

G2 SERIES 1.5-1.8 t

LIION

» FEATURES OF THE COMPLETED TRUCK

Three phase AC type motor technology

- Three phase AC type motor control on travelling, lifting and steering
- Good acceleration
- Fast and sensitive respond on travel direction shifting
- Free from maintenance motor without carbon brush having long service life and low maintenance cost
- Energy regenerating during deceleration extending operation hours

Newly designed hydraulic system

- Newly designed hydraulic system with high working efficiency
- High power lifting motor
- MOSTET lifting speed governing electric controller
- New type low noisy gear pump, high efficiency and long life

Optimized intelligent design

- CAN bus technology
- Parking brake on slope
- Operation sequence protection
- Travelling speed control
- Lifting speed control
- Electric controller self protection
- Dead-man footswitch traction interlock

Advanced EPS electric powered steering

- EPS electric power steering offering easy, flexible, high efficient and mute operation
- Steering motor controller
- Automatic centering function
- Automatic limit on speed and accelerated speed when steering

Easy operated thumb switch

- To control travelling functions
- Clear operating units

Five independent braking systems

- Automatic braking when accelerator lever is released
- Emergency brake activated by releasing foot switch
- Parking brake activated by pressing button on the panel
- Automatic hold-on brake
- Emergency isolator



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

- 2 hours 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



High Safety

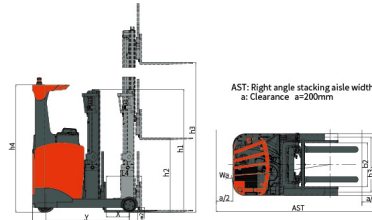
- According to the characteristics of industrial vehicles, it achieves safety protection design which includes lithium battery materials, battery core type, pack technique and system power management
- "Multiple node safety closed circuit protection" realizing truck real time closed circuit protection 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



Manufacturer's Data and Design Characteristics

Character		HELI			
Character		CQD15		CQD18	
1.01	Manufacturer	HELI			
1.02	Model	CQD15		CQD18	
1.03	Configuration number	GD2RLI	GE2RLI	GD2RLI	GE2RLI
1.04	Load capacity	Q	kg	1500	1800
1.05	Load center distance	C	mm	500	
1.06	Power mode	Lithium Battery			
1.07	Driving mode	Stand-on			
1.08	Wheel base	Y	mm	1335	1500
Tyre		Polyurethane			
2.01	Tyre type	Polyurethane			
2.02	Wheel number, drive/caster/load (front/rear)	1x2/2			
2.03	Track Width/load	b3	mm	976	
2.04	Wheel size, load	mm e254x114			
2.05	Wheel size, drive	mm e330x114			
2.06	Wheel size, caster	mm e178x76			
Size					
3.01	Lift height	h3	mm	3200	3200
3.02	Free lift	h2	mm	115	115
3.03	Max height, lowered	h1	mm	2355	
3.04	Fork size, thickness/width/length	s/e/l	mm	35x100x920	
3.05	Fork adjusting width	mm 200-628			
3.06	Fork sideshifting	mm ±55			
3.07	Truck body length(fork excluded)	L	mm	1721	1886
3.08	Truck body width	b1	mm	1090	
3.09	Distance between support arms	b2	mm	772	
3.10	Reach distance	l4	mm	550	
3.11	Height of overhead guard	h4	mm	2250	
3.12	Ground clearance,below mast	m2	mm	80	
3.13	Turning radius	Wa	mm	1615	1775
3.14	Distance from fork front tip to center of load wheel (side view)	X	mm	329	
3.15	100%L110%W clearance 200	Ast	mm	2760	
3.16	100%L110%W clearance 200	Ast	mm	2775	
Performance					
4.01	Travelling speed,with/without load	km/h	10/10.5		10/10.5
4.02	Lifting speed,with/without load	m/s	0.31/0.5		0.3/0.5
4.03	Lowering speed,with/without load	m/s	0.5/0.5		0.5/0.5
4.04	Reach speed,with/without load	m/s	0.11/0.11		0.11/0.11
4.05	Maximum climbing ability,with/without load	%	10/15		
Weight					
5.01	Total weight(with battery)	kg	2595		2645
Battery					
6.01	Battery voltage/capacity k5	V/Ah	48/271		48/271
6.02	Battery weight	kg	630		
6.03	Battery box dimension	mm	1020x359x629		1020x439x629
Motor and controller					
7.01	Drive motor power	kw	5		5
7.02	Lifting motor power	kw	10		10
7.03	Steering motor power	kw	0.6		0.6
7.04	Type of driving control	MOSTET/AC			
7.05	Type of lifting control	MOSTET/AC			
7.06	Type of steering control	MOSTET/AC			
7.07	Transmission box	HELI special transmission box			
7.08	Service brake	Electrical			
7.09	Hydraulic system working pressure	Mpa	16.5		18.5

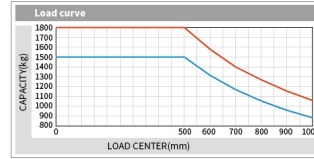
NOTE: Detailed information about battery, please contact our salesmen or engineer.



RENEWABLE ENERGY TECHNOLOGIES

With the use of AC controlling renewable energy technologies, the forklift is more energy-saving and the working hour of the battery is extended by 15%.

15%



1.5t 1.8t

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 100mm 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	Lifting height (mm)		Free lifting height(mm)		Mast height, lowered(mm)		Load capacity(kg)		Mast tilt angle (front/rear)α/β
	CQD15	CQD18	CQD15	CQD18	CQD15	CQD18	CQD15	CQD18	
ZSM460	4600	4600	1280	1280	2319	2319	1400	1700	2°/4°
ZSM480	4800	4800	1340	1340	2386	2386	1400	1700	2°/4°
ZSM500	5000	5000	1400	1400	2453	2453	1400	1550	2°/4°
ZSM540	5400	5400	1540	1540	2586	2586	1250	1450	2°/4°
ZSM570	5700	5700	1640	1640	2686	2686	1150	1350	2°/4°
ZSM600	6000	6000	1740	1740	2786	2786	1050	1250	2°/4°
ZSM630	6300	6300	1840	1840	2886	2886	950	1150	2°/4°
ZSM650	6500	6500	1900	1900	2953	2953	850	1050	2°/4°
ZSM675	6750	6750	1940	1940	2987	2987	750	950	2°/4°

WIDE VIEW MAST

Mast model	Lifting height (mm)		Free lifting height(mm)		Mast height, lowered(mm)		Load capacity(kg)		Mast tilt angle (front/rear)α/β
	CQD15	CQD18	CQD15	CQD18	CQD15	CQD18	CQD15	CQD18	
M290	2900	2900	115	115	2300	2300	1500	1800	2°/4°
M320	3200	3200	115	115	2450	2450	1500	1800	2°/4°
M360	3600	3600	115	115	2650	2650	1500	1800	2°/4°
M380	3800	3800	115	115	2750	2750	1500	1800	2°/4°
M400	4000	4000	115	115	2850	2850	1500	1800	2°/4°
M420	4200	4200	115	115	2950	2950	1450	1750	2°/4°
M440	4400	4400	115	115	3050	3050	1400	1700	2°/4°
M460	4600	4600	115	115	3150	3150	1400	1700	2°/4°
M500	5000	5000	115	115	3350	3350	1400	1550	2°/4°



Standard configuration

- AC travelling motor
- AC Lifting motor
- AC steering motor
- Electrical brake
- DC/DC converter
- Low noisy gear pump
- Control valve(four throw)
- 3200mm two-stage mast
- Integral sideshifter
- Standard fork
- Backrest
- Polyurethane tyre
- LED meter
- Front working light
- Warning light
- Rearview mirror
- Blue spotlight
- Fork tilting

Optional device

- Three-stage full free lift mast
- Two-stage mast(other lifting height)
- Fork with other length
- Fork extension
- Monitoring system
- Other battery
- Battery charger
- Alternative colour schemes
- Battery on rollers for rapid side battery change
- Lifting height pre-selector*
- Electronic control handle*

* Only to the reach truck that configuration number is GD2RLI.

Configuration number	Configuration
GD2RLI	Solenoid valve
	Thumb switch control hydraulic functions
	ZAPI travelling motor controller
	ZAPI lifting motor controller
GE2RLI	ZAPI steering motor controller
	Manually operated valve
	Mechanical handle control hydraulic functions
	ZAPI travelling motor controller
	ZAPI lifting motor controller
	ZAPI steering motor controller

HELIX smart fleet management system (optional)

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



LIION 1.5-1.8t
G2 SERIES LITHIUM BATTERY
POWERED REACH TRUCK
(STAND-ON TYPE)



Fork tilt



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