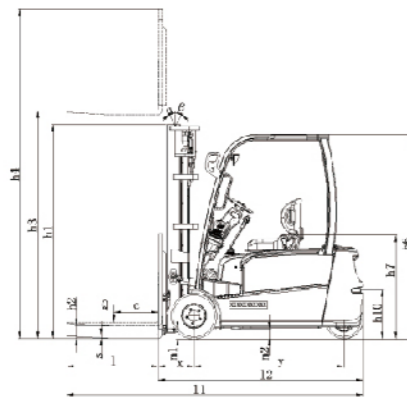
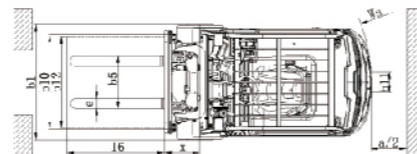


Optional		
Safety equipments	Speed limiting during steering	●
	Reversing handle with horn	●
	OPS	●
	Safety protecting function of multiway valve overload	●
	Reverse buzzer	●
	Electronic upper buffering	●
	Central wide-angle rearview mirror	●
	Rearview mirrors on two sides	○
	Front protective net	○
	Seat with belt switch	○
	Dry powder fire extinguisher (0.5kg)	○
	Dry powder fire extinguisher (2kg)	○
	Reverse Chinese voice speaker	○
	Reversing radar (with 4 probes)	○
Revsing image (1 camear+4 probes)	○	
Comfortable equipments	Semi-enclosed seat	●
	USB	●
	Start actovated by steering wheel	●
	Mechanical operation valve	●
	Colorful meter	●
	Full suspension seat	○
	Electromagnetic operation valve	○
	Fan	○
	Heater	○
	Panel-mounted cab	○
Equipments for driving/ Equipments for windshield	Rear windshield	○
	Rear windshield	○
	Top windshield	○
	LED lights	●
Lights	LED flickering warning ligh	●
	Rear LED light	○
	Rear LED red/blue spotlight	○
	Bilateral and rear red/blue strip light	○
	LED rotating warning light	○
	LED rotating buzzing warning light	○
Others	Metric thread	●
	Automatic water adding	○
	Solid tyre	●
	No-marking solid tyre	○
	Sleeve for tilting cylinder	○
	FCIS (Basic type)	●

Note: "●" standard; "○" optional;



Ast : Right angle stacking aisle width  
a : Clearance 200mm



## CPD15/16/ 18/20SQ A2PG3-M

# 1.5-2 t

G3 series front-wheel dual drive  
three wheel battery powered forklift truck



**ANHUI HELI CO., LTD.**

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LinkedIn



YouTube



Facebook



G3  
SERIES

**HELI**



**Powerful** >>>  
>>> **And Flexible**

The truck has high-end Appearance and Beautiful colors; Excellent performance

Comfortable and energy-saving The truck provides users with the Best comfortable driving experience. Advanced energy-saving technology makes The truck more environment friendly.

G3 series family design elements

Sheet metal stamping type side cover, side door



Wide view mast  
Optimized mast improves lateral stability.

Mobile phone and water cup holder offer convenient storage.

Optimized mast improves lateral stability.

The steering wheel is sensitive, lightweight, precise, and power-saving when starting and turning.

The steering wheel is optimized with height reduction  
And structure improving;  
Adjustable angle; Comfortable operation

Color screen instrument

PES third gear adjustment

P — Powerful  
E — Economical  
S — Energy-saving  
Multi performance modes satisfy the needs of various working conditions.



**Strong performance:**  
The truck is equipped with ZF dual motor drive unit.



The truck has small turning radius and good passability.

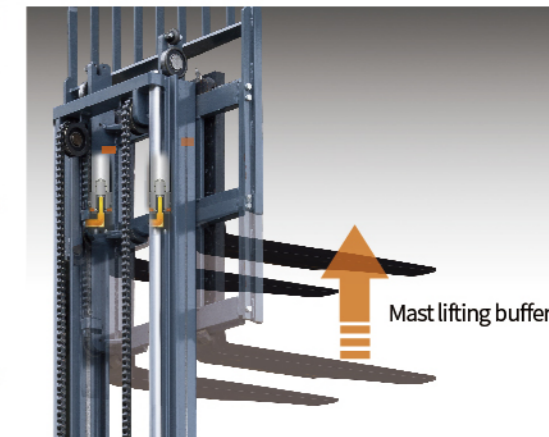
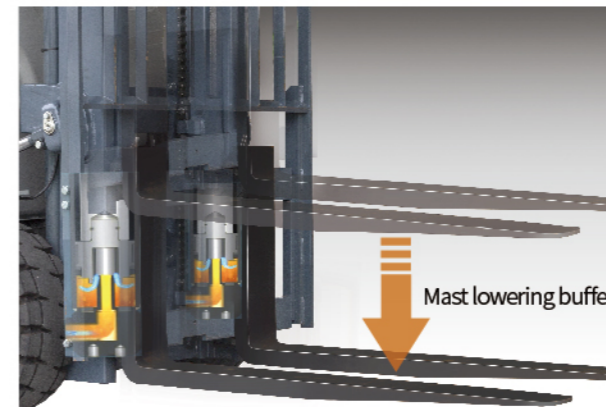


The minimum turning radius is as low as 1.48m.

The truck is designed with the concept of stability and reliability, and has undergone multiple rigorous tests and verifications.

The mast is durable and reliable which has undergone 80000 times fatigue test.

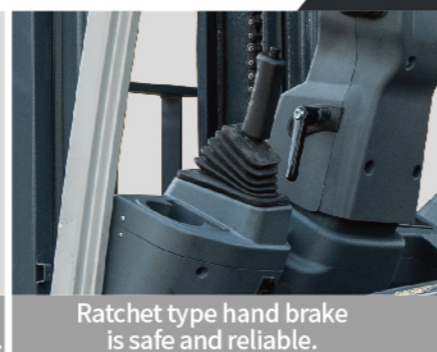
Side mounted battery offers more efficient replacement and maintenance.



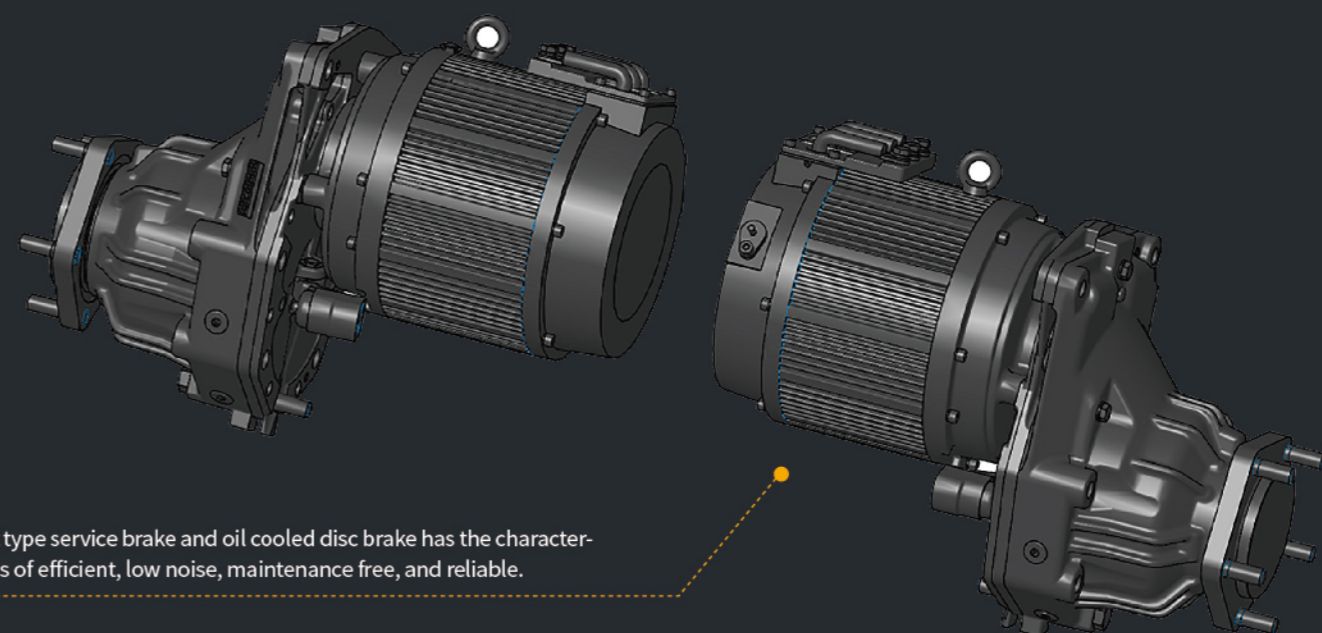
- Dual Core Controller
- Upper and lower mast buffer
- Automatic deceleration during turns
- OPS
- Electric service braking and wet type service braking offer dual protection.
- Intelligent differential speed of left and right motors.
- Reinforced cast steering axle is mature and reliable.
- The optimized design of the mast stress improves overall performance and effectively ensures work safety.



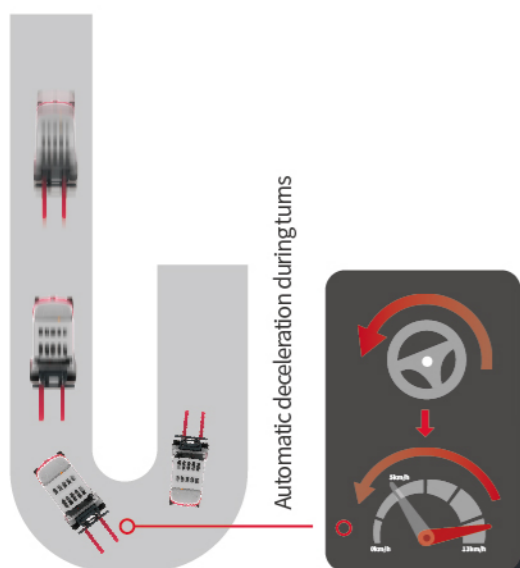
The entire truck and its components meet the latest CE & UKCA requirements.



Ratchet type hand brake is safe and reliable.



Wet type service brake and oil cooled disc brake has the characteristics of efficient, low noise, maintenance free, and reliable.



Automatic deceleration during turns



OPS (operator presence system)

Unmanned self-locking Intelligent protection

**Strict test**

**Rain test, reliability enhancement test, vibration test, bumps test**



**Rain test**

the truck reaches to IPX4 protection level after simulating operation under 15 min rainstorm and it meets outdoor operation requirements.



**Vibration test**

Conduct vibration frequency testing on the truck to optimize and improve operational comfort.



**Reliability enhancement test**

The truck undergoes 800 hours of enhancement test (including climbing, rain exposure, bumpy road surfaces, etc.).

**Intelligent safety technology:**  
The truck is designed with intelligent safety as its core and possesses multiple advanced safety technologies.

- Dual Core Controller.
- Upper and lower mast buffering.
- Automatic deceleration during turns.
- OPS.
- Electric service braking and wet type service braking offer dual protection.
- Intelligent differential speed of left and right motors.
- Hydraulic tube burst protection, forward tilt self-locking protection.
- Electrical multiple protection: dual wire system, short circuit protection.
- Overheat protection, low battery protection, sequential protection.
- Parking safety reminder.
- Reminder for slow slope sliding on the slope.
- Reverse horn handle.

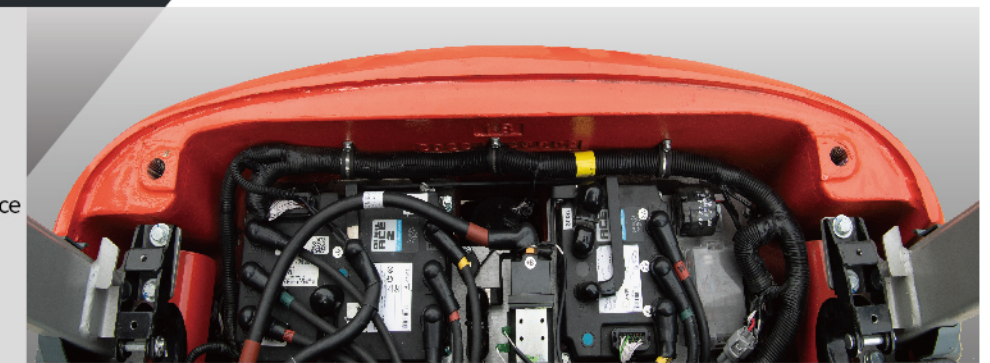


**Easy Maintenance;**  
Time-saving, convenient and efficient

Battery side pulling offers easy and fast replacing.



Electric control/main electrical components are located on the balance weight for efficient maintenance.



Maintenance-free steering axle

**HELI smart fleet management system (domestic basic edition)**

Vehicle positioning	Statistical form
Remote diagnosis	Vehicle management
Remote monitoring	Identification recognition (optional)
Maintenance reminder	Weight management (optional)
Battery management	Collision management (optional)



The hydraulic oil tank is located on the left side for easy filling and checking.

**Manufacturer and Technical Data**

1.01	Manufacturer	<b>HELI</b>					
1.02	Model	CPD15SQ	CPD16SQ	CPD18SQ	CPD20SQ		
1.03	Configuration number	A2PG3-M	A2PG3-M	A2PG3-M	A2PG3-M		
1.04	Rated capacity	Q	kg	1500	1600	1800	2000
1.05	Load center distance	c	mm	500			
1.06	Power mode	Battery					
1.07	Driving mode	Seated					
1.08	Front overhang	x	mm	359	359	359	364
1.09	Wheelbase	y	mm	1292	1400	1400	1508
<b>Weight</b>							
2.01	Total weight (with/without battery)		kg	3025/2330	3214/2358	3321/2465	3407/2396
2.02	Axle load (laden,front/rear)		kg	3920/605	4180/634	4500/621	4790/617
2.03	Axle load (unladen,front/rear)		kg	1420/1605	1600/1614	1600/1721	1640/1767
<b>Tyres</b>							
3.01	Tyre type			Solid	Solid	Solid	Solid
3.02	Tyre size,front			18×7-8	18×7-8	200/50-10	200/50-10
3.03	Tyre size,rear			140/55-9			
3.04	Wheels,number front/rear (x=driven wheels)			2×/2			
3.05	Tread, front	b10	mm	910	910	920	920
3.06	Tread, rear	b11	mm	180			
<b>Dimensions</b>							
4.01	Mast tilt angle (forward/backward)	α/β	°	5/7			
4.02	Height (mast lowered)	h1	mm	2000	2000	2000	2000
4.03	Free lifting height	h2	mm	105	105	105	110
4.04	Lifting height (standard)	h3	mm	3000			
4.05	Max. height,extended (with backrest)	h4	mm	4038			
4.06	Height of overhead guard	h6	mm	2040			
4.07	Seat height relating to SIP (to ground)	h7	mm	1042			
4.08	Towing coupling height	h10	mm	482			
4.09	Overall length (with fork)	l1	mm	2762	2870	2870	2983
4.10	Overall length (without fork)	l2	mm	1842	1950	1950	2063
4.11	Overall width	b1	mm	1076	1076	1120	1120
4.12	Fork size:thickness x width x length	s/e/l	mm	35×100×920	35×100×920	35×100×920	40×122×920
4.13	Fork carriage,according to ISO2328			2A			
4.14	Distance across fork-arms, Max./Min.	b5	mm	960/200	960/200	960/200	1030/200
4.15	Distance across fork-arms, Max./Min.	m1	mm	90			
4.16	Ground clearance (center of wheelbase)	m2	mm	100			
4.17	Right angle stacking aisle width for pallet 1000 x1200mm crossways	Ast	mm	3163	3271	3271	3389
4.18	Right angle stacking aisle width for pallet 800 x1200mm lengthways	Ast	mm	3286	3394	3394	3513
4.19	Min. outside turning radius	Wa	mm	1477	1585	1585	1699
<b>Performance Data</b>							
5.01	Travel speed (laden/unladen)		km/h	16/16	16/16	16/16	16/16
5.02	Lift speed (laden/unladen)		mm/s	380/600	430/600	430/600	400/600
5.03	Lowering speed (laden/unladen)		mm/s	470/500			
5.04	Max.drawbar pull (laden)		N	14000	15000	16000	16800
5.05	Max.gradeability (laden/unladen)		%	20/20	20/20	20/20	20/20
5.06	Acceleration time(10 m)(laden/unladen)		s	5.4/5	5.4/5	5.4/5	5.4/5
<b>Battery</b>							
6.01	Battery voltage/Capacity		V/Ah	48/440	48/600	48/600	48/720
6.02	Battery weight		kg	695	856	856	1011
6.03	Battery to DIN 43531/35/36/A/B/C			43531A			
<b>Motor and controller</b>							
7.01	Driving motor powering (S2-60min)		kW	5.4×2	5.4×2	5.4×2	5.4×2
7.02	Lifting motor powering (S3-15%)		kW	15	15	15	15
7.03	Driving motor controlling mode			MOSFET/AC			
7.04	Lifting motor controlling mode			MOSFET/AC			
<b>Addition data</b>							
8.01	Service brake/Parking brake			Hydraulic/mechanical			
8.02	Relief pressure		Mpa	17.5	17.5	22.5	22.5

**1.5t/1.6t/1.8t/2t Wide View Standard Mast**

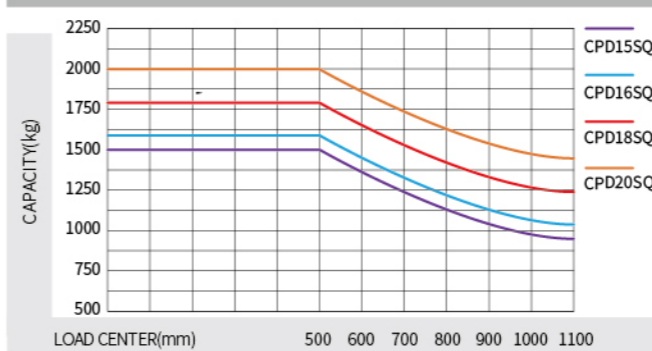
Mast type	Mast Model	Max lifting height (mm)	Load capacity (lode center 500mm)(kg)				Height (mast lowered) (mm)	Free lift (with backrest) (mm)		Service weight (kg)				Mast tilting angle (°)α/β
			1.5t	1.6t	1.8t	2t		1.5-2t	1.5-1.8t	2t	1.5t	1.6t	1.8t	
WIDE VIEW MAST	M200	2000	1500	1600	1800	2000	1500	105	110	2959	3148	3255	3341	5/7
	M250	2500	1500	1600	1800	2000	1750	105	110	2992	3181	3288	3374	5/7
	M300	3000	1500	1600	1800	2000	2000	105	110	3025	3214	3321	3407	5/7
	M330	3300	1500	1600	1800	2000	2150	105	110	3045	3234	3341	3427	5/7
	M350	3500	1500	1600	1800	2000	2250	105	110	3058	3247	3354	3440	5/7
	M370	3700	1500	1600	1800	2000	2350	105	110	3072	3261	3368	3454	5/7
	M400	4000	1500	1600	1800	2000	2550	105	110	3123	3312	3419	3505	3/5
	M425	4250	1500	1600	1750	1900	2675	105	110	3140	3329	3436	3522	3/5
	M450	4500	1400	1500	1700	1850	2800	105	110	3156	3345	3452	3538	3/5
	M500	5000	1300	1400	1600	1700	3050	105	110	3215	3404	3511	3597	3/3
WIDE VIEW FULL FREE 2-STAGE MAST	ZM200	2000	1500	1600	1800	2000	1500	477	482	2953	3142	3249	3335	5/7
	ZM250	2500	1500	1600	1800	2000	1750	727	732	2984	3173	3280	3366	5/7
	ZM300	3000	1500	1600	1800	2000	2000	977	982	3015	3204	3311	3397	5/7
	ZM330	3300	1500	1600	1800	2000	2150	1127	1132	3033	3222	3329	3415	5/7
	ZM350	3500	1500	1600	1800	2000	2250	1227	1232	3045	3234	3341	3427	5/7
	ZM370	3700	1500	1600	1800	2000	2350	1327	1332	3057	3246	3353	3439	5/7
	ZM400	4000	1500	1600	1800	2000	2550	1527	1532	3107	3296	3403	3489	3/5
	ZSM360	3600	1500	1600	1800	2000	1750	727	732	3134	3323	3430	3516	3/5
	ZSM400	4000	1500	1600	1800	2000	1900	877	882	3163	3352	3459	3545	3/5
	ZSM435	4350	1400	1500	1700	1900	2000	977	982	3183	3372	3479	3565	3/5
WIDE VIEW FULL FREE 3-STAGE MAST	ZSM450	4500	1400	1500	1700	1850	2050	1027	1032	3193	3382	3489	3575	3/5
	ZSM470	4700	1350	1450	1650	1750	2120	1097	1102	3207	3396	3503	3589	3/5
	ZSM480	4800	1350	1450	1650	1750	2150	1127	1132	3213	3402	3509	3595	3/5
	ZSM500	5000	1200	1300	1600	1700	2250	1227	1232	3233	3422	3529	3615	3/3
	ZSM540	5400	1050	1150	1250	1400	2400	1377	1382	3262	3451	3558	3644	3/3
	ZSM600	6000	800	900	1000	1100	2675	1652	1657	3347	3536	3643	3729	3/3
	ZSM650	6500	700	800	900	1000	2850	1827	1832	3381	3570	3677	3763	3/3

Note: Full free 2-Stage mast: the free lifting height increases by 449mm without backrest.  
Full free 3-Stage mast: the free lifting height increases by 449mm without backrest.

**Battery Configuration Chart**

Voltage/Capacity	48V/440Ah	48V/480Ah	48V/500Ah	48V/600Ah	48V/625Ah	48V/720Ah	48V/750Ah
1.5t	●	○	○	—	—	—	—
1.6t	—	—	—	●	○	—	—
1.8t	—	—	—	●	○	—	—
2.0t	—	—	—	—	—	●	○

**Load curve**



Note: The vertical axis stands for load capacity while 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 the mast is tilted forward, the worker using nonstandard forks for 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.