (lode center 600mm)(kg)			Height (mast lowered)(mm)	Free lift height (with backrest) (mm)			Service weight (kg)			Mast tilt angle α/β (°)
			CPCD50	CPCD60	CPCD70		CPCD50	CPCD60	CPCD70	CPCD50	CPCD60	CPCD70	
Wide View Standard Mast	M220	2200	5000	6000	7000	2080	155	160	165	8096	8666	9266	6°/12°
	M250	2500	5000	6000	7000	2230	155	160	165	8134	8704	9304	6°/12°
	M270	2700	5000	6000	7000	2330	155	160	165	8161	8731	9331	6°/12°
	M300	3000	5000	6000	7000	2480	155	160	165	8200	8770	9370	6°/12°
	M330	3300	5000	6000	7000	2630	155	160	165	8239	8809	9409	6°/12°
	M350	3500	5000	6000	7000	2730	155	160	165	8265	8835	9435	6°/12°
	M375	3750	5000	6000	7000	2855	155	160	165	8298	8868	9468	6°/12°
	M400	4000	5000	6000	7000	3030	155	160	165	8431	9001	9601	6°/12°
	M425	4250	5000	6000	7000	3155	155	160	165	8463	9033	9633	6°/12°
	M450	4500	5000	6000	7000	3280	155	160	165	8496	9066	9666	6°/12°
	M475	4750	5000	6000	7000	3405	155	160	165	8529	9099	9699	6°/6°
	M500	5000	5000	6000	7000	3530	155	160	165	8562	9132	9732	6°/6°
	M550	5500	4750	5700	6600	3830	155	160	165	8726	9296	9896	6°/6°
	M600	6000	4400	5400	6400	4080	155	160	165	8792	9362	9962	6°/6°
Full Free 2-Stage Mast	ZM250	2500	5000	6000	7000	2210		840		7998	8568	9168	6°/12°
	ZM270	2700	5000	6000	7000	2310		940		8016	8586	9186	6°/12°
	ZM300	3000	5000	6000	7000	2460		1090		8043	8613	9213	6°/12°
	ZM330	3300	5000	6000	7000	2610		1240		8070	8640	9240	6°/12°
	ZM350	3500	5000	6000	7000	2710		1340		8088	8658	9258	6°/12°
	ZM375	3750	5000	6000	7000	2835		1465		8110	8680	9280	6°/12°
	ZM400	4000	5000	6000	7000	3010		1640		8227	8797	9397	6°/12°
	ZM425	4250	5000	6000	7000	3135		1765		8249	8819	9419	6°/12°
	ZM450	4500	5000	6000	7000	3260		1890		8272	8842	9442	6°/12°
	ZM475	4750	5000	6000	7000	3385		2015		8294	8864	9464	6°/6°
	ZM500	5000	5000	6000	7000	3510		2140		8316	8886	9486	6°/6°
	ZM550	5500	4750	5700	6600	3810		2440		8456	9026	9626	6°/6°
	ZM600	6000	4400	5400	6400	4060		2690		8500	9070	9670	6°/6°
Full Free 3-Stage Mast	ZSM360	3600	4500	5600	6200	2335		910		8738	9308	9908	6°/6°
	ZSM400	4000	4500	5600	6200	2460		1040		8797	9367	9967	6°/6°
	ZSM435	4350	4500	5600	6200	2585		1156		8852	9422	10022	6°/6°
	ZSM480	4800	4500	5600	6200	2740		1310		8927	9497	10097	6°/6°
	ZSM500	5000	4500	5600	6200	2805		1380		8955	9525	10125	6°/6°
	ZSM540	5400	4300	5400	6200	2940		1510		9020	9590	10190	6°/6°
	ZSM600	6000	4000	5100	5600	3135		1710		9203	9773	10373	6°/6°
	ZSM650	6500	3600	4600	5000	3405		1975		9314	9884	10484	6°/6°
	ZSM700	7000	3200	4000	4200	3510		2085		9365	9935	10535	6°/6°

Note:1) 5-6t:the free lift without backrest 260mm increase. 2) 7t:the free lift without backrest 180mm increase. 3) With internal sideshift, the lifting weight is reduced by 200kg. With external sideshifter, the lifting weight reduced by 300kg.

9T/10T MAST PARAMETERS											
Mast type	Mast model	Max.lifting height (mm)	Load capacity (lode center 600mm)(kg)		Height (mast lowered)(mm)		Free lift height (with backrest) (mm)		Service weight (kg)		Mast tilt angle α/β (°)
			CPCD90	CPCD100	CPCD90	CPCD100	CPCD90	CPCD100	CPCD90	CPCD100	CPCD90/100
Wide View Standard Mast	M250	2500	9000	10000	2450	2600	190	200	10971	12379	6°/12°
	M270	2700	9000	10000	2550	2700	190	200	11025	12419	6°/12°
	M300	3000	9000	10000	2700	2850	190	200	11650	12500	6°/12°
	M330	3300	9000	10000	2800	3000	190	200	11751	12548	6°/12°
	M350	3500	9000	10000	2950	3100	190	200	11896	12593	6°/12°
	M375	3750	9000	10000	3075	3225	190	200	11976	12643	6°/12°
	M400	4000	9000	10000	3250	3400	190	200	12151	12783	6°/12°
	M425	4250	9000	10000	3375	3525	190	200	12306	12838	6°/12°
	M450	4500	9000	10000	3500	3650	190	200	12426	12888	6°/12°
	M475	4750	8800	9500	3625	3775	190	200	12551	12945	6°/6°
	M500	5000	8500	9000	3750	3900	190	200	12686	13000	6°/6°
	M550	5500	8000	8500	4050	4200	190	200	13008	13301	6°/6°
M600	6000	7500	7800	4300	4450	190	200	13211	13351	6°/6°	
Full Free 2-Stage Mast	ZM250	2500	9000	10000	2450	2600	1250	1215	11697	12379	6°/12°
	ZM270	2700	9000	10000	2550	2700	1350	1315	11723	12419	6°/12°
	ZM300	3000	9000	10000	2700	2850	1500	1465	11765	12500	6°/12°
	ZM330	3300	9000	10000	2800	2975	1650	1615	11806	12548	6°/12°
	ZM350	3500	9000	10000	2950	3100	1750	1715	11861	12593	6°/12°
	ZM375	3750	9000	10000	3075	3225	1875	1840	11869	12643	6°/12°
	ZM400	4000	9000	10000	3250	3400	2050	2015	12006	12783	6°/12°
	ZM425	4250	9000	10000	3375	3525	2175	2140	12040	12838	6°/12°
	ZM450	4500	9000	10000	3500	3650	2300	2265	12075	12888	6°/12°
	ZM475	4750	8800	10000	3625	3775	2425	2390	12110	12945	6°/6°
	ZM500	5000	8500	10000	3750	3900	2550	2515	12215	13000	6°/6°
	ZM550	5500	8000	9000	4050	4200	2850	2815	12317	13301	6°/6°
ZM600	6000	7500	8000	4300	4450	3100	3065	12386	13351	6°/6°	
Full Free 3-Stage Mast	ZSM360	3600	7500	8500	2450	2570	1200	1150	12291	13236	6°/12°
	ZSM400	4000	7500	8500	2575	2700	1330	1280	12362	13328	6°/12°
	ZSM435	4350	7500	8500	2700	2820	1450	1400	12436	13408	6°/12°
	ZSM450	4500	7500	8200	2750	2870	1500	1450	12463	13448	6°/6°
	ZSM480	4800	7500	8000	2850	2970	1600	1550	12524	13516	6°/6°
	ZSM500	5000	7500	7700	2950	3035	1700	1615	12580	13562	6°/6°
	ZSM540	5400	6800	7000	3075	3225	1830	1805	12654	13696	6°/6°
	ZSM600	6000	6100	6300	3375	3425	2130	2005	12825	13836	6°/6°
	ZSM650	6500	5400	5600	3600	3590	2350	2170	12955	13954	6°/6°
	ZSM700	7000	4600	4800	3750	3855	2500	2435	13043	14132	6°/6°

Note:1)9-10t:free lift without backrest. 2)With internal sideshift, the lifting weight is reduced by 200kg.

CONFIGURATION		
Configuration		General forklift (Isuzu)
Packaging method	HELI Packing	●
	Neutral Packing	○
Economic and energy saving	Load sense steering and double pump confluence	●
	LED lamps for whole truck	●
Intelligent security	Hydraulic power braking	●
	Tilting cylinder with self-locking valve	●
	Reversing buzzer	●
	Reverse radar and camera	○
	OPS (only for driving)	○
	OPS (Driving and lifting)	○
	Electric power switch	○
	Engine oil pressure alarm	●
	Oil water separator indicator	●
	Charging indicator	●
	Water temperature gauge	●
	Neutral start switch	●
Reliability	Fire extinguisher	○
	Spark arrester	○
	Fuel cap with lock	●
	Engine hood locking device	○
	Drum brake drive axle	●
	Wet-type brake drive axle (Mandatory cooling)	○
	Hydraulic oil radiator	○
	9 inches double filter element air filter (with pressure alarm)	●
	Dry-type double air filter	○
Comfortable and convenient	Self discharging ash filter	○
	Mechanical reversing	●
	intelligent gear shift	○
	Steering wheel with knob (HELI packing)	●
	Steering wheel without knob (HELI packing)	○
	Steering wheel with knob (Neutral packing)	○
	Full hydraulic power steering	●
	Mast rear cylinder with lower buffering and front cylinder with lifting buffering	●
	Speed limiting valve for lifting oil circuit	●
	Man-machine interactive liquid crystal instrument	●
	Fan	○
	USB interface	○
Top frame options	Rear view mirrors at both sides	○
	Get on/off handle	●
	Half enclosed seat	●
	Semi suspension seat	○
	Full suspension seat	○
	Standard overhead guard	●
	Low height overhead guard (150mm lower)	○

Note:“●” Standard ; “○” Optional

Configuration		General forklift (Isuzu)
Cab/ wind shield	Front windshield (with wiper)	○
	Front heat-resistant windshield (with wiper)	○
	Rear windshield (without wiper)	○
	Glass ceiling	○
	PC Endurance Board Ceiling	○
	Panel mounted cab	○
	Single cooling air conditioner	○
	Cold and warm air conditioner	○
	Air heater 改为 :heater"	○
Lifting system	Basic wide view mast with 3m	●
	The other lifting heights of basic wide view mast	○
	Two stages full free wide view mast	○
	Three stages full free wide view mast	○
	Hook type of fork carriage (5/6/7t)	●
	Fork carriage with screw rod (8t)	●
	Hydraulic fork positioner(9/10t)	●
	Widened fork carriage	○
	Backrest (5-7t)	●
Non standard fork and attachment	○	
Lights	LED headlights	●
	LED rear working lights	○
	Rear side of blue light	○
	Three sides of blue strip light	○
	Three sides of red strip light	○
	LED flashing warning light (assembly type)	○
	LED rotary warning light (assembly type)	○
	LED rotary buzzer light (assembly type)	○
Tyre	Pneumatic tyre	●
	Solid tyre	○
	Traceless solid tire	○
Others	Metric thread	●
	Middle exhaust	●
	High exhaust	○
	counterweight with protective net	○
	Counterweight and mast sling	○
	Steering cylinder sleeve	●
	Tilting cylinder sleeve	○
	Universal keys (2 pieces)	●
	Traction device	●
	Driver 's tool kits	●
	Customized color	○