

Tier-1 Supplier of Full Stack Humanoid Robot Solutions

From core components to the complete machine system, it provides a full-chain customized solution covering "**Joint Module - Humanoid Robotic Arm - Humanoid Upper Body - complete humanoid robot**" to meet the operational needs of multiple scenarios



Joint Module



ART3-R7



Humanoid Upper Body

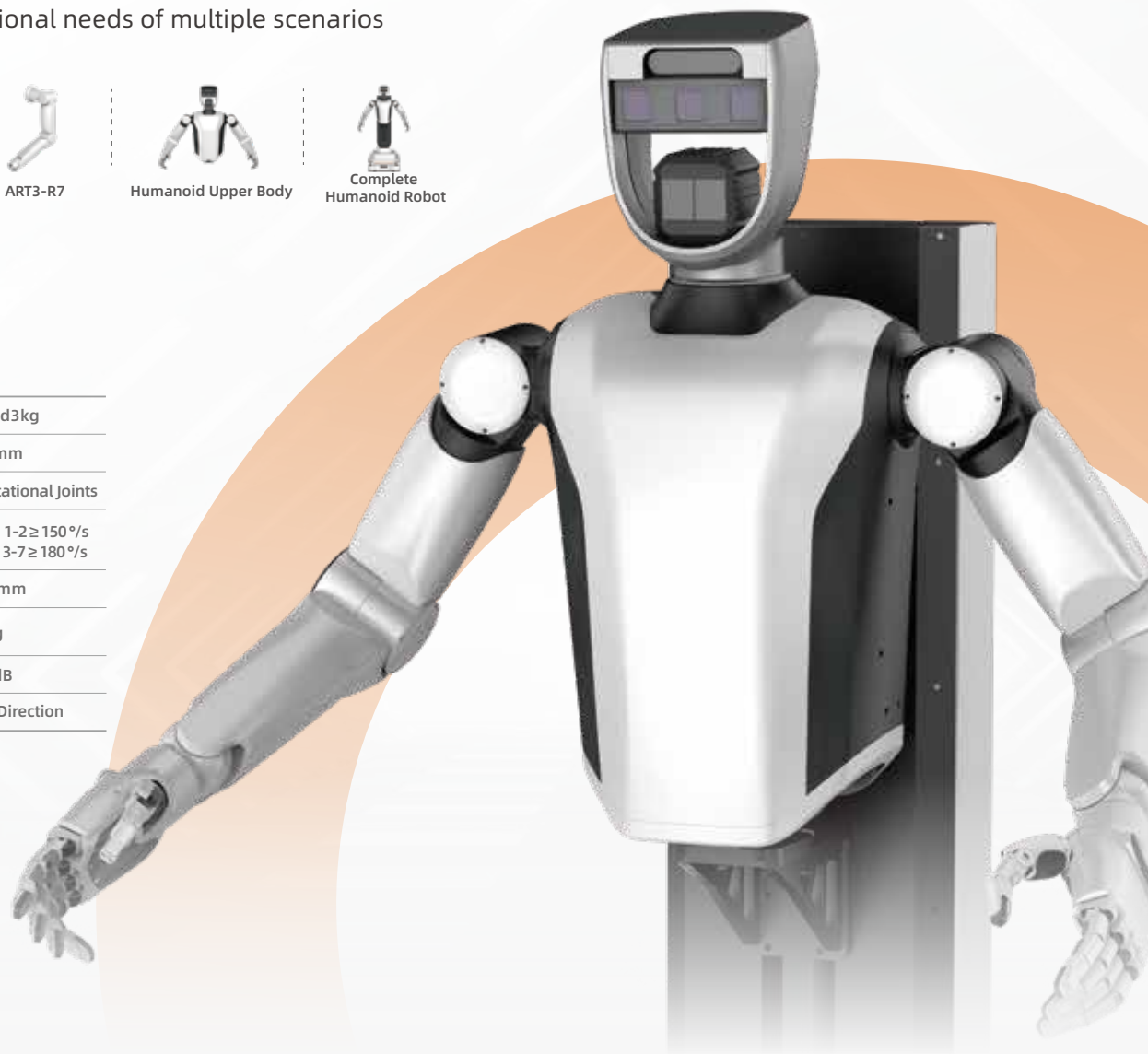


Complete Humanoid Robot

ART3-R7

Technical Parameters

Payload	Rated3kg
Arm Span	600mm
Degrees of Freedom	7 Rotational Joints
Joint Speed	Axis 1-2 ≥ 150 %/s Axes 3-7 ≥ 180 %/s
Repeatability	± 0.1 mm
Overall Machine Weight	≈ 8 kg
Noise	<65dB
Installation Direction	Any Direction



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Four Major Core Customized Solutions - Full-Dimension Empowerment for Full Scenarios

Joint Module

The "power core" of humanoid robots

Core Advantages

High load capacity, lightweight structure;
High-precision control;
High payload-to-weight ratio.

Customization Features

- Customizable payload parameters and dimensional specifications can be tailored to customer requirements;
- Compatible with the installation and operation requirements of different joint parts (shoulder, elbow, wrist, etc.) of humanoid robots.



Humanoid Upper Body

Core Carrier of Intelligent Interaction

Core Components

Humanoid robotic arm (7 degrees of freedom, balancing flexibility and payload);

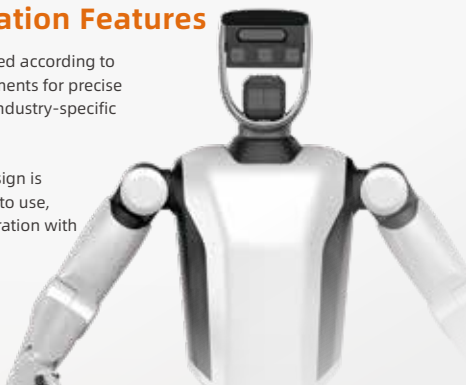
Control system (open and compatible, real-time response, smooth commands);

Perception module (equipped with cameras/six-axis force sensors, etc.);

End effector (robotic hand/Gripper etc.) .

Customization Features

- Can be customized according to industry requirements for precise alignment with industry-specific characteristics ;
- The interface design is simple and easy to use, facilitating integration with external devices.



ART3-R7

A flexible and efficient end effector

Core Advantages

- 7 Degrees of Freedom for Flexible Movement, Covering Multi-Angle Operation Positions;
- Lightweight Design (Weight \approx 8 kg), Saving Installation Space;
- High Payload Capacity (Maximum Instantaneous Load: 10 kg) + Ultra-High Precision (Repeat Positioning Accuracy: \pm 0.1 mm);
- Equipped with a camera to achieve "Precise Recognition - Precise ;
- Open end interface compatible with all types of actuators;
- It is equipped with built-in safety protection, collision detection, and drag-and-teach functions, which lowers the threshold for automated integration.

ART3-R7 offers a complete ecosystem of accessories

Dexterous Hand (RS485 Communication), Gripper (with IO Interface on the End), 6-Axis Force Sensor (Standard Interface).

Typical applications

Precision Assembly, Automated Inspection, Scientific Research Experiments, Education and Training, etc.

Customization Features

- The appearance of the humanoid robotic arm can be adjusted according to user requests (overall form, detailed design, and material color scheme);
- Arm span length can be customized according to needs, covering everything from compact short arms to ultra-long arm spans.



Complete Humanoid Robot

Full-Scenario Operation Solution

Core Componentsz

Semi-Humanoid (Motion and Interaction Execution Unit) ;

Lifting Column (to expand working Space vertically);

Mobile Platform (to expand the operational range).

Customization Features

- Tailored hardware configurations and software functions based on specific application scenarios;
- Modular interfaces are compatible and support rapid integration with third-party devices, reducing development time and cost.

