

UBTECH Full-sized Wheeled Humanoid Robot

Cruzr S2

Customized Services
Unlimited Possibilities





Full Size

Height 176cm
44 of DOF
Moving Speed 2m/s

Flexible Waist

Rotation Angle:
 $\pm 170^\circ$
Pitch Angle:
 $+90^\circ$ to -35°
Lifting Range:
0-0.4m
Workspace:
0-1.8m



Perception & Interaction

Supports LLM
Voice Interaction
4-inch Circular
Facial Display
4 Array Microphones
2 Speakers



Anthropomorphic Dual Arms

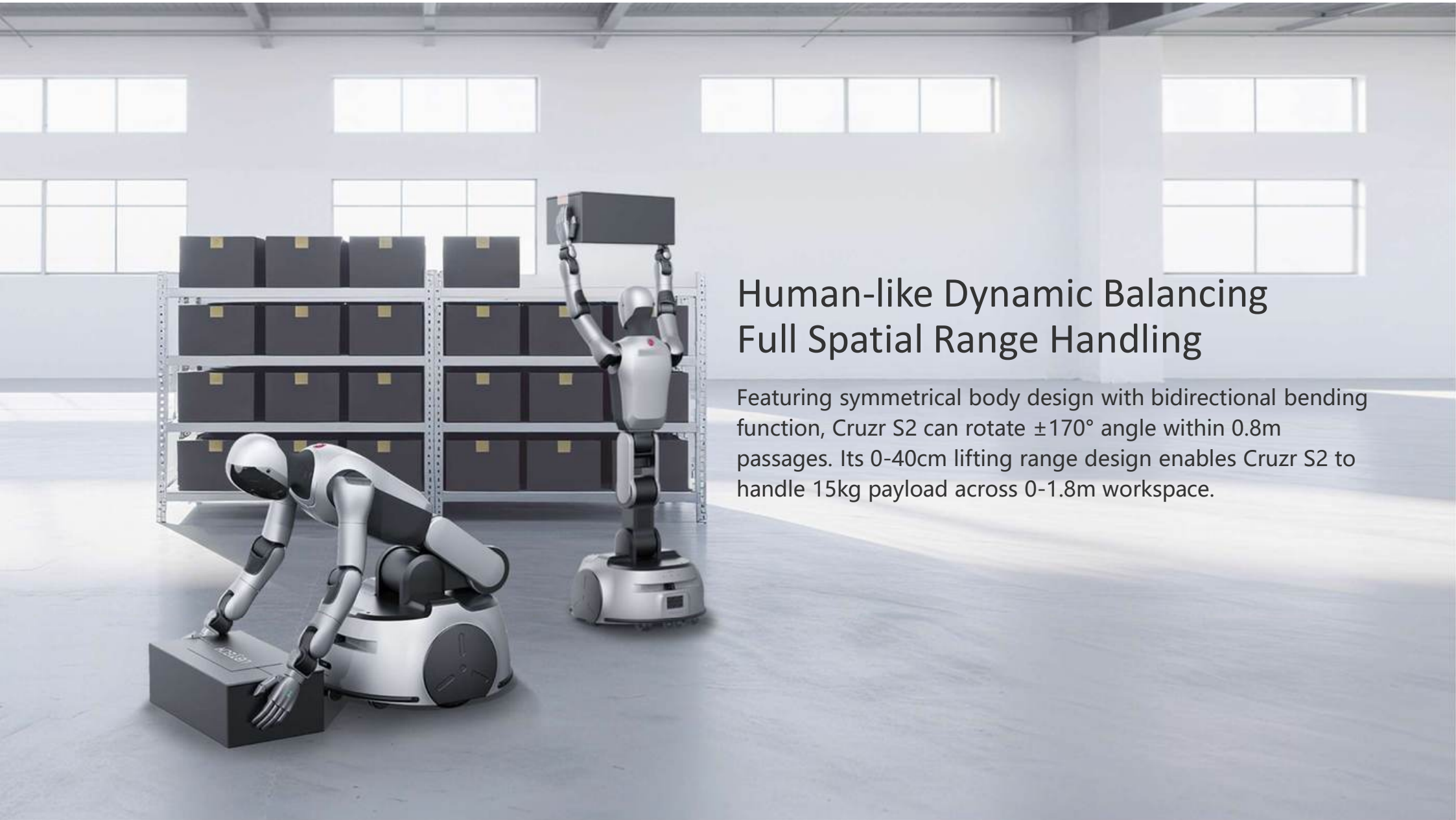
15kg Payload
Gen-4 Industrial
Dexterous Hands
11 of DOF 6
Tactile Sensors Array
Single-hand Grasp: 7.5kg
Finger Grasp: 1kg



Innovative Materials

Rigid-flex
Heterogeneous
Composite
Aerospace-grade
Aluminum Alloy
3D Printed Primary Frame
3D Knitted High-elastic
Fiber Material



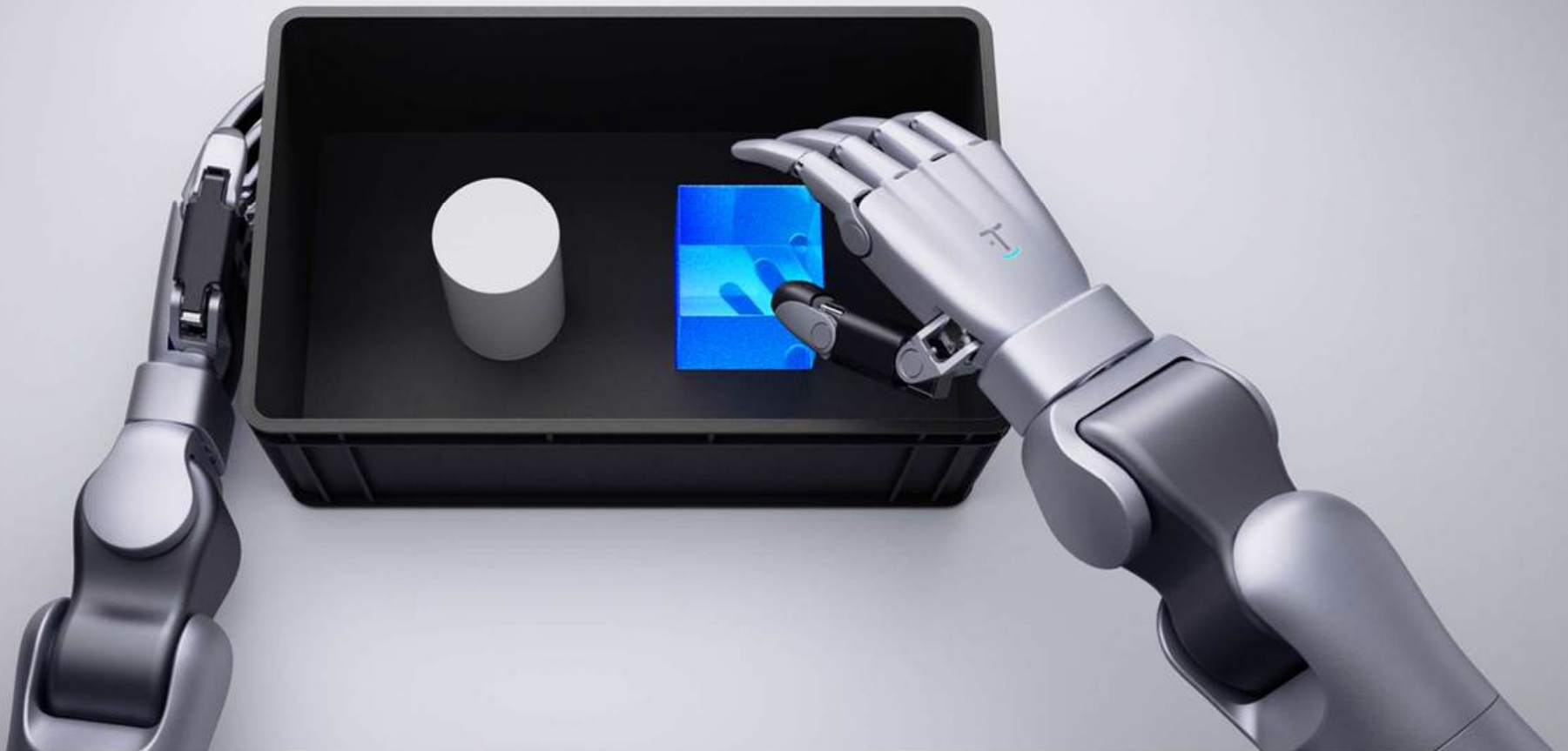


Human-like Dynamic Balancing Full Spatial Range Handling

Featuring symmetrical body design with bidirectional bending function, Cruzr S2 can rotate $\pm 170^\circ$ angle within 0.8m passages. Its 0-40cm lifting range design enables Cruzr S2 to handle 15kg payload across 0-1.8m workspace.

Dexterous Manipulation and Precise Operation

Powered by sim-to-real embodied intelligent data system, Cruzr S2 integrates gen-4 industrial dexterous hands, achieving sub-millimeter manipulation in sorting, component assembly, and other multi-scenario grasping operations.



"Human-eye" Binocular Stereo Vision Perception

The pure RGB binocular stereo vision solution is built in Cruzr S2's head. The self-developed passive binocular vision system employs deep learning-based stereo depth estimation algorithms to generate high-precision, left-aligned dense depth maps in real-time. This enables Cruzr S2 to achieve "human-eye" stereoscopic perception capabilities.

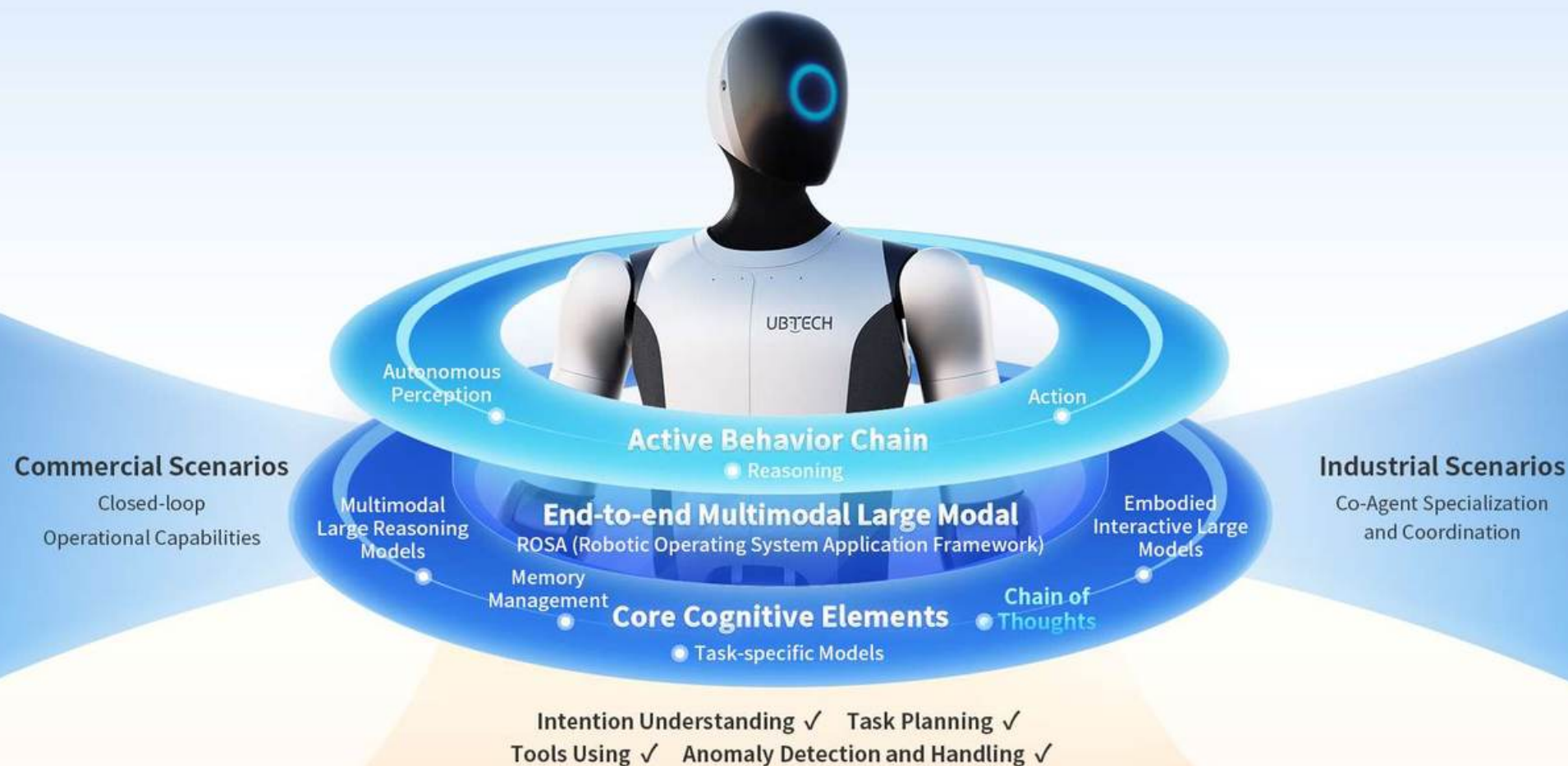


Complex Terrain Adaptability Human-Robot Collaboration Safety

With build-in learning-based motion control technology, Cruzr S2 is able to move with the speed of 2m/s and achieve self-balanced ability in complex terrain, ensuring human-robot collaboration safety.



UBTECH's Self-developed Co-Agent The World's First Industrial Agent for Humanoid Robot



Application Scenarios

Meets multi-scenario operational demands, improves enterprise efficiency and achieves high-quality industrial development.







Dream with Robots