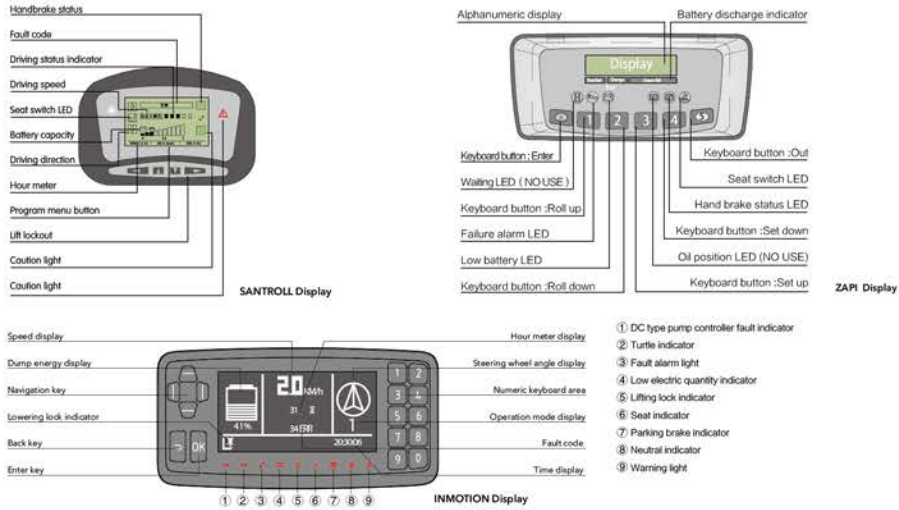


HELI



Reliable special designed instrument



Charger technology



- > High Efficiency
Charging efficiency higher than 95% meeting the requirements of energy saving and emissions reduction
- > Speediness
100% charging realized in 65mins at the soonest.
- > Compatibility
48 v / 80 v compatibility meeting the demand of different voltage levels
- > Safety
Built-in mis-connecting protection offering self isolating function under fault; Perfect fault self checking alarm facilitating users maintenance.

standard configuration

- | | | |
|--------------------------------------|-------------------------------------|--|
| Wide view basic mast | Carpet boom | Load pusher |
| Standard fork | Driver's cab | Fork sleeve |
| Ⅱ (Ⅱ) stage fork carriage | Lifting hook | Rotate clamp |
| Backrest | Lifting boom | Double tyre protection device |
| Control valve | Tip-over fork | Auxiliary hydraulic valve component |
| Battery | Back view mirror | Tilting/steering cylinder cover |
| Standard seat | Side shifting | Coloring tyre (white/green) |
| Overhead guard | Paper roll clamp | wide view two/three stage full free mast |
| Overhead guard rain cover | Warning light (rotating or buzzing) | Customised colour |
| LCD dashboard | solid tyre (1-3t) | Turn automatic deceleration function |
| Pneumatic tyre (1-3t) | Rear working light | Battery lifting sling |
| solid tyre (3.5t) | Steel protection net | HELI smart fleet management system |
| Traction pin | Multipurpose drum clamp | |
| Tool box | Load stabilizer | |
| LED lamp, strobe caution light | Load stabilizer | |
| Rear driving handle with horn button | Widen fork carriage | |
| | Lengthening fork | |



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63639530(Key Accounts Division); 63662105(Wheel loader)

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

HELI

2-3.5 t **LITON**

G series Lithium Battery Powered Counterbalanced Forklift Truck (UPGRADED)



Catalog No.200105 Forklift Truck

www.heliforklift.net

G SERIES 2-3.5t

wide view

Widened solid tire

IPX4 waterproof grade



Full LED lights

Standard USB interface



Environment Friendliness

- > Zero emission
- > Low noise
- > Free of heavy metals
- > No corrosion
- > No acid mist volatilization

Maintenance Free

- > Unnecessary of fluid adding and dust proofing
- > Daily maintenance free
- > Manual maintenance free

Long Service Life

- > Over 75% capacity reserved after 4000 shifts operation
- > Longer service life than lead-acid battery in equal working condition
- > 5 years or ten thousand hours quality guarantee for high performance lithium battery assembly

High Efficiency and Energy Saving

- > 1-2hours charging meet 6-8 hours working demand
- > High-energy density, self discharging rate lower than 1% per month
- > 95% energy conversion rate,superior charging and discharging performance
- > Flexible to charge, easy to operate, no impact on battery life
- > Unnecessary to change battery, cost saving



Suitable for working in both high and low environment

- > Lithium battery is better than lead-acid battery when working between -25℃ and 55℃

High Safety

- > According to the characteristics of industrial vehicles, it achieves safety protection design which includes lithium battery materials, battery core type, pack technique and system power management
- > "Multiple node safety closed circuit protection" realizing truck real time closed circuit protection in variable conditions
- > "Lock affirming" function during charging avoiding "hot connecting and disconnecting" operation effectively
- > "Whole system emergency button" to disconnect the truck control system and bms power quickly ensuring truck safety

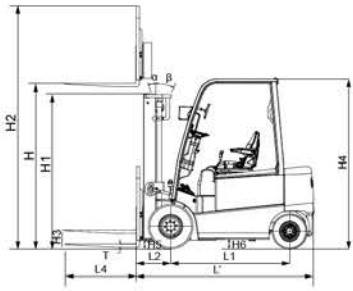
The superiority of HELI lithium battery forklift truck is embodied in the use-cost within product lifecycle. Compared with lead-acid battery forklift truck, lithium battery forklift truck is more convenient for multiple working shifts. It has lower implicit cost and more economical total running cost.



Manufacturer's Data and Design Characteristics

characteristics				HELI										
1.01	manufacturer													
1.02	model			CPD20(NEW)	CPD20(NEW)	CPD25(NEW)	CPD25(NEW)	CPD30(NEW)	CPD30(NEW)	CPD30(NEW)	CPD30(NEW)	CPD35(NEW)	CPD35(NEW)	CPD35(NEW)
1.03	configuration number			GB2Li	GB7Li	GB2Li	GB7Li	GB2Li	GB3Li	GB7Li	GB2Li	GB3Li	GB7Li	GB7Li
1.04	rated capacity	Q	kg	2000	2000	2500	2500	3000	3000	3000	3000	3500	3500	3500
1.05	load center distance	c	mm	500	500	500	500	500	500	500	500	500	500	500
1.06	power mode			lithium battery	lithium battery	lithium battery	lithium battery	lithium battery	lithium battery	lithium battery	lithium battery	lithium battery	lithium battery	lithium battery
1.07	driving mode			seated	seated	seated	seated	seated	seated	seated	seated	seated	seated	seated
1.08	wheel base	y	mm	1550	1550	1550	1550	1715	1715	1715	1715	1715	1715	1715
tyre														
2.01	tyre type			pneumatic tyre	pneumatic tyre	pneumatic tyre	pneumatic tyre	pneumatic tyre/solid	pneumatic tyre/solid	pneumatic tyre/solid	pneumatic tyre/solid	solid tyre	solid tyre	solid tyre
2.02	Wheels, number front rear (X=driven wheels)			2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2
2.03	front wheel base	b10	mm	960	960	960	960	1000	1000	1000	1000	1000	1000	1000
2.04	rear wheel base	b11	mm	950	950	950	950	990	990	990	990	990	990	990
2.05	tyre (front)			23×9-10-16PR	23×9-10-16PR	23×9-10-16PR	23×9-10-16PR	28×9-15-12PR	28×9-15-12PR	28×9-15-12PR	28×9-15-12PR	28×9-15	28×9-15	28×9-15
2.06	tyre (rear)			18×7-8-14PR	18×7-8-14PR	18×7-8-14PR	18×7-8-14PR	200/50-10	200/50-10	200/50-10	200/50-10	200/50-10	200/50-10	200/50-10
size														
3.01	front overhang	x	mm	425	425	425	425	485	485	485	485	490	490	490
3.02	mast tilt angle, front/rear	α/β	°	6/8	6/8	6/8	6/8	6/10	6/10	6/10	6/10	6/10	6/10	6/10
3.03	height with mast retraction	h1	mm	1995	1995	1995	1995	2075	2075	2075	2075	2180	2180	2180
3.04	free lifting height	h2	mm	145	145	145	145	145	145	145	145	150	150	150
3.05	Max. lifting height	h3	mm	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
3.06	Mast height, extended	h4	mm	4042	4042	4042	4042	4230	4230	4230	4230	4230	4230	4230
3.07	overhead guard height	h6	mm	2150	2150	2150	2150	2215	2215	2215	2215	2215	2215	2215
3.08	fork size:thickness×width×length	s/e/l	mm	40×122×920	40×122×920	40×122×1070	40×122×1070	45×125×1070	45×125×1070	45×125×1070	45×125×1070	50×125×1070	50×125×1070	50×125×1070
3.09	fork carriage, DIN standard			2A	2A	2A	2A	3A	3A	3A	3A	3A	3A	3A
3.10	truck body length (fork excluded)	l2	mm	2270	2270	2280	2280	2525	2525	2525	2525	2550	2550	2550
3.11	truck body width	l1	mm	1185	1185	1185	1185	1245	1245	1245	1245	1245	1245	1245
3.12	turning radius	Wa	mm	2000	2000	2010	2010	2240	2240	2240	2240	2260	2260	2260
3.13	clearance between mast and ground	m1	mm	110	110	110	110	135	135	135	135	135	135	135
3.14	clearance between wheel base center and ground (loaded)	m2	mm	115	115	115	115	145	145	145	145	145	145	145
3.15	right angle stacking aisle width (pallet1000x1000mm, clearance 200mm)	Ast	mm	3625	3625	3635	3635	3995	3995	3995	3995	4020	4020	4020
3.16	right angle stacking aisle width (pallet1000x1200mm, clearance 200mm)	Ast	mm	3825	3825	3835	3835	4125	4125	4125	4125	4150	4150	4150
3.17	lateral fork adjustment(outside of forks)Max./Min.	WS	mm	1030/244	1030/244	1030/244	1030/244	1060/250	1060/250	1060/250	1060/250	1060/250	1060/250	1060/250
performance														
4.01	travelling speed: loaded/unloaded		km/h	16/16	14.5/15.0	16/16	14.5/15.0	17/18	17/18	17/18	15.0/15.5	16.5/17.5	16.5/17.5	14.5/15
4.02	lifting speed: loaded/unloaded		mm/s	350/510	280/490	330/510	260/490	340/460	340/460	340/460	265/440	325/450	325/450	225/410
4.03	lowering speed: loaded/unloaded		mm/s	450/500	450/500	450/500	450/500	-/500	-/500	-/500	-/500	-/500	-/500	-/500
4.04	gradeability (loaded)		%	22	22	20	20	18	18	17	15	15	15	15
4.05	Max. traction force (loaded)		N	16000	16000	16500	16500	21700	21700	21700	19500	21700	21700	19500
4.06	acceleration time (10m) loaded/unloaded		s	4.6/4.4	4.8/4.6	4.6/4.4	4.8/4.6	4.7/4.5	4.7/4.5	4.7/4.5	5.0/4.7	4.9/4.7	4.9/4.7	5.2/4.9
weight														
5.01	total weight (with /without battery)		kg	3620/3340	3620/3340	3910/3630	3910/3630	4490/4030	4490/4030	4490/4030	4490/4030	5100/4640	5100/4640	5100/4640
5.02	axle load: unloaded, front/rear		kg	1493/2127	1493/2127	1690/2220	1690/2220	2095/2395	2095/2395	2095/2395	2095/2395	2290/2810	2290/2810	2290/2810
5.03	axle load: loaded, front/rear		kg	4687/933	4687/933	5680/730	5680/730	6820/670	6820/670	6820/670	6820/670	7810/790	7810/790	7810/790
battery														
6.01	battery voltage/capacity (discharging capacity in 5 hours)		V/Ah	80/271	80/271	80/271	80/271	80/404	80/404	80/404	80/404	80/404	80/404	80/404
6.02	battery weight		kg	280	280	280	280	420	420	420	420	420	420	420
motor and controller														
7.01	driving motor power (S2-60min)		kW	12	12	12	12	16.6	16.6	16.6	16.6	16.6	16.6	16.6
7.02	lifting motor power (S3-15%)		kW	15	15	15	15	13.5	13.5	13.5	13.5	13.5	13.5	13.5
7.03	drive motor controlling mode			MOSFET/AC"	MOSFET/AC"	MOSFET/AC"	MOSFET/AC"	MOSFET/AC"	MOSFET/AC"	MOSFET/AC"	MOSFET/AC"	MOSFET/AC"	MOSFET/AC"	MOSFET/AC"
7.04	lifting motor controlling mode			MOSFET/AC"	MOSFET/AC"	MOSFET/AC"	MOSFET/AC"	MOSFET/AC"	MOSFET/AC"	MOSFET/AC"	MOSFET/AC"	MOSFET/AC"	MOSFET/AC"	MOSFET/AC"
others														
8.01	service brake/parking brake			hydraulic/mechanical"	hydraulic/mechanical"	hydraulic/mechanical"	hydraulic/mechanical"	hydraulic/mechanical"	hydraulic/mechanical"	hydraulic/mechanical"	hydraulic/mechanical"	hydraulic/mechanical"	hydraulic/mechanical"	hydraulic/mechanical"
8.02	hydraulic system working pressure		Mpa	17.5	17.5	17.5	17.5	21	21	21	21	21	21	21
8.03	type of drive control			ZAPI	Santroll	ZAPI	Santroll	ZAPI	INMOTION	Santroll	ZAPI	INMOTION	Santroll	Santroll

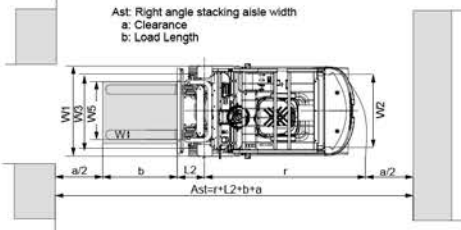
NTOE: For configuration number, 2: ZAPI Controller; 3: INMOTION Controller; 7: Santroll Controller.



WIDE VIEW MAST

mast model	Max. lifting height (mm)	load capacity (load center 500mm) (kg)				mast overall height (fork to the ground) (mm)			mast tilt angle (α/β)	
		2t	2.5t	3t	3.5t	2-2.5t	3t	3.5t	2-2.5t	3-3.5t
M200	2000	2000	2500	3000	3500	1495	1570	1680	6/8	6/10
M250	2500	2000	2500	3000	3500	1745	1820	1930	6/8	6/10
M300	3000	2000	2500	3000	3500	1995	2070	2180	6/8	6/10
M330	3300	2000	2500	3000	3500	2145	2220	2330	6/8	6/10
M350	3500	2000	2500	3000	3500	2245	2320	2430	6/8	6/10
M370	3700	2000	2500	3000	3400	2345	2420	2530	6/8	6/6 *6/10
M400	4000	2000	2500	2950	3350	2545	2620	2730	6/5	6/6 *6/10
M425	4250	2000	2500	2850	3250	2670	2745	2855	6/5	6/6 *6/10
M450	4500	1900	2300	2750	3100	2795	2870	2980	6/5	6/6 *6/10
M500	5000	1800	1950 *2050	2400 *2550	2650 *2800	3045	3120	3230	6/5 *6/5	6/6 *6/6
M550	5500	1400	1550 *1950	2250 *2450	2500 *2600	3345	3420	3530	3/3 *6/5	3/6 *3/6
M600	6000	950 *1500	1100 *1800	1500 *2200	1550 *2400	3595	3670	3780	3/3 *6/5	3/6 *3/6

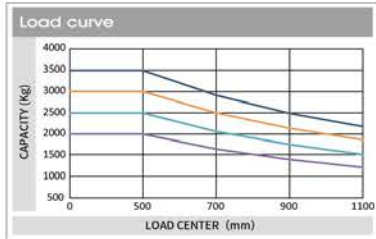
Note: (1) *refers to rated capacity with dual front tires or widen tires;



WIDE VIEW FULL FREE 2-STAGE MAST

mast model	Max. lifting height (mm)	load capacity (load center 500mm) (kg)				mast overall height (mm)			free lifting height (with backrest)(mm)			mast tilt angle (α/β)	
		2t	2.5t	3t	3.5t	2-2.5t	3t	3.5t	2-2.5t	3t	3.5t	2-2.5t	3-3.5t
ZM200	2000	2000	2500	3000	3500	1495	1570	1680	447	380	500	6/8	6/10
ZM250	2500	2000	2500	3000	3500	1745	1820	1930	697	630	750	6/8	6/10
ZM300	3000	2000	2500	3000	3500	1995	2070	2180	947	880	1000	6/8	6/10
ZM330	3300	2000	2500	3000	3500	2145	2220	2330	1097	1030	1150	6/8	6/10
ZM350	3500	2000	2500	3000	3500	2245	2320	2430	1197	1130	1250	6/8	6/10
ZM370	3700	2000	2500	3000	3400	2345	2420	2530	1297	1230	1350	6/8	6/6 *6/10
ZM400	4000	2000	2500	2950	3350	2545	2620	2730	1497	1430	1550	6/5	6/6 *6/10
ZM425	4250	2000	2500	2850	3250	2670	2745	2855	1622	1555	1675	6/5	6/6 *6/10
ZM450	4500	1900	2300	2750	3100	2795	2870	2980	1747	1675	1800	6/5	6/6 *6/10
ZM500	5000	1800	1950 *2050	2400 *2550	2650 *2800	3045	3120	3230	1997	1930	2050	6/5 *6/5	6/6 *6/6
ZM550	5500	1400	1550 *1950	2250 *2450	2500 *2600	3345	3420	3530	2297	2230	2350	3/3 *6/5	3/6 *3/6
ZM600	6000	950 *1500	1100 *1800	1500 *2200	1550 *2400	3595	3670	3780	2547	2480	2600	3/3 *6/5	3/6 *3/6

Note: (1) *refers to rated capacity with dual front tires or widen tires;
 (2) 2-2.5t: free lifting height 397mm increase without backrest ;
 (3) 3-3.5t: free lifting height 396mm increase without backrest ;



CPD20 CPD25
 CPD30 CPD35

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.

WIDE VIEW FULL FREE 3-STAGE MAST

mast model	Max. lifting height (mm)	load capacity (load center 500mm) (kg)				mast overall height (mm)		free lifting height (with backrest)(mm)			mast tilt angle (α/β)	
		2t	2.5t	3t	3.5t	2-2.5t	3-3.5t	2-2.5t	3t	3.5t	2-2.5t	3-3.5t
ZSM360	3600	2000	2500	3000	3400	1975	1930	774	740	745	6/8	6/6
ZSM400	4000	2000	2500	2900	3250	1920	2055	900	865	870	6/5	6/6
ZSM435	4350	2000	2450	2750	3150	2045	2180	1024	990	995	6/5	6/6
ZSM450	4500	2000	2300	2700	3000	2095	2230	1074	1040	1045	6/5	6/6
ZSM470	4700	2000	2200	2700	2900	2160	2230	1140	1140	1048	6/5	6/6
ZSM480	4800	1900	2050	2600	2800	2195	2330	1174	1140	1145	6/5	6/6
ZSM500	5000	1800	1950 *2050	2400 *2500	2650	2295	2430	1274	1240	1245	6/5 *6/5	6/6 *6/6
ZSM540	5400	1400	1550 *1950	2250 *2450	2500	2420	2555	1400	1365	1370	3/3 *6/5	3/6 *3/6
ZSM600	6000	950 *1500	1100 *1800	1550 *2150	1550 *2300	2645	2780	1624	1590	1595	3/3 *6/5	3/6 *3/6
ZSM650	6500	700 *1400	800 *1600	1250 *2200	1300 *2500	2835	2970	1814	1788	1793	3/3 *3/5	3/3 *3/3
ZSM700	7000	300 *1100	400 *1200	850 *2100	1000 *2300	3105	3240	2084	2058	2063	3/3 *3/5	3/3 *3/3

Note: (1) *refers to rated capacity with dual front tires or widen tires;
 (2) 2-2.5t: free lifting height 451mm increase without backrest ;
 (3) 3-3.5t: free lifting height 520mm increase without backrest ;

LITHIUM BATTERY

Model	Configuratio	Voltage(V)	Capacity(Ah)	Supplier
CPD20/CPD25	Standard	80	271	ENEROC
	Optional	80	404	ENEROC
CPD30/CPD35	Standard	80	404	ENEROC
	Optional	80	542	ENEROC