

# DUCO Mobile Cobot



SIASUN CO., LTD.

<https://www.ducorobots.com>

We are Dedicated to the Advancement of Cobot.



Facebook



Linkedin



Youtube



SIASUN CO., LTD.

- 📍 Jinqiao Operations Headquarters: NO.358 Building4 Jinhua Road, Shanghai
- 📍 Lingang Industrial Base: NO.199 Boyi Road, Shanghai
- ☎ 400 088 5288
- ✉ message.in@siasun.com

# DUCO Mobile Cobot

## Customized Wheel Train



The customized wheel train for DUCO Mobile Cobot comes more stable and reliable.

## 360° Safety Protection



Real-time 360° security protection achieves man-machine security cooperation

## Ecological Technical Support



Efficient docking of various tools and more convenient for grasping

B-Series

T-Series



## Product Introduction

DUCO Mobile Cobot are integrated with independently developed mobile platforms and Cobot, with independently developed vision and fixture and other execution units to realize functional applications such as material handling, assembly, detection and precision processing. DUCO Mobile Cobot have comprehensive security protection, multiple interaction and communication modes and can well interface with customer systems. It can also provide customized solutions, customized scheduling system, on-site guidance and perfect after-sales service to ensure customer experience.

As a standardized product, DUCO Mobile Cobot have consistency, reliability and stability that non-standard equipment does not have.

## L-Series



### Integrated Teach Pendant



Realize visual linkage debugging of mobile platform and collaboration arm on one screen, fast deployment.

### Charging Variety



Contact/wireless/automatic charging mode, meeting the requirements of short-time, real-time and 7 \* 24 all-day operation.

### Integrated & Open Controller



Open programming environment+multiple communication and data interfaces+independent detection can meet more customization requirements.

## Applications



Automobile Industry



3C Industry



Electric Industry



Medical Industry



Pan Industry



Consumer Goods Industry

## Technical Parameters



HC-X2-B



HC-X3-B

<b>Dimensions</b> <small>(L×W×H, excluding cooperation arm and side obstacle avoidance laser)</small>	1250mm×600mm×700mm		950mm×600mm×700mm	
<b>Comprehensive Accuracy</b> <sup>(1)</sup>	±0.3mm			
<b>Total Weight</b>	About 320/330/361/350/360KG (Transport Cobot GCR5/10/14/16/20)		About 270/280/300/KG (Transport Cobot GCR5/10/14/16)	
<b>Navigation Mode</b>	SLAM & QR CODE			
<b>Cobot Payload</b>	5kg/10kg/14kg/20kg (Transport Cobot GCR5/10/14/16/20)		5kg/10kg/14kg/16kg (Transport Cobot GCR5/10/14/16)	
<b>Platform Load</b>	670kg Max		350kg Max	
<b>Driving Form</b>	Two-Wheel Differential		Two-Wheel Differential	
<b>Turning Radius</b>	500mm Min		500mm Min	
<b>Crab Speed (Any Angle)</b>	/		/	
<b>Width of Walking Passage</b>	900mm Min		900mm Min	
<b>Movement Speed</b>	≤1m/s		≤1m/s	
<b>Turning Speed</b>	≤0.5m/s		≤0.5m/s	
<b>Obstacle Clearance Height</b>	10mm		10mm	
<b>Trench Width</b>	30mm		25mm	
<b>Ground Clearance</b>	30mm		30mm	
<b>Gradeability</b>	<5%		<5%	
<b>Parking Accuracy</b>	±5mm Position Accuracy, ±1° Angle Accuracy			
<b>Battery</b>	DC51.2V LFP	DC51.2V LFP (Option)	DC51.2V LFP	DC51.2V LFP (Option)
<b>Capacity</b>	52Ah	80Ah	42Ah	80Ah
<b>Running Time</b>	About 5.5H	About 8H	About 5.5H	About 8H
<b>Charging Time</b>	≤1.8h	≤2h	≤1.5h	≤2h
<b>Charging Mode</b>	Contact Charging / Wireless Charging / Converter (Both Manual and Automatic Support)			
<b>Safety Device</b>	Collision Detection/Safety Contact/Obstacle Avoidance Laser/Emergency Stop, etc			
<b>Interface</b>	Hardware Support CAN bus, RS-485, RS-232, RJ45, USB			
<b>Communication Protocol</b>	Communication Protocol Support CANOPEN, Modbus, etc.			
<b>Button</b>	Start Button/Pause Button/Reset Button/Teach Button			
<b>Ambient Temperature</b>	Ambient Temperature:-10°C~45°C			
<b>Ambient Humidity</b>	Ambient Humidity:5%~95% (No Condensation)			
<b>Runtime Environment</b>	Indoor Use Only			
<b>Cleanliness</b>	None/ Class6(Class 1000) / Class5 (Class 100)			

(1) The comprehensive accuracy depends on the accuracy of the end positioning device, the parking accuracy of the mobile platform, and the accuracy of the collaborative arm end.

(2) The operating time depends on requirements such as operating conditions and rhythm.



HC-X4-B



HC-X6-B



HC-X2-T



HC-X2-L

800mm×600mm×700mm		1250mm×700mm×800mm		1250mm×600mm×1070mm		1250mm×600mm×700mm	
±0.3mm							
About 247/260KG (Transport Cobot GCR5/10)		About 392/405/436/435KG (Transport Cobot GCR5/10/14/20)		About 330/361/350/360KG (Transport Cobot GCR10/14/16/20)		About 320/330/361/350/360KG (Transport Cobot GCR5/10/14/16/20)	
SLAM & QR CODE							
5kg/10kg (Transport Cobot GCR5/10)		5kg/10kg/14kg/20kg (Transport Cobot GCR5/10/14/20)		10kg/14kg/20kg (Transport Cobot GCR10/14/16/20)		5kg/10kg/14kg/20kg (Transport Cobot GCR5/10/14/16/20)	
120kg Max		470kg Max		100kg Max		670kg Max	
Two-Wheel Differential		Mecanum Wheel		Two-Wheel Differential		Two-Wheel Differential	
500mm Min		/		500mm Min		500mm Min	
/		≤0.5m/s		/		/	
900mm Min		1000mm Min		900mm Min		900mm Min	
≤0.8m/s		≤0.8m/s		≤1m/s		≤1m/s	
≤0.5m/s		≤0.5m/s		≤0.5m/s		≤0.5m/s	
10mm		10mm		10mm		10mm	
30mm		80mm		30mm		30mm	
30mm		45mm		30mm		30mm	
<5%		<5%		<5%		<5%	
±5mm Position Accuracy, ±1°Angle Accuracy							
DC51.2V LFP	DC51.2V LFP (Option)	DC51.2V LFP	DC51.2V LFP (Option)	DC51.2V LFP	DC51.2V LFP (Option)	DC51.2V LFP	
28Ah	42Ah/80Ah	42Ah	80Ah	52Ah	80Ah	52Ah	
About 5.5H	About 8H	About 5.5H	About 8H	About 5.5H	About 8H	About 5.5H	
≤1.5h	≤2h	≤1.5h	≤2h	≤1.8h	≤2h	≤1.8h	
Contact Charging / Wireless Charging / Converter (Both Manual and Automatic Support)    Contact Charging (A/M)							
Collision Detection/Safety Contact/Obstacle Avoidance Laser/Emergency Stop,etc							
Hardware Support CAN bus, RS-485, RS-232, RJ45, USB							
Communication Protocol Support CANOPEN, Modbus, etc.							
Start Button/Pause Button/Reset Button/Teach Button							
Ambient Temperature:-10°C~45°C							
Ambient Humidity:5%~95 % (No Condensation)							
Indoor Use Only							
None/ Class6(Class 1000) / Class5 (Class 100)							

## 360° Safety Protection



## Safe Human-Machine Collaboration for a Better Future



### Collision Detection Protection



- Well-designed security hierarchy
- Cobot comply with ISO10218-1, ISO15066 standards

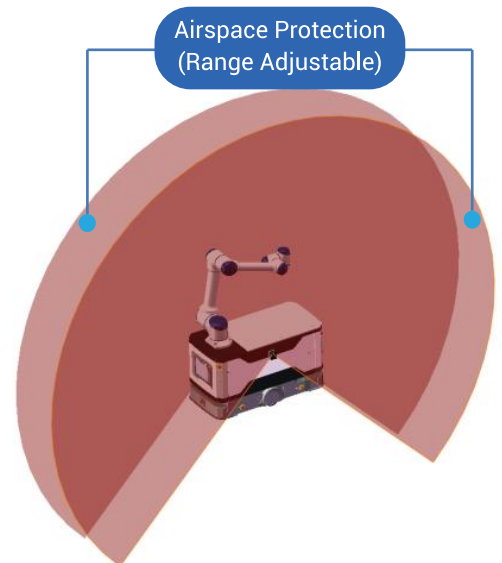
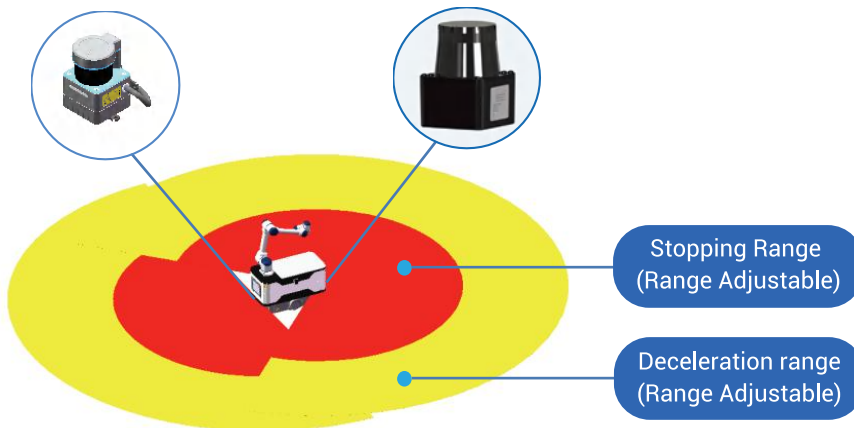
### Emergency Stop Guards on All Sides

- Suitable height. Ergonomic.
- Rapid demonstration and teaching while ensuring the safety of workers and materials.

### Software and Hardware Protection

- Lithium iron phosphate batteries (single-cell compliant with UN38.3, UL2580 and CB62619)  
Compliance with electromagnetic compatibility, current loop control, etc.

## Safety Protection



### 360° Safety Protection

- Ground protection + airspace protection (optional)

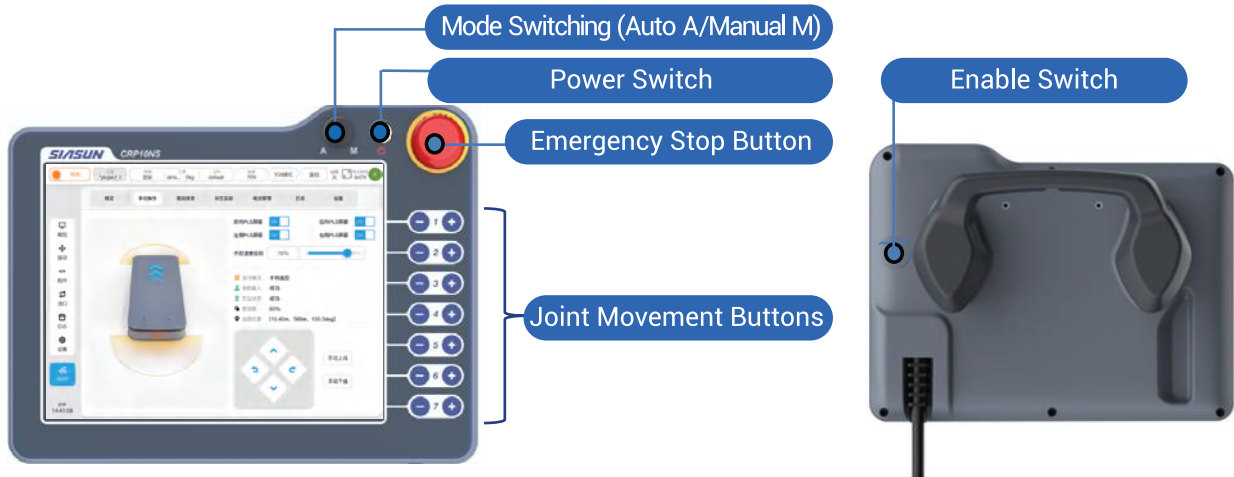
### Inductive Downshift

- Step-down for efficiency and safety

### Adjustable Protection Zone

- Protective area can be tailored (maximum protection distance: 25 metres in front, 10 metres behind)

## Integrated Teach Pendant



### Integrated:

*Collaborative Robotics & Mobile Robotics Platforms at the Touch of a Button.*

### Interfaces can be Adapted:

*Extended Devices can Also be Operated.*

### Easy to get Started:

*Real-time Status, at a Glance, Debugging Worry-free.*

## Charging Variety



### Charging Methods

#### Contact Charging

- *Quality-price Ratio*
- *Suitable for Regular Scenarios*

#### Wireless Charging

- *Contactless, Frictionless Dust Generation*
- *Higher Cleanliness*
- *Recharging while working*

#### Converter Module

- *Automatic Power Changeover: High Efficiency and Return on Investment when Multiple Units are in place*
- *Enables 24-Hour Continuous Operation, Reducing the Number of Acquisitions*

