

**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.

#### Configurations

Safety	Steering deceleration	<input checked="" type="radio"/>
	Rear handle with horn for truck reversing	<input checked="" type="radio"/>
	Overspeed alarm (5km/h)	<input type="radio"/>
	Overspeed alarm(8km/h)	<input type="radio"/>
	Overspeed alarm (10km/h)	<input type="radio"/>
	Speed limit ((no ultimate limit type)	<input type="radio"/>
	OPS(travelling+lifting+tilting+attachment) (lowering is not included)	<input checked="" type="radio"/>
	Full set of OPS	<input type="radio"/>
	Safety switch for seat belt	<input checked="" type="radio"/>
	Hydraulic valve overload protection device	<input checked="" type="radio"/>
	Dry powder extinguisher (0.5kg)	<input type="radio"/>
	Dry powder extinguisher (2kg)	<input type="radio"/>
	Backward buzzer	<input checked="" type="radio"/>
	Reversing speaker (Chinese)	<input type="radio"/>
	Electronic upper buffering	<input type="radio"/>
	Wide- angle central rear view mirror	<input checked="" type="radio"/>
	Rearview mirror on two sides+ Center wide angle rearview mirror	<input type="radio"/>
	Reverse radar (4 probes)	<input type="radio"/>
	Reversing image (1 camera + 4 probes)	<input type="radio"/>
Comfort		
	Semi-enclosure seat	<input checked="" type="radio"/>
	Full suspension seat	<input type="radio"/>
	1 USB interface (5V/1A)	<input checked="" type="radio"/>
	Super low torque steering unit	<input checked="" type="radio"/>
	Mechanical control valve	<input type="radio"/>
	Fan	<input type="radio"/>
Cab/ Windshields		
	Panel mounted cab ( with fan and wiper)	<input type="radio"/>
	Heater	<input type="radio"/>
	Air conditioner only for cooling	<input type="radio"/>
	Air conditioner only for cooling + heater	<input type="radio"/>
	Front windshield (with wiper/no blow can)	<input type="radio"/>
	Rear windshield	<input type="radio"/>
	Top windshield (without fan)	<input type="radio"/>
Lights		
	LED rear working lamp (one)	<input type="radio"/>
	Rear LED red/blue spot lamp	<input type="radio"/>
	Left, right and rear blue bar	<input type="radio"/>
	Fixed type LED flicker warning lamp	<input checked="" type="radio"/>
	Fixed type LED rotating warning lamp	<input type="radio"/>
	Fixed type LED rotating buzzer warning lamp	<input type="radio"/>
Others		
	Sleeve for steering cylinder	<input checked="" type="radio"/>
	Sleeves for steering cylinder and tilting cylinder	<input type="radio"/>
	FICS standard type (domestic)	<input type="radio"/>



The company reserves the right to change product design and specifications without prior notice.

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*Based on the platform of  
internal counterbalance forklift truck*

*Integrated with electric drive,  
the truck is powerful and high efficient.*



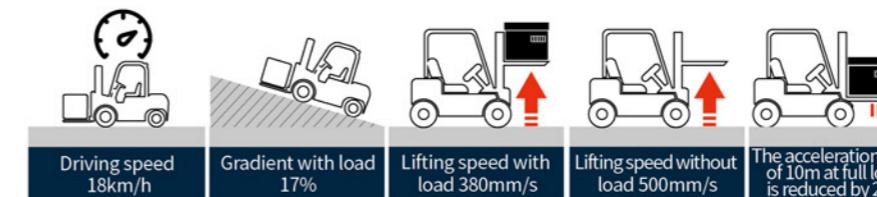
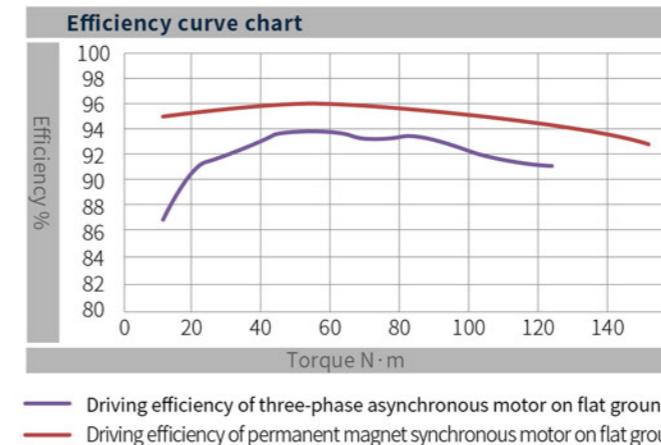
## A NEW GENERATION

Smart / Safe / High efficient / Energy saving and environmental protection

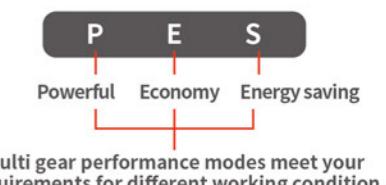
## Powerful performance, High efficiency and energy saving

- The voltage is increased from 80V of traditional lithium battery powered truck to 153.6V. The overall energy efficiency is significantly improved by increasing of the motor power and reducing of the current of motor and controller.
- Permanent magnet synchronous motor for electric vehicle which has lighter mass compared with the same energy three-phase asynchronous motor is adopted and the comprehensive efficiency is significantly improved.

Standard load sensing is equipped on the truck as standard which gives priority to steering and saves energy by 5%;



The integrated power system reduces the wiring harness which greatly reduces the loss of electric energy transmission. And the levels of parts and control modules are clear and convenient for maintenance;



## Smart safety functions offer comprehensive guarantee.



Emergency power-off switch is equipped as standard to ensure safety in case of emergency;

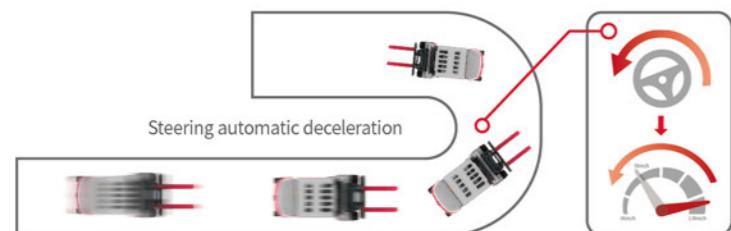


High efficiency liquid cooling and heat dissipation system is equipped as standard, which can meet the requirements of automobile S1 continuous working system;



**System level voltage safety protection:** The truck features integrated / shortest design of voltage connection and multiple insulation monitoring protection;  
**System level voltage safety sectional design:** when the maintenance switch is pulled out, the system fails or the key is disconnected, the voltage system will be automatically disconnected, and the maximum voltage shall not be greater than 76.8V;

- Steering deceleration function: the standard steering automatic deceleration function can reduce the risk of tipping when steering;



**Color screen instrument:** it has the functions of full display of truck information, timely reminder and convenient operation;



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

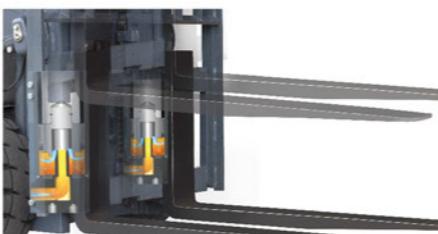
Vehicle positioning	Statistical form
Remote diagnosis	Vehicle management
Remote monitoring	Identification recognition (optional)
Maintenance reminder	Weight management (optional)
Battery management	Collision management (optional)

## Internal combustion platform, stable and reliable

- The whole truck is developed based on the internal combustion truck platform, and all parts are mature and reliable. It has the advantages of high performance, high stability and high environmental adaptability of the internal combustion truck, as well as the green and environmental protection characteristics of the lithium truck.



## Ergonomic design, intelligent and comfortable



Buffering under the mast makes goods handling operation more comfortable;



When the tilt cylinder sinks down in layout, the upper space of the bottom plate increases and the leg space is enlarged;



The armrest is equipped with horn switch for reversing, which makes driving safer;



The whole truck is equipped with USB interface and folder as standard;



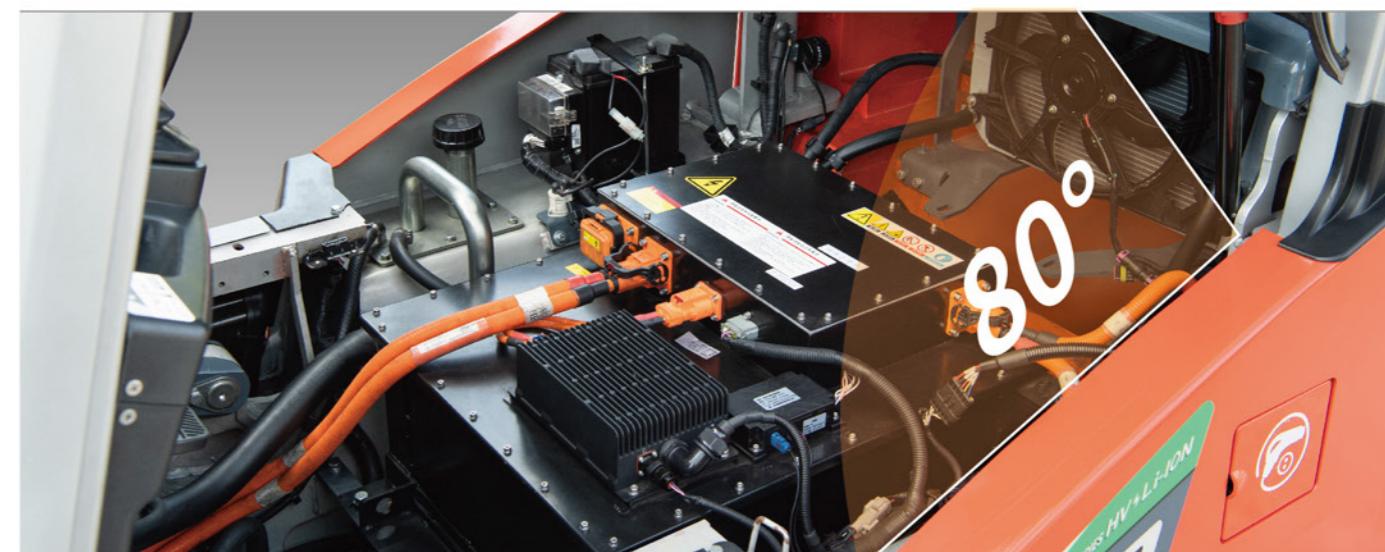
Ratchet type parking brake operating handle offers more labor-saving operation;



Wide view mast optimize the blind area of operation vision and it is comfortable and safe for operation;

## Centralized maintenance points, fast and convenient for maintenance

- The truck features 80° hood opening angle and simple opening mechanism. The key lock is optional.
- Optimized layout of truck structure offers large internal space and convenient maintenance;
- Modular design of power assembly and electrical system offer convenient maintenance and low cost;



Manufacturer and Technical Data						
Characteristics						
1.01	Manufacturer					<b>HELI</b>
1.02	Model		CPD40	CPD45	CPD50	
1.03	Configuration number			G2A11LI		
1.04	Rated capacity	Q kg	4000	4500	5000	
1.05	Load center distance	c mm		500		
1.06	Power mode			Lithium battery		
1.07	Driving mode			Sit-on type		
1.08	Front overhang	x mm		560		
1.09	Wheelbase	y mm		2100		
Weight						
2.01	Total weight	kg	5890/5590	6245/5945	6600/6300	
2.02	Axle load (laden,front/rear)	kg	8990/900	9720/1025	10430/1170	
2.03	Axle load (unladen,front/rear)	kg	2970/2920	2950/3295	2900/3700	
Tyres						
3.01	Tyre type			Solid tyre		
3.02	Tyre size,front			8.25-15	300-15	
3.03	Tyre size,rear			7.00-12		
3.04	Wheels,number front/rear (x=driven wheels)			2X2(Dual tyre 4X2)		
3.05	Tread, front	b <sub>10</sub> mm		1180		
3.06	Tread, rear	b <sub>11</sub> mm		1190		
Dimensions						
4.01	Mast tilt angle (forward/backward)	a/β °		6/12		
4.02	Height (mast lowered)	h <sub>1</sub> mm		2275		
4.03	Free lifting height	h <sub>2</sub> mm		150		
4.04	Lifting height (standard)	h <sub>3</sub> mm		3000		
4.05	Max. height,extended (with backrest)	h <sub>4</sub> mm		4250		
4.06	Height of overhead guard	h <sub>6</sub> mm		2350		
4.07	Seat height relating to SIP (to ground)	h <sub>7</sub> mm		1080		
4.08	Towing coupling height	h <sub>10</sub> mm		430		
4.09	Overall length (with fork)	l <sub>1</sub> mm	4255	4275	4325	
4.10	Overall length (without fork)	l <sub>1</sub> mm	3185	3205	3255	
4.11	Overall width	b <sub>1</sub> mm		1480		
4.12	Fork size:thickness x width x length	s/e/l mm		50x150x1070		
4.13	Fork carriage,according to ISO2328			III		
4.14	Distance across fork-arms, Max./Min.	b <sub>5</sub> mm		1340/300		
4.15	Ground clearance (laden,between mast)	m <sub>1</sub> mm		150		
4.16	Ground clearance (center of wheelbase)	m <sub>2</sub> mm		230		
4.17	Right angle stacking aisle width for pallet 1000x1200mm crossways	Ast mm	4610	4640	4690	
4.18	Right angle stacking aisle width for pallet 800x1200mm lengthways	Ast mm	4810	4840	4890	
4.19	Min. outside turning radius	Wa mm	2850	2880	2930	
Performance Data						
5.01	Travel speed (laden/unladen)	km/h	18/19	18/19	18/19	
5.02	Lift speed (laden/unladen)	m/s	450/500	420/500	390/500	
5.03	Lowering speed (laden/unladen)	m/s	470/500	470/500	470/500	
5.04	Max.drawbar pull (laden/unladen)	N	23000/20000	23000/20000	23000/20000	
5.05	Max.gradeability (laden/unladen)	%	19/20	18/20	17/20	
5.06	Acceleration time (10m) (laden/unladen)	s				
Battery						
6.01	Voltage/capacity (K5)	V/Ah		153.6/230 (Optional 153.6/330)		
6.02	Mass (Min./Max.)	kg		330/435		
Motor and controller						
7.01	Power of driving motor (S2-60min)	kW		25		
7.02	Power of lifting motor (S3-15%)	kW		20		
7.03	Control mode of driving motor			MOS tube / AC		
7.04	Control mode of lifting motor			MOS tube / AC		
Addition data						
8.01	Service brake/Parking brake			Hydraulic power assisted braking / mechanical- ratchet type		
8.02	Operating pressure for attachments	Mpa		14		

