DOBOT

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300°/s
Industry-leading Speed

1800mm
Maximum Reach

±0.05mm
Repeatability

IP65
Rugged Protection

CR 30H Collaborative Robots
Next-gen Flagship Model

Engineered with industry-leading 300°/s speed and high 30kg payload capacity to transform industrial automation.

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DOBOT CR 30H Cobot Born Powerful

The Ultimate Heavy-Load Cobot for Smart Manufacturing

High-Speed

High-Performance

High-Stability

30kg

Fast | High Speed

300°/s Industry-leading joint speed

Precision Motion Control - Swift yet stable handling & palletizing.
Boosted Efficiency - Maximizes production throughput.

Strong | High Performance

30kg Payload

Ideal for Heavy-duty handling in food production, chemicals, logistics, and automotive.

1800mm Reach

Engineered for large-scale production and ideal for heavy-part handling and seamless multi-station workflows.

Stable | High Stability

<0.3mm Vibration – Ultra-precise under Full Load

Advanced vibration suppression and TrueMotion™ path correction ensure jitter-free precision at full-speed production.

Next-gen Flagship Performance ▼

Designed for high-end industrial automation that demands superior performance, stability, and efficiency, the CR 30H represents a breakthrough in heavy-duty collaborative robotics. With a record-breaking 300°/s joint speed, the fastest in its class, it shatters productivity barriers by perfectly balancing high payload capacity, blazing speed, and exceptional stability.

Uncompromising Quality ▼

DOBOT has deployed over 80,000 collaborative robots globally, serving 200,000+ customers ranging from Fortune 500 enterprises to small-medium manufacturers. Through 100,000-cycle certification on core components, 160+ precision assembly procedures, and 200+ stringent quality tests, we've validated exceptional product reliability - successfully achieving the ultimate combination of peak performance, maximum productivity, and unmatched reliability that redefines industrial automation standards. This breakthrough establishes DOBOT as the preferred automation partner for manufacturers worldwide.
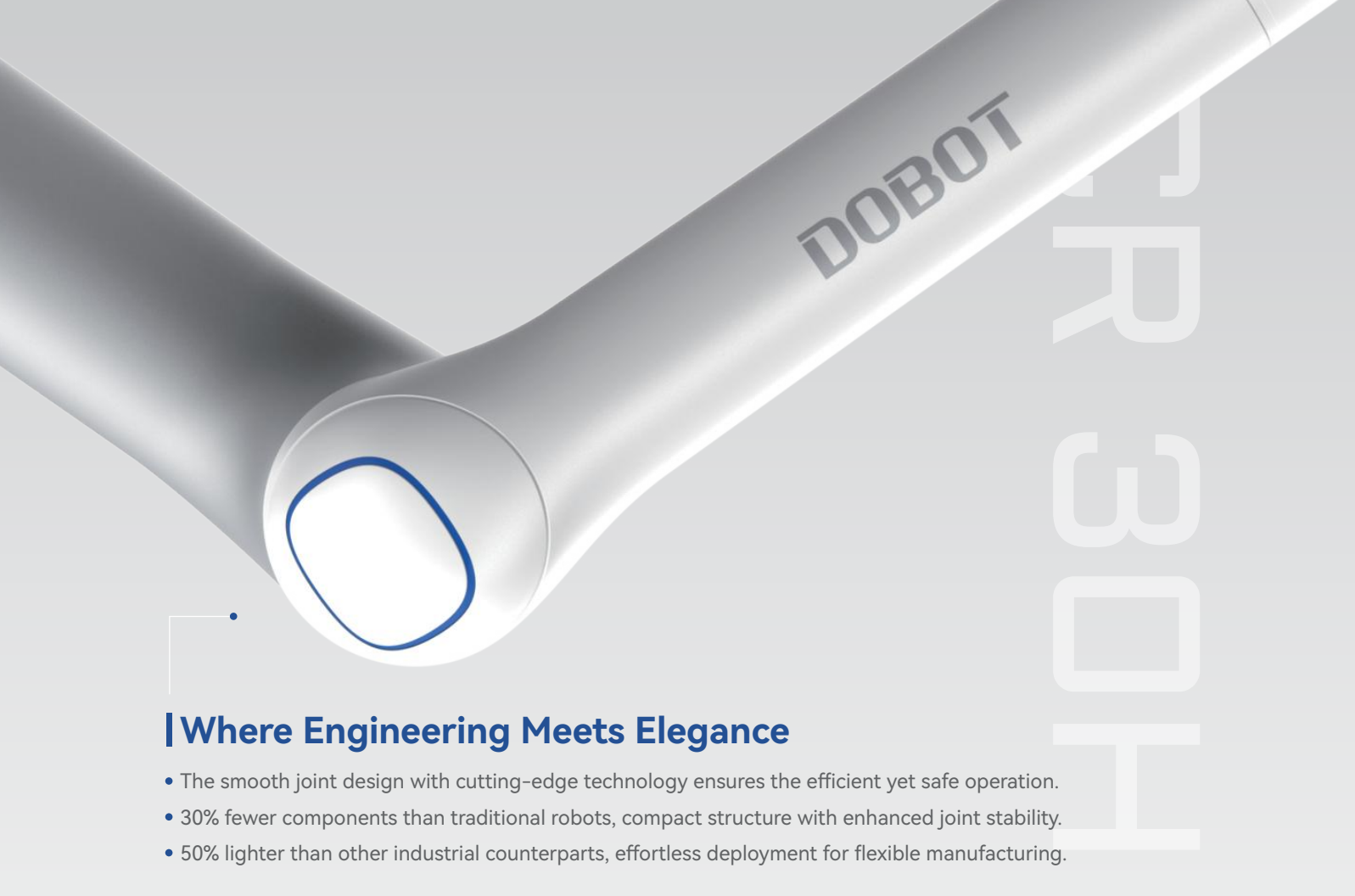
Where Engineering Meets Elegance

- The smooth joint design with cutting-edge technology ensures the efficient yet safe operation.
- 30% fewer components than traditional robots, compact structure with enhanced joint stability.
- 50% lighter than other industrial counterparts, effortless deployment for flexible manufacturing.

CR 30H - Standard Edition

Reliable Performance, Unmatched Productivity
- Industrial-grade stability for demanding environments.
- 2x throughput capacity versus conventional systems.
- Full-scenario production readiness.

CR 30HT - Touch Edition

Intuitive Collaboration, Effortless Teaching
- Built-in joint torque sensors.
- One-hand drag-to-teach functionality.
- Instant collision detection response.

CR 30H-Food - Clean Edition

Food-Safe Automation Certified
- NSF International certified components.
- Food-grade lubricants throughout.
- Seamless, easy-clean surfaces.

Palletizing Power Unleashed, Productivity Doubled

Industry-leading 300°/s Joint Speed

- Precision Motion Control – Swift yet stable handling & palletizing.
- Boosted Efficiency – Maximizes production throughput.

Smarter Speed, Proven Results

- Equipped with HyperMove™ motion control that intelligently adjusts acceleration to maintain maximum reliable speed, delivering 20% higher single-unit efficiency than competitors.

Palletizing/Handling Pace: 10 pcs/min

- Unlike the traditional palletizing system, the CR 30H solution can achieve new levels of automated palletizing performance.

Unmatched Stability at Full Speed & Load

<0.3mm vibration amplitude

- Advanced Vibration Suppression Algorithm: Effectively reduces vibrations and end-effector oscillations across the full speed and payload range.
- TrueMotion™ Path Replication Algorithm: Ensures 1:1 reproduction of taught trajectories with uncompromised consistency.

30 kg

Enhanced Reliability, Engineered for Uncompromising Performance

High-Density Servo Drive Technology

- Equipped with a high-performance power engine and 96V mid-voltage servo drive technology, delivering 50% more power with 20% less heat generation.

Optimized Joint Stability

- 30% fewer components with optimized load distribution, significantly reducing stress on individual parts and cutting downtime by 45%.

Fail-Safe Electromagnetic Braking

- Equipped with fail-safe electromagnetic brakes that automatically engage during power loss, limiting end-effector displacement to <1mm for maximum safety and precision.

IP67 Rugged Protection

- Resists dust, water jets, and oil contamination.

Smarter Collaboration for Enhanced Efficiency

One-Hand Drag-to-Teach

- Industry's first 30kg payload cobot with integrated torque sensors.
- Enables 90% faster programming with intuitive dragging.

Ultra-Fast 1kHz Control Cycle

- Minimizes command latency to enable higher acceleration and speed operation without trajectory overshoot.

1ms Collision Detection & Arrest

- DOBOT's proprietary Anti-Collision Algorithm identifies and stops potential impacts within 1 millisecond, reducing end-effector and body damage incidents by 95%.

Industry-leading 300°/s Speed and 30kg Payload Capacity

Heavy-Duty, High-Speed, Ultra-Stable
Unlock Full-Scenario Productivity Across Industries

Food & Beverage
Full-case palletizing and raw material handling solutions for dairy and frozen food production lines.

Automotive
Automotive wheel hub handling, seat assembly, and battery module transfer, etc.

Metal Processing
Handling of heavy-duty workpieces and laser cutting applications.

Semiconductor
Wafer handling and packaging solutions.

Simplified Automation
Making Industrial Manufacturing Smarter and More Efficient

- Blockly graphical programming, get started in just 30 minutes.
- Intuitive interface, easy operation for users of all skill levels.

International Quality Standards
Powerful Performance, Uncompromising Quality, Total Peace of Mind

DOBOT's cobots have achieved global reach since 2015 – now with 50+ certifications across 40 economies and market access in 180 countries and regions.

Industry-First 3-Year Warranty

24/7 Global Support

**Delivering Professional Technical Service Worldwide**

90% In-House R&D Key Components

Product Specifications

Robot Body

Weight		98.5 kg
Max. Payload		30 kg
Reach		1800 mm
Joint Range	J1/J2/J4/J5/J6	± 360°
	J3	± 163°
Max. Joint Speed	J1/J2	150°/s
	J3	200°/s
	J4/J5/J6	300°/s
End IO	Power Supply	0/12/24V, 2A(avg), 3A(max)
	Connector 1	2DI + 2DO + RS485
	Connector 2	2DI + 2DO
Repeatability		± 0.05 mm
IP Rating		IP67
Noise Level		70dB(A)
Operating Temp		0 ~ 50℃
Mounting		Floor/Wall/Ceiling
Cable Length		6 m (Body to Cabinet)
Materials		Aluminum Alloy/ABS/Rubber

Control Cabinet

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Dimensions		400 mm × 190 mm × 400 mm
Weight		19 kg
Power Input		200-240V AC, 50/60Hz
IO Power		24V, 3A(max), 0.5A/channel
General I/O Interface	DI	Digital Input 24 channels (NPN/PNP)
	DO	Digital Output 24 channels (NPN/PNP)
	AI	Analog Input 2 channels, 0-10V/4-20mA
	AO	Analog Output 2 channels, 0-10V/4-20mA
Safety I/O Interface	SI	Safety Input 10 channels
	SO	Safety Output 10 channels
Communication Interface	Network Ports	2× Ethernet (TCP/IP, Modbus TCP, Ethernet/IP, Profinet)
	RS485 Port	1× (Modbus RTU)
	Encoder	1× ABZ incremental interface
Environment	Temperature/Humidity	0-50℃, ≤95% RH (non-condensing)
IP Rating		IP20 (Optional IP54)
Teaching Methods		Teach Pendant/PC/Android App

End-Effector Flange Assembly
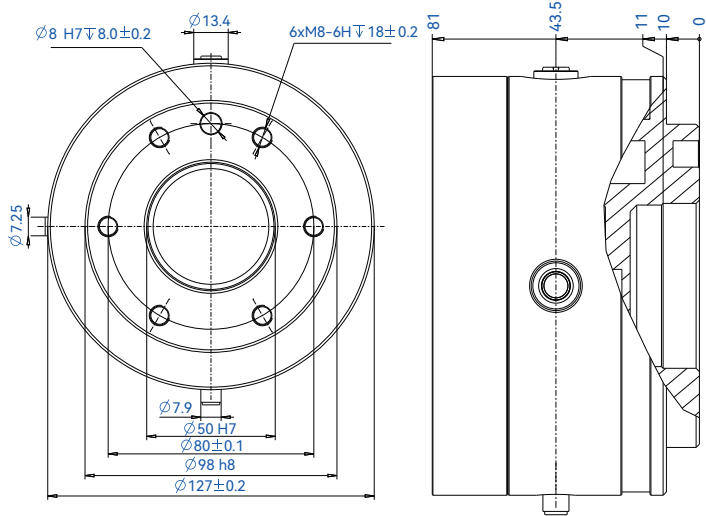
Base Mounting Dimensions
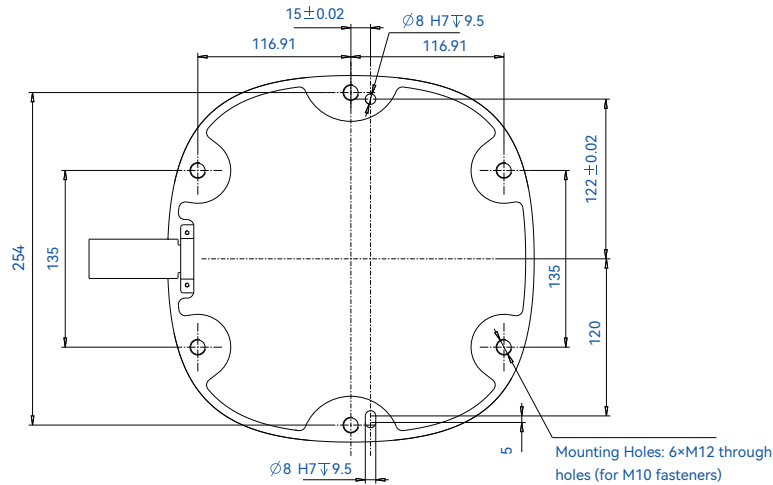
Robot Body Parameters
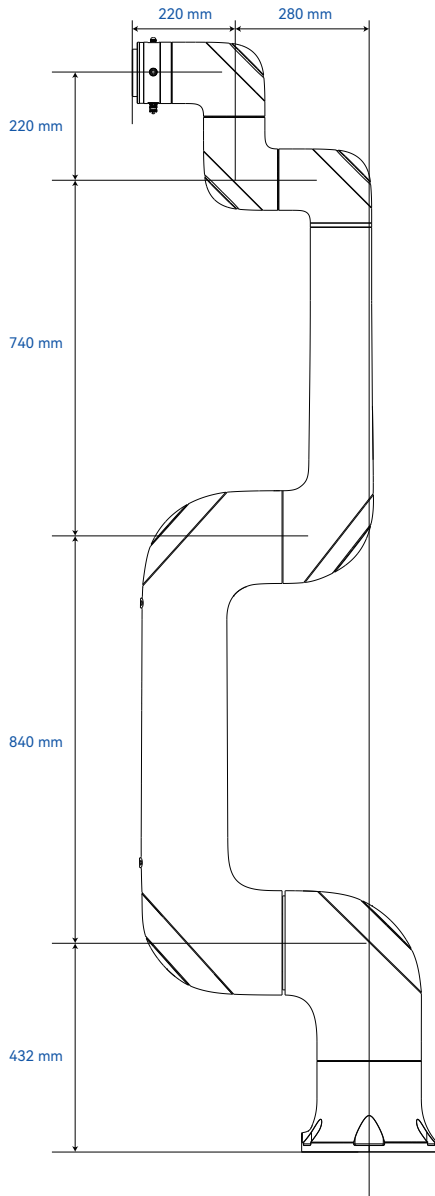
Teach Pendant

Dimensions	294 mm × 184 mm × 59 mm
Weight	1.09 kg
IP Rating	IP54 (Dust protected, splash proof)
Cable Length	4.5 m (Controller to Cabinet)
Display Size	10.1 inches
Display Resolution	1900 × 1200@60Hz
Memory	4GB RAM + 32GB Storage