

ROBOTIX MARKET

PRODUCT BROCHURE
2026 edition



UBTECH ROBOTICS · FULL-SIZED
WHEELED HUMANOID · ROBOTIX
MARKET

Cruzr S2

**Full-sized wheeled humanoid
robot with industrial
dexterous hands for
factories, warehouses, retail
and healthcare**

176 cm, 44 degrees of freedom, a 15 kg
payload and sub-millimetre dexterous
hands, on a wheeled base that moves at
up to 2 m/s.

Available worldwide from Robotix Market
robotixmarket.com

Human reach and human hands, on wheels

Cruzr S2 is UBTECH's full-sized wheeled humanoid robot: a 176 cm, 44-degree-of-freedom body with anthropomorphic dual arms and gen-4 industrial dexterous hands, carried on a wheeled base. It reaches from the floor to 1.8 m with 15 kg in hand, sees depth through a human-eye binocular vision system and is driven by UBTECH's Co-Agent, an industrial agent built for humanoid robots. Built for material handling, sorting and assembly, with the voice interaction to work in customer-facing spaces too.

A full-sized humanoid on wheels

176 cm tall with 44 degrees of freedom, on a wheeled base that moves at up to 2 m/s; the body rotates $\pm 170^\circ$ even inside a 0.8 m passage.

Hands that handle parts, not just boxes

Gen-4 industrial dexterous hands with a 6-tactile-sensor array and six-axis wrist force sensors: 7.5 kg in one hand, 1 kg in the fingers, sub-millimetre manipulation.

Stays balanced on real floors

Learning-based motion control keeps the body self-balanced on complex terrain, designed by UBTECH for safe human-robot collaboration.

Reaches from the floor to 1.8 m

A bidirectionally bending waist ($+90^\circ$ to -35°) and a 0–0.4 m lift give the arms a working envelope from 0 to 1.8 m with a 15 kg payload.

Sees depth like a human eye

Passive, pure-RGB binocular stereo vision in the head, with deep-learning depth estimation producing dense depth maps in real time.

Run by an industrial agent

UBTECH's Co-Agent — an end-to-end multimodal large model on the ROSA framework — understands intentions, plans tasks, uses tools and handles anomalies.


176 cm

FULL SIZE

44

 DEGREES OF
FREEDOM

15 kg

PAYLOAD

2 m/s

MOVING SPEED

0–1.8 m

WORKSPACE

Every part of Cruzr S2 has a job

Fish-eye × 2 and RGB × 2 cameras

Binocular stereo vision and a wide-angle view, all in the head

4-inch circular facial display

LED display, with a microphone array for LLM voice interaction

Speakers × 2 and chest RGBD

Voice output and a depth camera in the chest

Radar and base RGBD

Radar at the front and rear of the base; a depth camera at the front



Power switch and emergency stop

Both on the back of the torso

Gigabit Ethernet / USB 3.0

Wired connectivity on the back of the torso

Six-axis force sensor × 2

One at each wrist

Dexterous hands × 2 · fast-charging port

Gen-4 industrial hands; the charging port sits on the base

7.5 kg

SINGLE-HAND GRASP

1 kg

FINGER GRASP

6

TACTILE-SENSOR ARRAY

2 × 6-axis

WRIST FORCE SENSORS

Turn, bend, lift, move

THE MOTIONS BEHIND THE 0–1.8 M WORKSPACE

±170°

Turn

Waist rotation of ±170°, even within a 0.8 m passage

+90°/–35°

Bend

Bidirectional waist pitch from +90° to –35°

0.4 m

Lift

0–0.4 m body lift for a 0–1.8 m workspace

2 m/s

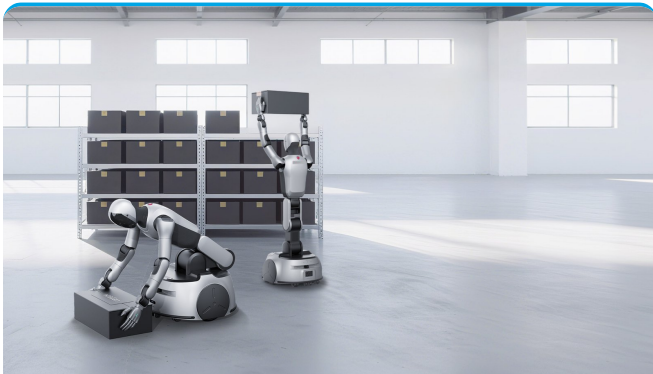
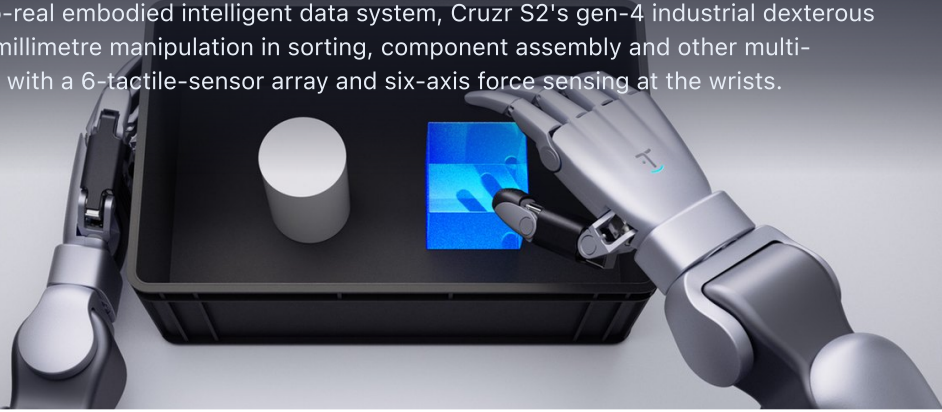
Move

Up to 2 m/s, self-balancing on complex terrain

What sets Cruzr S2 apart

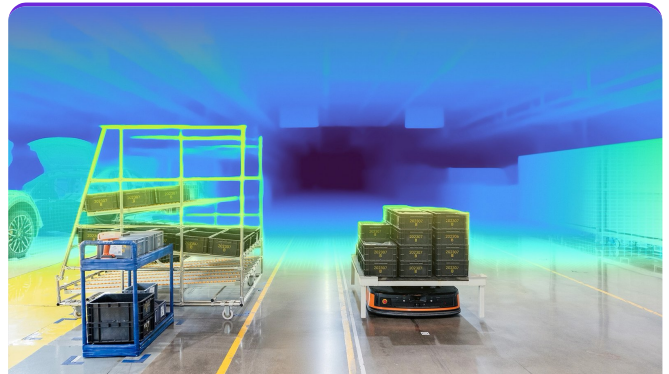
Dexterous manipulation and precise operation

Powered by a sim-to-real embodied intelligent data system, Cruzr S2's gen-4 industrial dexterous hands achieve sub-millimetre manipulation in sorting, component assembly and other multi-scenario grasping — with a 6-tactile-sensor array and six-axis force sensing at the wrists.



Full spatial-range handling

A symmetrical body with bidirectional bending rotates $\pm 170^\circ$ within 0.8 m passages; the 0–40 cm lift lets it handle a 15 kg payload anywhere from the floor to 1.8 m.



Human-eye binocular stereo vision

A passive, pure-RGB binocular system in the head runs deep-learning stereo depth estimation and produces high-precision, dense depth maps in real time.



Human-like dynamic balancing

Learning-based motion control lets Cruzr S2 move at up to 2 m/s and stay self-balanced on complex terrain, for safe human-robot collaboration.



UBTECH Co-Agent

UBTECH describes it as the world's first industrial agent for humanoid robots: an end-to-end multimodal large model on ROSA with autonomous perception, reasoning, memory management and task-specific models — intention understanding, task planning, tool use and anomaly handling.

Factory floors, warehouses, shop floors and halls

Smart factory

Material sorting and handling, production-line assembly — sub-millimetre manipulation with tactile and force feedback.

Warehouse & logistics

Picking from shelves anywhere between floor level and 1.8 m, with a 15 kg payload and a body that turns within 0.8 m passages.

Retail & supermarket

Warehouse picking and shopping service on the shop floor, with voice interaction for customers.

Hospital & pharmacy

Pharmaceutical item transfer and medicine dispensing, the hospital and pharmacy tasks UBTECH lists for Cruzr S2.

Exhibition & halls

Greeting and guide service with entertainment interaction — a full-sized humanoid presence.

Customised services

UBTECH offers customised services to adapt Cruzr S2 to a customer's own tasks and site; the scope is agreed at quotation.



UBTECH positions Cruzr S2 for both industrial scenarios (Co-Agent specialisation and coordination) and commercial scenarios (closed-loop operational capabilities).

CruZR S2 at a glance

BODY & MOBILITY

Form factor	Full-sized wheeled humanoid: humanoid torso, dual arms and dexterous hands on a wheeled base
Height	176 cm
Degrees of freedom	44 (whole body)
Moving speed	Up to 2 m/s
Balance & terrain	Learning-based motion control; self-balancing on complex terrain
Waist rotation	$\pm 170^\circ$
Waist pitch	$+90^\circ$ to -35° (bidirectional bending)
Lifting range	0–0.4 m
Workspace	0–1.8 m
Rotation in tight spaces	Waist rotates $\pm 170^\circ$ within a 0.8 m passage

ARMS & HANDS

Arms	Anthropomorphic dual arms
Arm & hand DoF	11, as listed on UBTECH's dual-arm and dexterous-hand card
Payload	15 kg
Hands	Gen-4 industrial dexterous hands $\times 2$; six-axis force sensor $\times 2$ at the wrists
Tactile sensing	6-tactile-sensor array
Single-hand grasp	7.5 kg
Finger grasp	1 kg
Manipulation	Sub-millimetre manipulation for sorting, component assembly and multi-scenario grasping (sim-to-real embodied intelligent data system)

PERCEPTION

Stereo vision	Pure-RGB passive binocular stereo vision in the head; deep-learning stereo depth estimation producing dense depth maps in real time
Head cameras	Fish-eye camera $\times 2$, RGB camera $\times 2$
Depth cameras	RGBD $\times 2$ (chest and base)
Radar	Radar $\times 2$ (front and rear of the base)

INTERACTION

Facial display	4-inch circular LED display
Voice	Supports LLM voice interaction; 4-array microphones; 2 speakers
Agent	UBTECH Co-Agent — industrial agent for humanoid robots: end-to-end multimodal large model, ROSA application framework, autonomous perception, memory management, task planning, tool use, anomaly detection and handling

MATERIALS & CONNECTIVITY

Materials	Rigid-flex heterogeneous composite; aerospace-grade aluminium alloy; 3D-printed primary frame; 3D-knitted high-elastic fibre
Ports	Gigabit Ethernet, USB 3.0; fast-charging port
Controls	Power switch; emergency-stop button

Sources: UBTECH Robotics CruZR S2 product page (ubtrobot.com/en/humanoid/products/cruZR-s2) — feature copy, specification cards, component diagram, application-scenario and Co-Agent graphics; robotixmarket.com. Figures are the manufacturer's; battery, run-time and weight are not published by UBTECH and are confirmed at quotation.

NEXT STEP

Put Cruzr S2 to work on your site

Tell us about the tasks — what it should pick, sort, assemble or carry, the floor and the aisles, and how it should talk to people. We will come back with a configuration, a delivery estimate to your address and a formal quotation.

Request a quotation

Web · robotixmarket.com/products/ubtech-cruzs2

Email · info@robotixmarket.com

Prices and configuration on request. Robotix Market ships worldwide.



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Supplied through established distribution channels.

Manufacturer warranty

Every robot ships with the full UBTECH manufacturer warranty and official documentation.

Support

Technical support is coordinated with the manufacturer's service network.