#### Features

No.	Configuration	Standard	Options
1	Color	Green black	Other customized color
2	Particular market	/	CE Standard
3	Cold storage environment	1	-30°C
4	Mast	Standard duplex mast	Configuration Table of the Mast
5	Fork and attachment	Standard fork Fork arm carrier Load backrest	Non-standard series fork Various attachments
6	Tires	Solid tire - single (6-8t) Solid tire - dual (above 8-10t)	Solid tire - dual (6-8t)
7	Multiway valve	Double multi-way valve (load-sensitive) Lifting potentiometer	Triple valve (load-sensitive) Quadruple valve (load-sensitive) Quintuple valve (load-sensitive)
8	Tiller	Lifting and tilting manual level	Fingertip system
9	Battery	Standard lithium battery (national standard,dual-charging,built-in) Battery removed sideways	Large-capacity lithium battery (national standard,dual-charging,built-in)
10	Light	LED front combination headlamp LED rear combination lamp	Common alarm lamp Acoustic and optical alarm lamp LED rear lamp Blue light Straight projection lamp
11	Horn	Electric horn Reverse buzzer Right rear armrest with horn button	1
12	Smart module	/	FIMS(Fleet intelligent management system)
13	Safety configuration	Turning deceleration Emergency power-off switch Fuse box Descending buffering	Reversing radar Front /front and rear driving recorder OPS sensing system Fire extinguisher Ascending buffering
14	Instrument rack space	Smart color-screen instrument (speed mode selection) Combination switch USB port Storage box	Cigarette lighter Electronic code lock (start by swiping a card) Fingerprint lock
15	Driving space	Standard overhead guard Central rear view mirror PVC ceiling	Front windshield Cab Electric fan Left and right rear view mirrors
16	Chair	Standard seat	Fully-suspended seat Semi-suspended seat
17	Other standard configuration	Driving and lifting (+2) controllers Driving and lifting (+2) motors Silent gear pump (+2) Charging valve+ accumulator Oil return filter Pedal pad Traction pin Integral stamped side panel and hood	/

## **Battery Capacity 96V**

		Capacity(Ah)	6.0-8.0t	8t@L.C,900mm 9-10t		
	EVE	690	•	/		
		920	0	•		
		1216	/	0		
		684	0	/		
	CATL	906	0	0		
		1208	/	0		

Note: • Standard; O Optional

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HANGCHA **XC SERIES** 4-W ELECTRIC FORKLIFT TRUCK WITH LITHIUM POWER With capacity of 6,000 to 10,000kg



# 4-W ELECTRIC FORKLIFT TRUCK WITH LITHIUM POWER



XC series lithium battery forklifts 6-10t are brand new products on the basis of Hangzhou forklift's "lithium battery special structure", and offer two platforms, the classic "AC Asynchronous" and the leading "permanent magnet synchronous". Following the family design of electric forklifts, they are optimized mainly on the overall performance, ergonomics, reliability, maintenance, outdoor operation ability and load capacity in a bid to meet customers' use scenarios of traditional electric forklifts.



#### **COMFORTABLE EXPERIENCE**

- With the advantages of special lithium battery architecture, this ergonomically designed forklift has a more compact body and enables a wide view and a large operation space.
- Standard load-sensitive multi-way valve and lifting potentiometer supplied boasts good energy-saving effect, 20% reduction of the manoeuvring force, and improved inching performance.



The three-step pedal with optimized height and lengthened handrail is easier to get on and off the forklift.



Standard panoramic rear view mirror and reverse horn button on the armrest reversing armrest horn allow more comfortable backward operation.



Smart color-screen instrument with built-in view and adjustment function of main parameters is convenient for maintenance and fine-tuning.



#### **MAINTENANCE**

Counterweight cover can be dismounted without a tool, and a wide-open hood allows all maintenance parts to be shown clearly





#### **ENERGY-SAVING AND EFFICIENT**

- The leading "permanent magnet synchronous system" (Y2 model) provided can effectively reduce energy consumption and improve endurance
- Hydraulic lifting, with a strong power system, adopts dual-pump merging technology, which comprehensively improves the performance of the forklift.



The charging port adopts door-in-door design with standard quick-change battery, convenient for charging and replacing the battery.



## **BETTER SAFE THAN SORRY**

#### **SAFE AND RELIABLE**

- Standard turning deceleration, reducing the turning radius, can realize flexible shuttle, and more stable operation;
- Two independent cooling air ducts ensure that the forklift works efficiently for a long time;
- The whole forklift under IPX4 level protection with a lithium battery having a standard electric heating module can guarantee normal operation in cold/stormy weather;





The standard descending lock function (China) can disable the descending function when the driver leaves the seat and enable high safety.





MOBILE SOLUTION
PROVIDING A MOBILE
APPLICATION



### **KEEP AN EYE ON EVERYTHING**

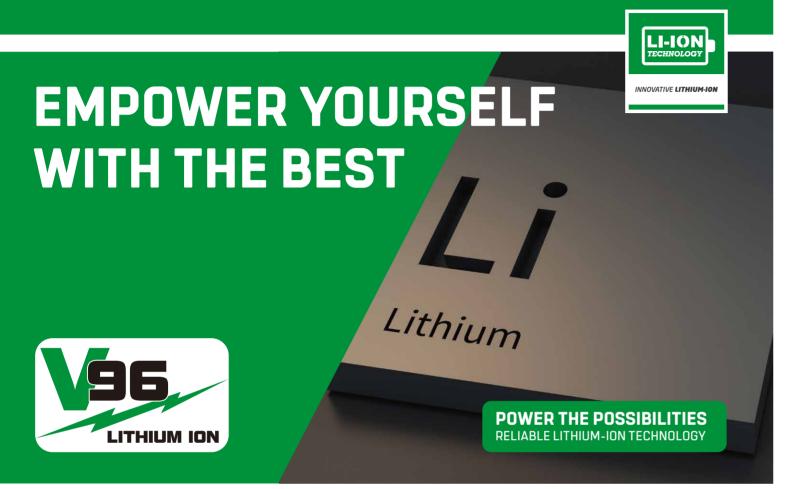
Hangcha FIMS is a system that provides you with real-time information about forklift truck and driver. Whether you have dozens or hundreds of forklift trucks across multiple sites, you can get access to collecting, monitoring and evaluating all the fleet data at anytime and anywhere.

#### >> Features

- ▶ Access Control
- **▶** GPS Tracking
- ▶ Remote Monitoring
- ▶ Maintenance Reminder
- ▶ Vehicle Management
- ▶ Vibration Monitoring
- ▶ Pre-shift Check (Optional)
- ▶ Shift Management (Optional)
- ▶ OpenAPI (Optional)



## LITHIUM POWERED



## LITHIUM BATTERY ADVANTAGES



#### Long service life

4000 full charging cycles with at least 75% residual capacity.



#### Return on investment

Add flexibility to your operation, cost-saving in the long term, increased efficiencies.



#### Maintenance free

No topping up of water or checking acid levels.



#### High energy density

The high energy density of the Li-lon battery ensures long working times and increases the high availability.



#### Cold area application

Li-lon batteries maintain high performance at temperatures below freezing.



#### High safety and reliability

Intelligent battery management monitoring every important function, no emission of battery gasses.



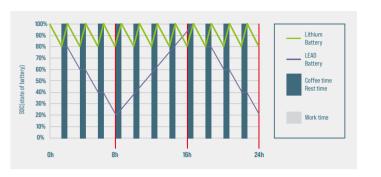
#### Opportunity charging

Full performance during several shifts thanks to effective interim charging.

## FEATURES & BENEFITS THE HANGCHA DIFFERENCE

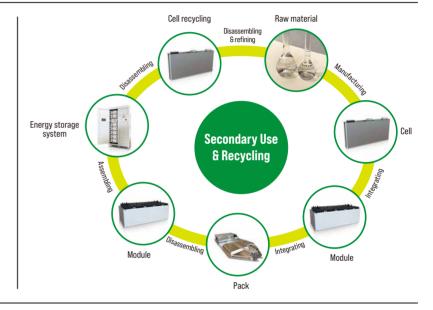
## **Efficiency**

By quick opportunity charging any downtime, such as a lunch break, can be efficiently used and the battery is recharged in a very short period of time. Interim charging does not affect the battery service life.



## Safety

- / Intelligent battery management monitoring every important function.
- / Higher user safety, thanks to acid-free use.
- / User friendly due to avoided battery change
- / No emission of battery gasses.





### Q: What are the characteristics of lithium batteries, especially when used in high and low temperature environments?

Charging temperature: -30 C -65 C
Discharge temperature: -30 C -65 C
Storage environment temperature: -30 C -65 C

After the truck key switch is closed, the instrument battery condition needs to be checked:

- Confirm that there is no battery system alarm message on the instrument panel.
   Please check the remaining power before use. It is recommended to use the SOC between 50% and 100%.
- 3. If the SOC is lower than 20%, it is not recommended to continue using it Please charge it as soon as possible.



## Q: What is the charging time and usage time calculation of forklift lithium battery?

- 1. Available power of lithium battery (kWh) = rated voltage \* rated power \* 90% (To avoid over-discharge damaging the battery, the forklift is equipped with low power protection (less than 10%)).
- 2. Charging time (h) = rated capacity of lithium battery (Ah)  $\star$  90% + charger output current (A).
- 3. The power consumed for charging (kWh) = the available power of the lithium battery + 93% (the charging efficiency of the charger is calculated as 93%).

  4. Usage time (h) = available power of lithium battery + energy consumption data.

  For specific energy consumption values, please refer to the technical table on the sharing platform.



## Q: How does Hangcha BMS work to ensure the safety of the lithium battery?

HANGCHA BMS (battery management system) can monitor the cells at all times. As a result, hangcha lithium power is the reliable solution



#### **Battery Safety Management:**

Overcharge/over discharge protection
Overcurrent/over-temperature/low- temperature protection
Multi-level fault diagnosis protection
Double fault monitoring



#### Battery Parameter Detection:

Battery voltage detection and analysis
Battery current detection and analysis
Battery temperature detection and analysis



#### Equilibrium Management:

Equalization based on voltage mode Equalization based on time mode Equalization based on battery cell SOC Active/passive equalization optional



#### Other Features:

Low cost,low power consumption Historical data record Flexible cascade expansion CRC data validation