G2 1.6-2.0 t LITION

WIDE VIEW FULL FREE 3–STAGE MAST

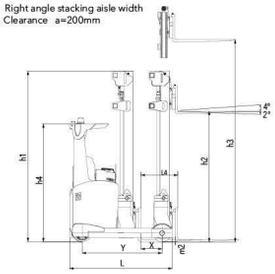
Mast model	Max. lifting height (mm)	Load capacity (load center 600mm)(kg)		Mast overall height (mm)	Free lifting height (with backrest) (mm)	Service weight(kg)		Fork tilt angle (front/rear) α / β
		CQD16-GB3SLi	CQD20-GB3SLi	1.6-2t	1.6-2t	CQD16-GB3SLi	CQD20-GB3SLi	
ZSM460	4600	1600	2000	2314	1280	3460	3650	2°/4°
ZSM480	4800	1600	2000	2381	1340	3480	3670	2°/4°
ZSM540	5400	1600	2000	2581	1540	3540	3730	2°/4°
ZSM570	5700	1550	1900	2681	1640	3565	3755	2°/4°
ZSM630	6300	1500	1900	2881	1840	3625	3815	2°/4°
ZSM675	6750	1450	1800	2982	1940	3660	3850	2°/4°
ZSM700	7000	1400	1700	3065	2030	3680	3870	2°/4°
ZSM715	7150	1400	1700	3115	2080	3695	3885	2°/4°
ZSM750	7500	1300	1700	3232	2190	3730	3920	2°/4°
ZSM800	8000	1200	1500	3398	2360	3780	3970	2°/4°
ZSM850	8500	1100	1300	3564	2530	3825	4015	2°/4°
ZSM900	9000	900	1100	3730	2690	3875	4065	2°/4°
ZSM950	9500	800	1000	3898	2860	3920	4110	2°/4°
ZSM1000	10000	-	850	4064	3030	-	4160	2°/4°
ZSM1050	10500	-	800	4230	3190	-	4205	2°/4°
ZSM1080	10800	-	750	4330	3290	-	0235	2°/4°
ZSM1100	11000	-	700	4398	3360	-	4255	2°/4°
ZSM1150	11500	-	650	4564	3530	-	4305	2°/4°
ZSM1200	12000	-	550	4730	3690	-	4350	2°/4°
ZSM1250	12500	-	500	4898	3860	-	4400	2°/4°

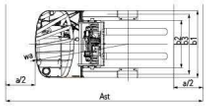
Note:The free lift height is 4600mm-6300mm when the truck is not assembled with backrest. The free lift height is 175mm increased and other height is 25mm increased.

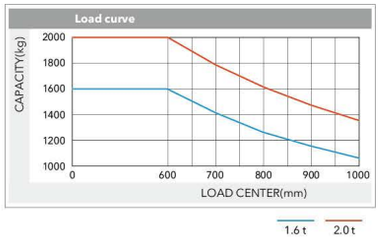
WIDE VIEW MAST

Mast model	Max. lifting height (mm)	Load capacity (load center 600mm)(kg)		Mast overall height (mm)	Service weight(kg)		Fork tilt angle (front/rear) α / β
		CQD16-GB3SLi	CQD20-GB3SLi	1.6-2t	CQD16-GB3SLi	CQD20-GB3SLi	
M290	2900	1600	2000	2200	3235	3425	2°/4°
M320	3200	1600	2000	2350	3250	3440	2°/4°
M360	3600	1600	2000	2550	3280	3470	2°/4°
M380	3800	1600	2000	2650	3295	3485	2°/4°
M400	4000	1600	2000	2750	3310	3500	2°/4°
M420	4200	1600	2000	2850	3325	3515	2°/4°
M440	4400	1600	2000	2950	3335	3525	2°/4°
M460	4600	1600	2000	3050	3390	3580	2°/4°
M500	5000	1500	1900	3250	3420	3610	2°/4°

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







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.

Manufacturer's Data and Design Characteristics

	Character				
1.01	Manufacturer			HELI	
1.02	Model			CQD16	CQD20
1.03	Configuration number			GB3S Li	GB3S Li
1.04	Load capacity	Q	kg	1600	2000
1.05	load center distance	C	mm	600	
1.06	Power mode			Lithium Battery	
1.07	Driving mode			Seated	
1.08	Wheel base	Y	mm	1450	1515
	Tyre				
2.01	Tyre type			Polyurethane	
2.02	Wheels, number front/rear (x=driven wheels)			1x/2	
2.03	Track width, rear	b3	mm	1157	1143
2.04	Wheel size, rear		mm	ϕ285x100	ϕ330x100
2.05	Wheel size, front		mm	ϕ343x114	ϕ343x114
	Size				
3.01	Lift height	h3	mm	4600	4600
3.02	Free lift	h2	mm	1280	1280
3.03	Mast height, lowered	h1	mm	2314	2314
3.04	Fork size:thickness×width×length	s/e/l	mm	40x122x1150	40x122x1150
3.05	Fork adjusting width		mm	244~724	244~724
3.06	Fork tilt angle (front/rear)	α/β	°	2°/4°	2°/4°
3.07	Fork sideshifting		mm	±75	±75
3.08	Truck body length (fork excluded)	L	mm	1840	1942
3.09	Truck body width	b1	mm	1270	1270
3.10	Distance between support arms	b2	mm	900	900
3.11	Reach distance	L4	mm	606	620
3.12	Height of overhead guard (cab)	h4	mm	2215	2215
3.13	Ground clearance, below mast	m2	mm	75	75
3.14	Turning radius	Wa	mm	1689	1751
3.15	Load distance, centre of support arm wheel to face of forks	X	mm	369	383
3.16	Aisle width with pallet 1200 x 1200 across forks	Ast	mm	2914	2965
3.17	Aisle width with pallet 1000 x 1200 across forks	Ast	mm	2760	2810
	Performance				
4.01	Travelling speed: with/without load		km/h	11/12	12/14
4.02	Lifting speed: with/without load		m/s	0.34/0.53	0.35/0.55
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	10/15
	Weight				
5.01	Total weight (with battery)		kg	3460	3650
5.02	Axle load,fork outreached,without load,front/rear		kg	1570/1880	1690/1950
5.03	Axle load,fork retracted,without load,front/rear		kg	2165/1270	2285/1360
5.04	Axle load,fork outreached,with load,front/rear		kg	610/4445	580/5065
5.05	Axle load,fork retracted,with load,front/rear		kg	1920/3140	1980/3650
	Battery				
6.01	Battery voltage/capacity		V/Ah	48/404	48/404
6.02	Battery weight		kg	430	535
6.03	Battery box dimension		mm	1220x298x790	1220x352x790
	Motor and controller				
7.01	Drive motor power(S2-60min)		kW	6	8
7.02	Lifting motor power(S3-15%)		kW	11	12.5
7.03	Steering motor power(S3-50%)		kW	0.4	0.4
7.04	Type of driving control			MOSFET/AC	
7.05	Type of Lifting control			MOSFET/AC	
7.06	Type of Steering control			MOSFET/AC	
7.07	Transmission box			HELI special transmission box	
7.08	Service brake			Electromagnetic brake	
7.09	Hydraulic system working pressure		Mpa	17.5	20.5

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

FORKLIFTS DIRECT

Charger technology

- **High Efficiency**
  Charging efficiency higher than 95% meeting the requirements of energy saving and emissions reduction.
- **Speediness**
  100% charging realized in 2 hours 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

- AC travelling motor
- AC lifting motor
- AC steering motor
- Inmotion travelling motor controller
- Inmotion lifting motor controller
- Inmotion steering motor controller
- Electromagnetic brake
- DC/DC converter
- Low noisy gear pump
- Control valve (four throw)
- 4600mm three stage full free lift mast
- Integral sideshifter
- Standard fork
- Backrest
- Polyurethane tyre
- LED meter
- Front working light
- Warning light

Optional device

- Three-stage full free lift mast (other lifting height) fork with other length
- Fork extension
- Lifting height pre-selector
- Monitoring system
- Battery charger
- Customer made color

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LITION 1.6-2.0 t

G2 SERIES LITHIUM BATTERY POWERED REACH TRUCK (SIT-DOWN TYPE)

G2 1.6-2.0 t LITION

» 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
- MOSFET lifting speed governing electric controller New type low noisy gear pump

Optimized intelligent design

- Inmotion travelling motor controller
- Inmotion lifting motor controller
- Inmotion steering motor controller
- CAN bus technology
- Emergency power off of both main circuit and control circuit
- Parking brake on slope
- Operation sequence protection
- Travelling speed control
- Electric controller self protection
- Lifting height pre-selector (optional)

Advanced EPS electric powered steering

- EPS electric powered steering offering easy, flexible, high efficient and mute operation
- Steering motor controller
- Automatic centering function
- Real-time shifting between 180°steering mode and 360° steering mode
- Automatic limit on speed and accelerated speed when steering

Easy operated thumb switch

- To control hydraulic functions
- Clear operating units
- Proportional solenoid offering a stable and comfort lowering action

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

Suitable for working in both high and low environment

- Lithium battery is better than lead-acid battery
- when working between -25°C and 55°C

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.