

DUCO MOBILE COBOT

Strive to be the Best Partner for Smarter Future



ABOUT US

Founded in 2014, SIASUN-DUCO focuses on R&D of Next-Generation Intelligent Robots. As the sub-brand of SIASUN CORPORATION (Stock No.300024), SIASUN-DUCO has retained SIASUN's innovative spirit and craftsmanship philosophy, deeply creating continuous values to the world. Currently, SIASUN-DUCO has brought cutting-edge technologies in multiple industries, with 100% core components of HW & SW originally self-manufactured.

28 million USD⁺
Annual Sales

30⁺
Types of Robots

200⁺
High-Level talents



1500+
Projects



300+
Patents



30+
Countries



40%+
R&D Engineers



20%+
High-End Customers



GLOBAL LOCATION



- 1 **Headquarter:** Block 4, No.358 Jinhu Road, Pudong District, Shanghai.
- 2 **Thailand:** 112 Moo 2, KM. 15 th Bangna-Trad Rd, Bangchalong, Bangplee, Samutprakarn.
- 3 **Malaysia:** 1050708 Jalan Gurdwara hexagon tech park 10300 george town pulau pinang.
- 4 **Singapore:** 3A International Business Park, Tower B #08-18, Singapore.
- 5 **Germany:** Austraße 58, 71642 Ludwigsburg, Stuttgart.
- 6 **Mexico:** piso 5 oficina 518 avenida miguel hidalgo 330 monterrey centro monterrey nuevo leon.
- 7 **America:** 2021 Guadalupe Street, Suite 260, Austin, Texas.
- 8 **Japan:** 5F, CLOTO Building, 376 Ichinofunairicho Kawaramachi-dori, Nijo Sagaru, Nakagyo-Ku, Kyoto. 604-0924.

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 ARV 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.

PRODUCT FEATURES



Customized Wheel Train

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



360° Safety Protection

- Real-time security protection achieves man-machine security cooperation.



Integrated Ecological Technical Support

- Seamless tool interfacing enables enhanced grasping efficiency.



B Series



T Series



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.



360° SAFETY PROTECTION



Human-Robot Safe Collaboration for a Better Future

Collision Detection Protection

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

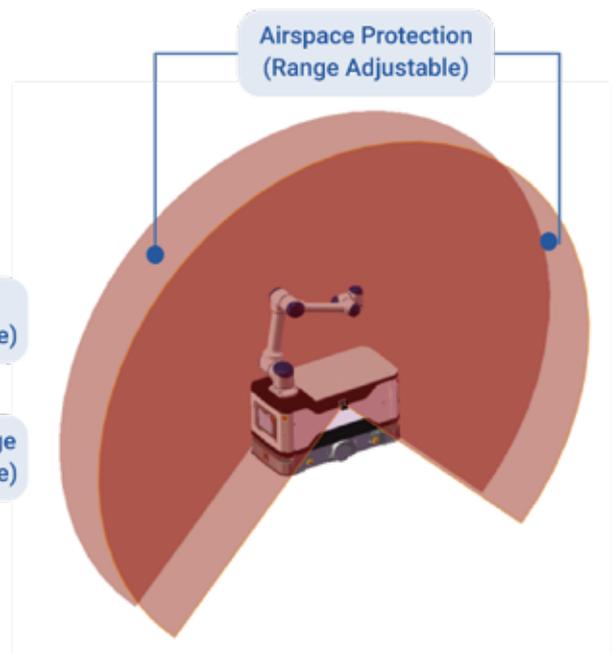
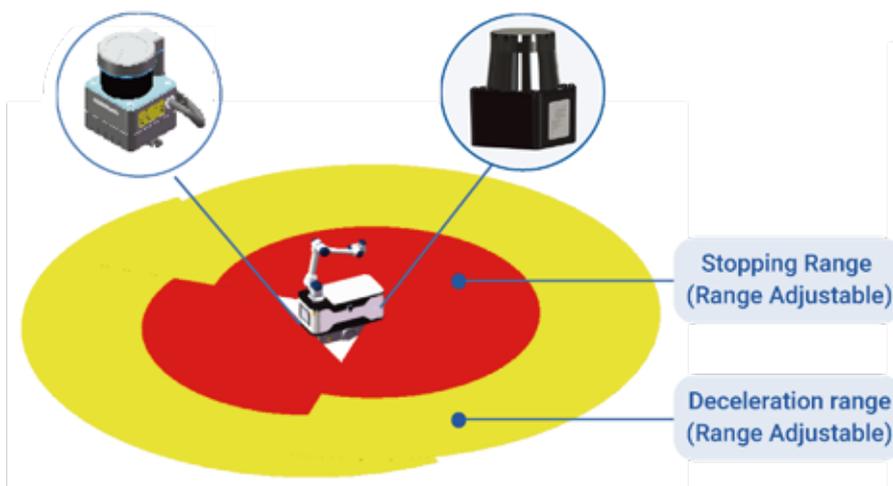
Emergency Stop Guards on All Sides

- 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 Deceleration

Speed-down by sensor for efficiency and safety

Adjustable Protection Zone

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

PRODUCT MODEL



Technical parameters		HC-X2-B		HC-X3-B	
Dimensions L × W × H (excl. steel tubes & wear plates)		1250mm×600mm×700mm		950mm×600mm×700mm	
Comprehensive Accuracy (1)		±0.3mm			
Total Weight		About 320/330/361/350/360KG (With Cobot GCR5/10/16/20/30)		About 270/280/300/KG (With Cobot GCR5/10/16/20)	
Navigation Mode		SLAM & QR CODE			
Cobot Payload (2)		10kg/16kg/20kg/30kg		5kg/10kg/16kg/20kg	
Platform Load		670kg Max		350kg Max	
Mobile Capability	Driving Form	Two-Wheel Differential		Two-Wheel Differential	
	Turning Radius	500mm Min		500mm Min	
	Trench Width	/		/	
	Passage Width	900mm Min		900mm Min	
	Movement Speed	≤1.2m/s		≤1.2m/s	
	Turning Speed	≤0.5m/s		≤0.5m/s	
	Obstacle Clearance Height	10mm		10mm	
	Trench Width	30mm		30mm	
	Ground Clearance	30mm		30mm	
Gradeability		<5°(2.86°)			
Positioning Accuracy		±5mm Position Accuracy, ±1°Angle Accuracy			
Battery Performance (3)	Battery	DC51.2V - LFP	DC51.2V - LFP (Option)	DC51.2V - LFP	DC51.2V - LFP (Option)
	Capacity	52Ah	80Ah	42Ah	80Ah
	Operating Time(2)	About 5.5h	About 8h	About 5.5h	About 8h
	Charging Time	≤1.8h	≤2h	≤1.5h	≤2h
Charging Mode		Contact Charging / Wireless Charging / Battery Change (Both Manual and Automatic Support)			
Safety Devices		Collision Detection/Safety Contact/Obstacle Avoidance Laser/Emergency Stop,etc			
Interfaces	Hardware Support	Hardware Support CAN bus, RS-485, RS-232, RJ45, USB			
	Communication Protocols	Communication Protocol Support CANOPEN, Modbus, etc.			
Control Buttons		Start Button/Pause Button/Reset Button/Teach Button			
Operating Environment	Ambient Temperature	-10°C~ 45°C			
	Ambient Humidity	5%~ 95 % (No Condensation)			
	Runtime Environment	Indoor Use Only			
	Cleanroom Level	None/ Class6(Grade 1000) / Class5 (Grade 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 payload capacity for the collaborative arm is 16 kg, model GCR16-960.

(3) The operating time depends on requirements such as operating conditions and cycle time.

**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
(With Cobot GCR5/10)About 392/405/436/435KG
(With Cobot GCR5/10/20/30)About 330/361/350/360KG
(With Cobot GCR10/16/20/30)About 320/330/361/350/360KG
(With Cobot GCR5/10/16/20/30)

SLAM & QR CODE

5kg/10kg

10kg/20kg/30kg

10kg/16kg/20kg/30k

10kg/16kg/20kg/30kg

120kg Max

470kg Max

100kg Max

670kg Max

Two-Wheel Differentail

Mecanum Wheel

Two-Wheel Differentail

Two-Wheel Differentail

500mm Min

/

500mm Min

500mm Min

/

≤0.5m/s

/

/

900mm Min

1000mm Min

900mm Min

900mm Min

≤1.2m/s

≤1.2m/s

≤1.2m/s

≤1.2m/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°(2.86°)

±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

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 / Battery Change (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

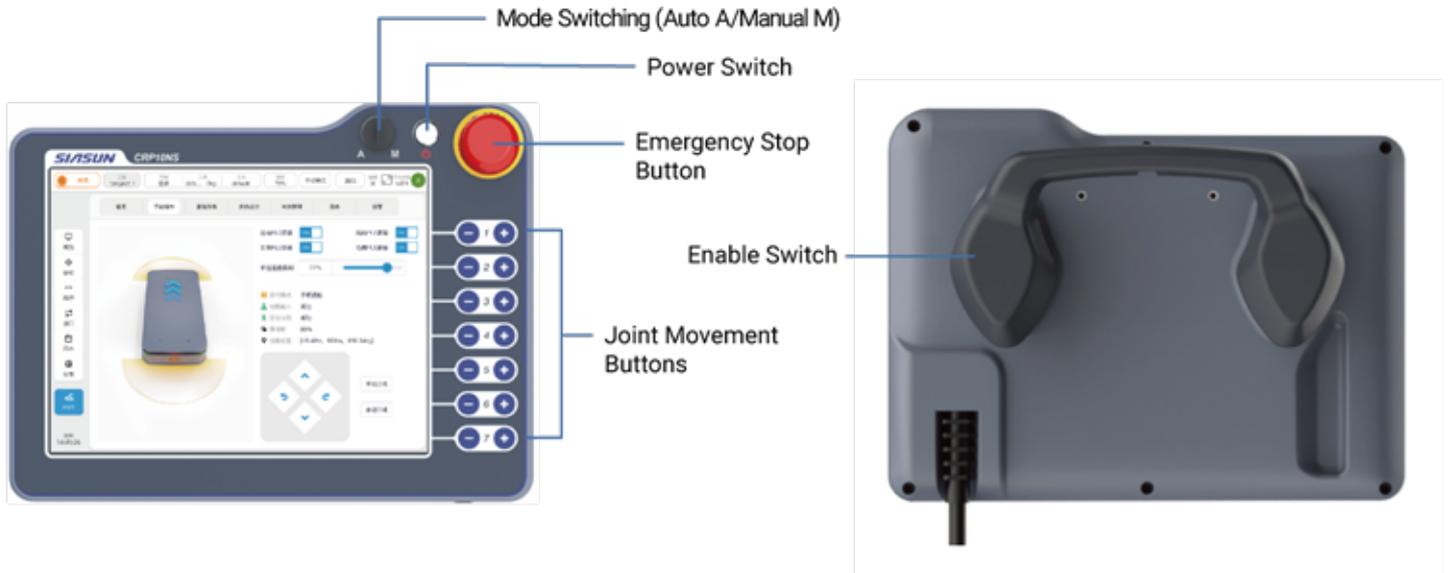
-10°C~ 45°C

5%~ 95 % (No Condensation)

Indoor Use Only

None/ Class6(Grade 1000) / Class5 (Grade 100)

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



- Contact Charging**
 - Quality-price Ratio
 - Suitable for Regular Scenarios
- Wireless Charging**
 - Contactless, Frictionless Dust Generation
 - Higher Cleanliness
 - Recharging while working
- Battery Change**
 - Automatic Battery Changer: High Efficiency and Return on Investment when Multiple Units are in place.
 - Enables 24-Hour Continuous Operation, Reducing the Number of Acquisitions.



Force Sensor



Vision System



Electrical Gripper



Vacuum Gripper



Quick-Change



Simulation&Off-line Program



Fasten System



Dress Packs



Gateway&Expansion Module



Laser Scanner



Optical &3D Scanner



Welding Machine(China)



Welding Machine(Global)



Other

