

TFT

CPD 40/45/50

G2A11LI

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

Charger			
Charger Model		APSP-150V100A-S1	APSP-150V200A-S1
Wiring type		Three-phase four-wiring type	
Power of charger	KVA	≤20	≤40
Air switch model of Upper level power	A	63	80
Input voltage range	Vac	380±15%	
Protection level		IP20	
Working ambient temperature		-20~+45	
Plugs and sockets		Charger meeting national standard	
Charger		Full charging time=required chaging capacity/charging current+0.2h. For example: the battery capacity is 153.6V/230Ah, and the discharging state is alarmed by instrument,the charger is 100A, thus the full charging time is 230*0.9/100+0.2≈2.27h	

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LITON 4-5 t

G2 series lithium battery
powered counterbalance forklift truck

*Based on the platform of
internal counterbalance forklift truck*

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



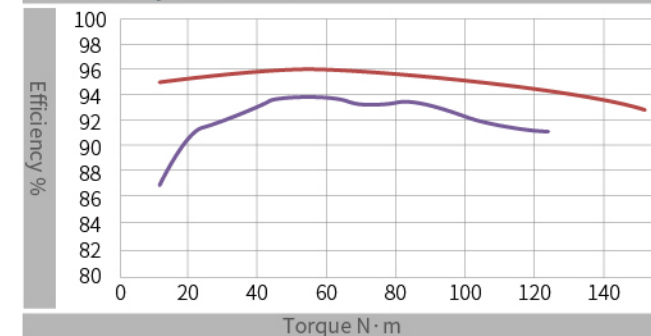
A NEW GENERATION

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%;

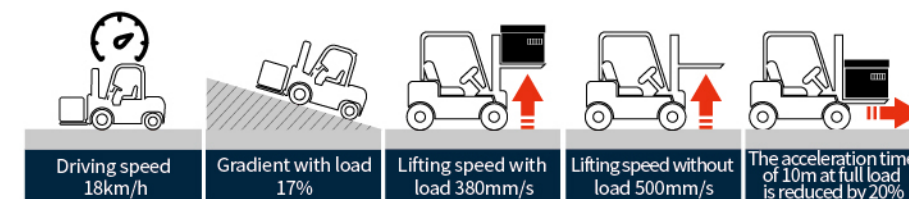
Efficiency curve chart



— Driving efficiency of three-phase asynchronous motor on flat ground
— Driving efficiency of permanent magnet synchronous motor on flat ground



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;



P E S
Powerful Economy Energy saving
Multi gear performance modes meet your requirements for different working condition.

Smart safety functions offer comprehensive guarantee.



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



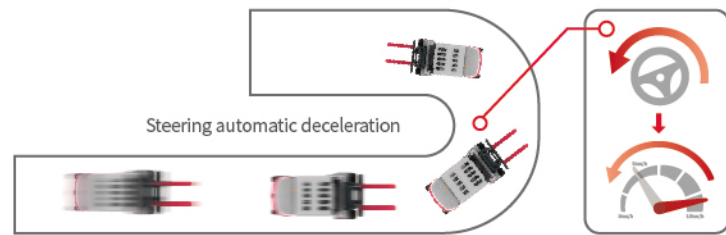
High efficiency liquid cooling and heat dissipation system is equipped as standard, which can meet the requirements of automobile S1 continuous working system;



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)

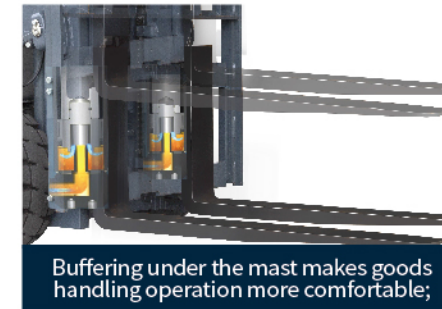
Vehicle positioning	Statistical form
Remote diagnosis	Vehicle management
Remote monitoring	Identification recognition (optional)
Maintenance reminder	Weight management (optional)
Battery management	Collision management (optional)

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.



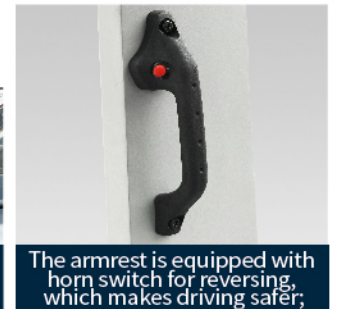
Ergonomic design, intelligent and comfortable



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;



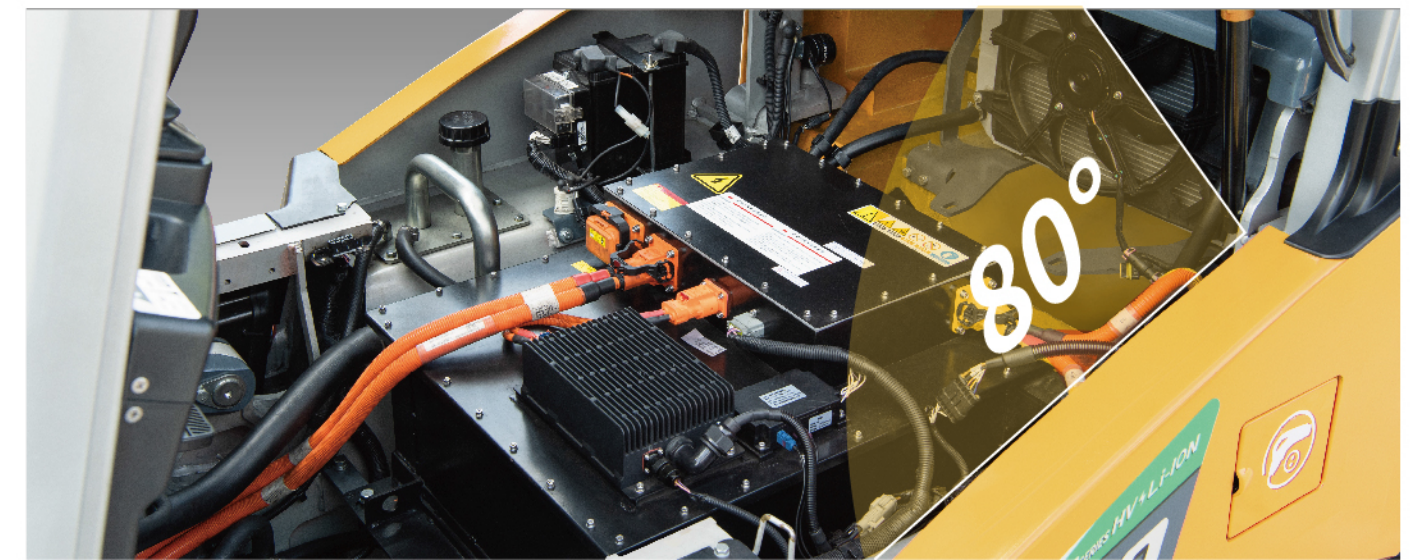
Ratchet type parking brake operating handle offers more labor-saving operation;



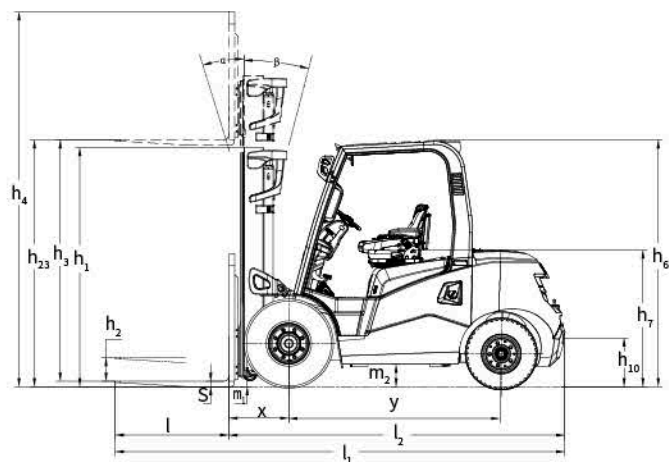
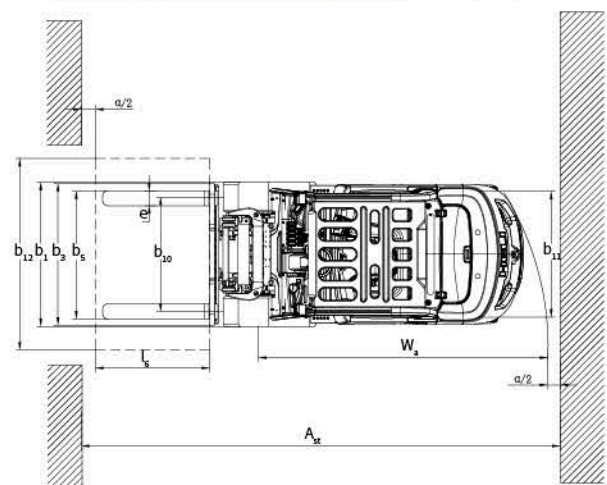
Wide view mast optimize the blind area of operation vision and it is comfortable and safe for operation;

Centralized maintenance points, fast and convenient for maintenance

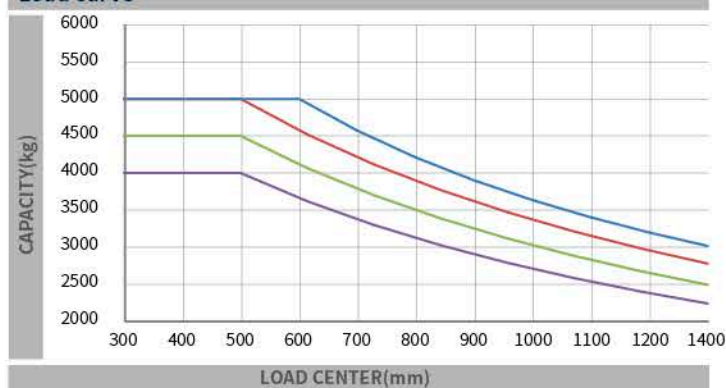
- The truck features 80° hood opening angle and simple opening mechanism. The key lock is optional.
- Optimized layout of truck structure offers large internal space and convenient maintenance;
- Modular design of power assembly and electrical system offer convenient maintenance and low cost;



Manufacturer and Technical Data									
Characteristics									
1.01	Manufacturer	TYMBIA							
1.02	Model	CPD40 CPD45 CPD50 CPD50							
1.03	Configuration number	G2A11LI G2A11LI-600							
1.04	Rated capacity	Q	kg	4000	4500	5000	5000	5000	5000
1.05	Load center distance	c	mm	500	500	500	500	500	500
1.06	Power mode	Lithium battery							
1.07	Driving mode	Sit-on type							
1.08	Front overhang	x	mm	560	560	560	560	560	560
1.09	Wheelbase	y	mm	2100	2100	2100	2100	2100	2100
Weight									
2.01	Total weight		kg	5890/5560	6245/5915	6600/6270	7050/6720	7050/6720	7050/6720
2.02	Axle load (laden,front/rear)		kg	8990/900	9720/1025	10430/1170	10770/1280	10770/1280	10770/1280
2.03	Axle load (unladen,front/rear)		kg	2970/2920	2950/3295	2900/3700	3000/4050	3000/4050	3000/4050
Tyres									
3.01	Tyre type	Solid tyre							
3.02	Tyre size,front	8.25-15							
3.03	Tyre size,rear	7.00-12							
3.04	Wheels,number front/rear(x=driven wheels)	2X/2(Dual tyre 4X/2)							
3.05	Tread, front	b ₁₀	mm	1180	1180	1180	1180	1180	1180
3.06	Tread, rear	b ₁₁	mm	1190	1190	1190	1190	1190	1190
Dimensions									
4.01	Mast tilt angle (forward/backward)	α/β	°	6/12	6/12	6/12	6/12	6/12	6/12
4.02	Height (mast lowered)	h ₁	mm	2275	2275	2275	2275	2275	2275
4.03	Free lifting height	h ₂	mm	150	150	150	150	150	150
4.04	Lifting height (standard)	h ₃	mm	3000	3000	3000	3000	3000	3000
4.05	Max. height,extended (with backrest)	h ₄	mm	4250	4250	4250	4250	4250	4250
4.06	Height of overhead guard	h ₅	mm	2350	2350	2350	2350	2350	2350
4.07	Seat height relating to SIP (to ground)	h ₇	mm	1080	1080	1080	1080	1080	1080
4.08	Towing coupling height	h ₁₀	mm	430	430	430	430	430	430
4.09	Overall length (with fork)	l ₁	mm	4255	4275	4325	4525	4525	4525
4.10	Overall length (without fork)	l ₂	mm	3185	3205	3255	3305	3305	3305
4.11	Overall width	b ₁	mm	1480	1480	1480	1480	1480	1480
4.12	Fork size:thickness x width x length	s/e/l	mm	50x150x1070	50x150x1070	50x150x1070	55x150x1220	55x150x1220	55x150x1220
4.13	Fork carriage,according to ISO2328			III	III	III	IV	IV	IV
4.14	Distance across fork-arms, Max./Min.	b ₅	mm	1340/300	1340/300	1340/300	1340/300	1340/300	1340/300
4.15	Ground clearance (laden,between mast)	m ₁	mm	150	150	150	150	150	150
4.16	Ground clearance (center of wheelbase)	m ₂	mm	230	230	230	230	230	230
4.17	Right angle stacking aisle width for pallet 1000x1200mm crossways	Ast	mm	4610	4640	4690	4740	4740	4740
4.18	Right angle stacking aisle width for pallet 800x1200mm lengthways	Ast	mm	4810	4840	4890	4940	4940	4940
4.19	Min. outside turning radius	Wa	mm	2850	2880	2930	2970	2970	2970
Performance Data									
5.01	Travel speed (laden/unladen)		km/h	18/19	18/19	18/19	17/18	17/18	17/18
5.02	Lift speed (laden/unladen)		m/s	450/500	420/500	390/500	360/470	360/470	360/470
5.03	Lowering speed (laden/unladen)		m/s	450/450	450/450	450/450	450/450	450/450	450/450
5.04	Max.drawbar pull (laden/unladen)		N	23/20	23/20	23/20	23/20	23/20	23/20
5.05	Max.gradeability (laden/unladen)		%	19/20	18/20	17/20	15/20	15/20	15/20
Battery									
6.01	Voltage/capacity (Standard/Optional)		V/Ah	Standard153.6/230	Optional153.6/280, 153.6/346	Optional153.6/280, 153.6/346	Optional153.6/280, 153.6/346	Optional153.6/280, 153.6/346	Optional153.6/280, 153.6/346
6.02	Mass (Min./Max.)		kg	325/455	325/455	325/455	325/455	325/455	325/455
Motor and controller									
7.01	Power of driving motor (S2-60min)		kW	25	25	25	25	25	25
7.02	Power of lifting motor (S3-15%)		kW	20	20	20	20	20	20
7.03	Control mode of driving motor			MOS tube / AC	MOS tube / AC	MOS tube / AC	MOS tube / AC	MOS tube / AC	MOS tube / AC
7.04	Control mode of lifting motor			MOS tube / AC	MOS tube / AC	MOS tube / AC	MOS tube / AC	MOS tube / AC	MOS tube / AC
Addition data									
8.01	Service brake/Parking brake			Hydraulic power assisted braking / mechanical- ratchet type	Hydraulic power assisted braking / mechanical- ratchet type	Hydraulic power assisted braking / mechanical- ratchet type	Hydraulic power assisted braking / mechanical- ratchet type	Hydraulic power assisted braking / mechanical- ratchet type	Hydraulic power assisted braking / mechanical- ratchet type
8.02	Operating pressure for attachments		Mpa	14	14	14	14	14	14



Load curve



— 5t@600
— 5t@500
— 4.5t@500
— 4t@500

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 Standard Mast

Mast model	Max.lifting height (mm)	Load capacity(kg)				Height (mast lowered) (mm)	Free lift (with backrest) (mm)	Service weight (kg)				Mast tilt angle α/β (°)
		4t@500	4.5t@500	5t@500	5t@600			4t@500	4.5t@500	5t@500	5t@600	
M250	2500	4000	4500	5000	5000	1990	150	5825	6180	6535	7000	6/12
M300	3000	4000	4500	5000	5000	2240	150	5890	6245	6600	7050	6/12
M330	3300	4000	4500	5000	5000	2390	150	5930	6285	6640	7080	6/12
M350	3500	4000	4500	5000	5000	2490	150	5855	6210	6565	7095	6/12
M370	3700	4000	4500	5000	5000	2590	150	5980	6335	6690	7115	6/12
M400	4000	4000	4500	5000	5000	2790	150	6070	6425	6780	7195	6/12
M425	4250	4000	4500	5000	5000	2915	150	6105	6460	6815	7220	6/6
M450	4500	3800	4300	4700	4700	3040	150	6135	6490	6845	7240	6/6
M475	4750	3700	4200	4500	4500	3165	150	6165	6520	6875	7265	6/6
M500	5000	3700	4200	4500	4500	3290	150	6200	6555	6910	7290	6/6
M550	5500	3200	3600	4000	4000	3590	150	6315	6670	7025	7385	6/6
M600	6000	3200	3600	4000	4000	3840	150	6380	6735	7090	7435	6/6

Wide View Full Free 2-Stage Mast

Mast model	Max.lifting height (mm)	Load capacity(kg)				Height (mast lowered) (mm)	Free lift (with backrest) (mm)		Service weight (kg)				Mast tilt angle α/β (°)
		4t@500	4.5t@500	5t@500	5t@600		4t/4.5t/5t@500	5t@600	4t@500	4.5t@500	5t@500	5t@600	
ZM250	2500	4000	4500	5000	5000	1990	785	640	5828	6183	6538	6969	6/12
ZM300	3000	4000	4500	5000	5000	2240	1035	890	5883	6238	6593	7029	6/12
ZM330	3300	4000	4500	5000	5000	2390	1185	1040	5923	6278	6633	7074	6/12
ZM350	3500	4000	4500	5000	5000	2490	1285	1140	5948	6303	6658	7094	6/12
ZM370	3700	4000	4500	5000	5000	2590	1385	1240	5973	6328	6683	7124	6/12
ZM400	4000	4000	4500	5000	5000	2790	1585	1440	6063	6418	6773	7214	6/12
ZM425	4250	4000	4500	5000	5000	2915	1710	1565	6103	6458	6813	7254	6/6
ZM450	4500	3800	4300	4700	4700	3040	1835	1690	6143	6498	6853	7294	6/6
ZM475	4750	3700	4200	4500	4500	3165	1960	1815	6183	6538	6893	7339	6/6
ZM500	5000	3700	4200	4500	4500	3290	2085	1940	6218	6573	6928	7374	6/6
ZM550	5500	3200	3600	4000	4000	3590	2385	2240	6333	6688	7043	7489	6/6
ZM600	6000	3200	3600	4000	4000	3840	2635	2490	6383	6738	7093	7544	6/6

Note: 4-5t@500 the free lifting height is increased by +295mm when there is no backrest.
5t@600 the free lifting height is increased by +447mm when there is no backrest.

Wide View Full Free 3-Stage Mast

Mast model	Max.lifting height (mm)	Load capacity(kg)				Height (mast lowered) (mm)	Free lift (with backrest) (mm)		Service weight (kg)				Mast tilt angle α/β (°)
		4t@500	4.5t@500	5t@500	5t@600		4t/4.5t/5t@500	5t@600	4t@500	4.5t@500	5t@500	5t@600	
ZSM360	3600	3800	4350	4800	4800	1940	730	630	6048	6403	6758	7243	6/6
ZSM400	4000	3800	4350	4800	4800	2080	870	770	6098	6453	6808	7308	6/6
ZSM435	4350	3800	4350	4800	4800	2190	980	880	6143	6498	6853	7353	6/6
ZSM450	4500	3800	4350	4800	4800	2240	1030	930	6158	6513	6868	7353	6/6
ZSM470	4700	3500	4000	4500	4500	2305	1095	995	6183	6538	6893	7378	6/6</