

ROBOTIX MARKET

SERIES BROCHURE
2026 edition

NOETIX ROBOTICS · DEVELOPER
HUMANOID ROBOT · ROBOTIX MARKET

Bumi EDU

EDU-Air, EDU-Pro and EDU-Max — the developer editions of Noetix's 98 cm humanoid

Motor-level control and an open DDS SDK on every EDU edition — and, on EDU-Pro and EDU-Max, an NVIDIA Jetson computer and a depth camera on board.



Available worldwide from Robotix Market
robotixmarket.com

OVERVIEW

The Bumi humanoid, opened up for developers

Bumi EDU is the developer line of Noetix Robotics' 98 cm, 21-DoF humanoid. On top of everything the consumer Bumi does, every EDU edition opens motor-level control, audio and video access and an open DDS SDK for C++ and Python, with 4G/5G connectivity built in. The three editions differ in on-board computing: EDU-Air is developed from your own computer, EDU-Pro adds an NVIDIA Jetson Orin Nano Super and EDU-Max a Jetson Orin NX — both with an Intel RealSense depth camera.

Down to the motors

Every EDU edition opens motor-level control (LowController) — individual joints, below Noetix's own motion algorithms. Bumi Standard and Pro stop at high-level commands.

Audio and video access

MediaController gives developers the wake word, reply phrases and the audio and video streams — on all three EDU editions.

Depth camera (EDU-Pro, EDU-Max)

An Intel RealSense D435i — RGB 1080p30, depth 720p30 — wired to the Jetson for perception projects.

An open SDK

A DDS SDK for C++ and Python, open-source on GitHub under BSD-3-Clause and prebuilt for Ubuntu 22.04, with the Bumi URDF model published by Noetix.

Jetson on board (EDU-Pro, EDU-Max)

EDU-Pro adds an NVIDIA Jetson Orin Nano Super (67 TOPS), EDU-Max a Jetson Orin NX (117 TOPS); EDU-Air is developed from your own computer.

Everything Bumi does

The same 98 cm, 21-DoF body with 4G/5G, the full dance library including the Chinese New Year dance, teaching mode, visual programming and the NOETIX Run app.



21

DEGREES OF
FREEDOM

6 + 117

TOPS (EDU-MAX)

70 N·m

KNEE TORQUE

C++ · Python

DDS SDK

2-3 h

RUNTIME

Which EDU edition?

ONE BODY, THREE LEVELS OF ON-BOARD COMPUTING

COMPUTING POWER

6 TOPS

TOPS

EDU-Air

Motor-level development from
your own computer

- LowController, HighController and MediaController
- 4G/5G, full dance library, teaching mode
- Image transmission to the app

COMPUTING POWER

6 + 67 TOPS

TOPS

EDU-Pro

NVIDIA Jetson Orin Nano Super on
board

- Everything in EDU-Air, developed on the Jetson
- Intel RealSense D435i depth camera
- Rear ports wired to the Jetson

COMPUTING POWER

6 + 117 TOPS

TOPS

EDU-Max

NVIDIA Jetson Orin NX on board

- The most on-board computing in the Bumi range
- Intel RealSense D435i depth camera
- Rear ports wired to the Jetson

EDU-Air · EDU-Pro · EDU-Max compared

	EDU-Air Develops from your own computer	EDU-Pro Jetson Orin Nano Super + depth camera	EDU-Max Jetson Orin NX + depth camera
BODY AND POWER			
Size (standing)	98 × 35 × 20 cm	98 × 35 × 20 cm	98 × 35 × 20 cm
Weight	approx. 17 kg	approx. 17 kg	approx. 17 kg
Degrees of freedom	21	21	21
Knee torque · walking speed	70 N·m · 0.5 m/s	70 N·m · 0.5 m/s	70 N·m · 0.5 m/s
Battery · runtime	48 V 5.1 Ah · 2–3 h	48 V 5.1 Ah · 2–3 h	48 V 5.1 Ah · 2–3 h
Hands	Modelled, no loads	Modelled, no loads	Modelled, no loads
COMPUTING AND SENSING			
Computing power	6 TOPS	6 + 67 TOPS	6 + 117 TOPS
On-board developer computer	—	Jetson Orin Nano Super	Jetson Orin NX
Motion-control board	RK3576 (closed)	RK3576 (closed)	RK3576 (closed)
Perception	Camera, IMU	Camera, IMU	Camera, IMU
Depth camera	—	RealSense D435i	RealSense D435i
Voice languages	Chinese, English	Chinese, English	Chinese, English
4G/5G, Wi-Fi, Bluetooth	Yes	Yes	Yes
DEVELOPMENT			
HighController (upper-layer motion)	Yes	Yes	Yes
LowController (motor-level)	External computer	On the Jetson	On the Jetson
MediaController (audio, video)	Yes	Yes	Yes
DDS SDK · C++, Python · Ubuntu 22.04	Yes	Yes	Yes
URDF robot model	Published	Published	Published
Rear ports connect to	Motion-control board	Jetson	Jetson
MOVEMENT AND APP			
Walking, teaching mode, stand-up	Yes	Yes	Yes
Low- and high-intensity dances	Yes	Yes	Yes
Chinese New Year dance	Yes	Yes	Yes
App, OTA, visual programming	Yes	Yes	Yes
Image transmission to the app	Yes	— (not yet)	— (not yet)

— means not available on that edition. According to Noetix, some features are released progressively through software updates, and figures were measured under laboratory conditions. Group dancing with other Bumis is a separate purchase.

Sources: Noetix Robotics Bumi specification page (EDU tab) and product page (noetixrobotics.com/en/spec/Bumi, [/en/detail/Bumi](https://noetixrobotics.com/en/detail/Bumi)) and the Noetix Bumi documentation — hardware, SDK (HighController, LowController, MediaController), URDF — and FAQ (web.noetixrobotics.com/docs), checked 12 September 2026; robotixmarket.com. Figures are the manufacturer's, measured under laboratory conditions. Where Noetix's own sources disagree (for example the Jetson Orin NX memory size), the value is left out.

21 joints, a camera in the head and ports on the back

Camera

On the face of the head; on EDU-Pro and EDU-Max an Intel RealSense D435i depth camera

Ring microphone and speaker

Voice interaction in Chinese and English — wake word "Bumi Bumi"

Arms: 4 DoF each

Two degrees of freedom at the shoulder and two at the elbow

Modelled hands

Rubber hands for gestures — not designed to carry loads



Waist: 1 DoF

One degree of freedom between the upper body and the legs

Legs: 6 DoF each

Three at the hip, one at the knee and two at the ankle; knees up to 70 N·m

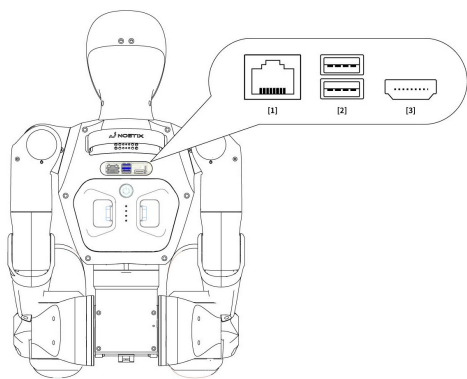
Quick-release battery

On the back — 48 V 5.1 Ah, 2–3 h of runtime, about 1–2 h to charge

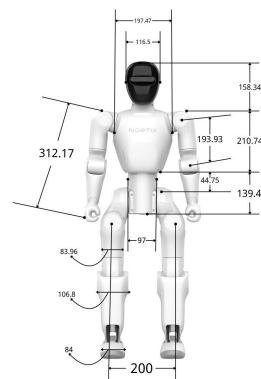
Rear developer ports

Ethernet, two USB and HDMI — wired to the Jetson on EDU-Pro and EDU-Max

BUMI EDU — THE SAME BODY ON ALL THREE EDITIONS



Rear developer ports — [1] Ethernet (RJ45) · [2] two USB · [3] HDMI. On EDU-Pro and EDU-Max they connect to the Jetson; on EDU-Air to the motion-control board.



Dimensions — front view in millimetres, from Noetix's documentation (98 × 35 × 20 cm standing).

98 cm

HEIGHT

35 cm

WIDTH

20 cm

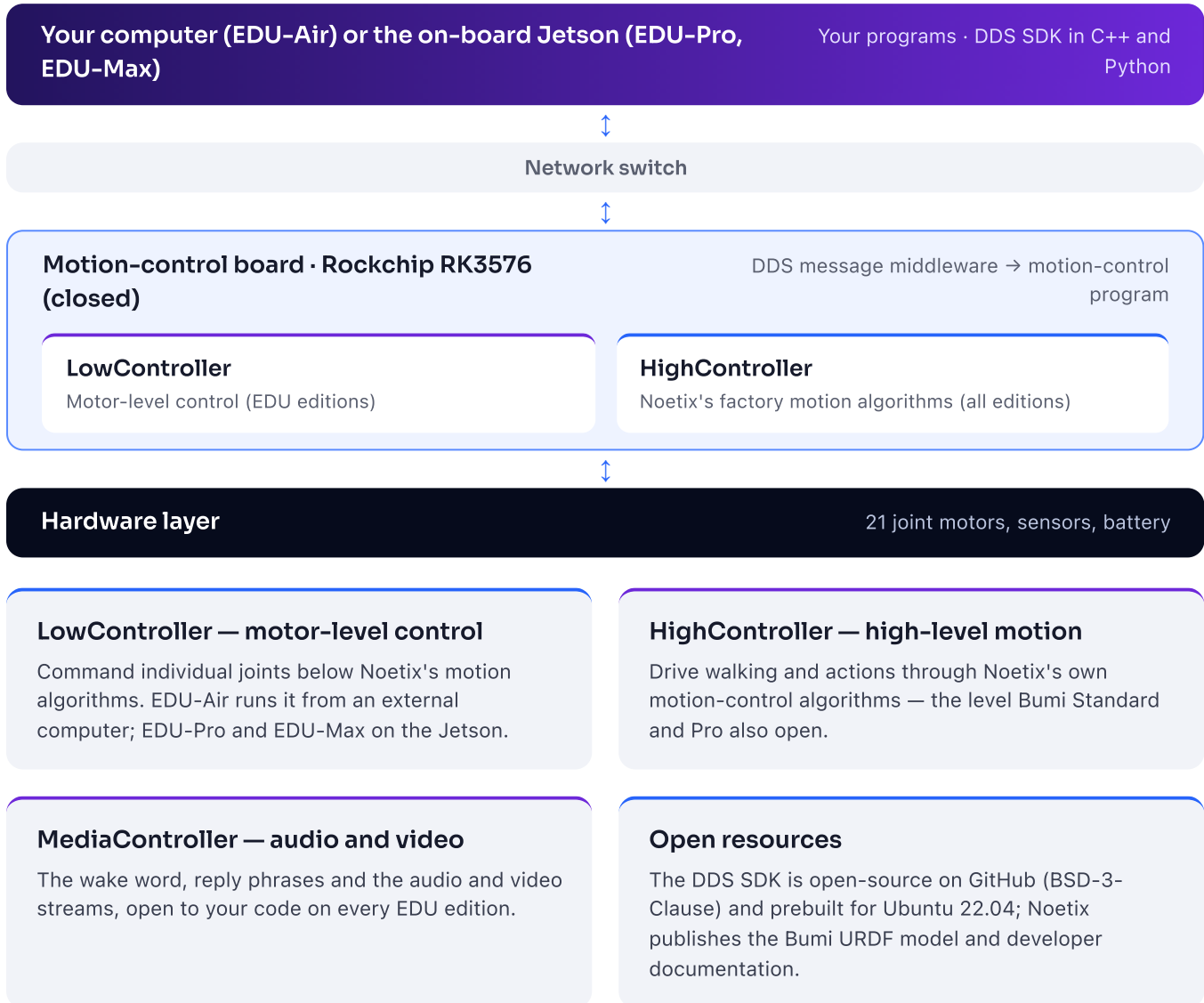
DEPTH

≈ 17 kg

WEIGHT

From the app down to each motor

Bumi's software is layered. Your programs run on the Jetson (EDU-Pro, EDU-Max) or on your own computer (EDU-Air) and talk to the robot's motion-control board through the DDS SDK. There they can command Noetix's own motion algorithms through HighController — or, on EDU editions only, drive the motors directly through LowController.



Where your code runs

THE SAME SDK ON ALL THREE — THE DIFFERENCE IS THE COMPUTER ON BOARD

EDU-Air

Your own computer

All three controllers run on a computer of your choice; the 6 TOPS motion-control board stays closed.

EDU-Pro

Jetson Orin Nano Super

67 TOPS, 8 GB + 128 GB, wired to the RealSense D435i depth camera and the rear ports.

EDU-Max

Jetson Orin NX

117 TOPS — the most on-board computing in the range — wired to the depth camera and the rear ports.

Labs, classrooms and developer desks

Robotics courses and labs

Teach motion control from high-level commands down to individual motors, on a humanoid small enough for a classroom bench.

Perception and AI projects (EDU-Pro, EDU-Max)

Run your own perception code on the on-board Jetson with the RealSense depth camera, and send the results to the robot's motion stack.

Programming learning

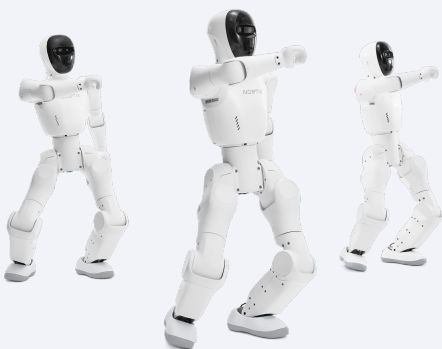
Start with visual programming in the app, then move to the Python and C++ SDK on the same robot.

Maker education and clubs

Students build movements with teaching mode and the dance library, then program new behaviours through the SDK.



Dexterous hands are not supported on Bumi, and multi-robot group control is a separate purchase. Noetix is preparing EDU course material (graphical and Python programming); ask us for its current status.



Still the whole Bumi experience

Every EDU edition keeps the consumer features: the NOETIX Run app, visual programming, audiobooks, teaching mode and the full dance library — including high-intensity routines and the Chinese New Year dance — with over-the-air updates.

NEXT STEP

Put Bumi EDU on your lab bench

Tell us what you want to build — a course, a research project or your own robot software — and where the robot should go. We will help you choose between EDU-Air, EDU-Pro and EDU-Max and come back with a delivery estimate to your address and a formal quotation.

Request a quotation

Web · robotixmarket.com/search?q=bumi+edu

Email · info@robotixmarket.com

Current prices for your market are shown on the product pages. Robotix Market ships worldwide.



EDU-Air



EDU-Pro



EDU-Max

Sourced new

Supplied through established distribution channels.

Manufacturer warranty

The full Noetix Robotics manufacturer warranty: 12 months from first activation, per Noetix's after-sales policy.

Support

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

In the box

THE SAME KIT FOR EDU-AIR, EDU-PRO AND EDU-MAX

- **Bumi EDU robot**
Jetson + depth camera on EDU-Pro and EDU-Max
- **Quick-release smart battery**
48 V 5.1 Ah, 2–3 h of runtime
- **Charger and charging base**
The battery charges off the robot in about 1–2 h
- **Two-layer box with foam inserts**
Noetix recommends keeping it to store the robot

Bumi is controlled from the NOETIX Run app (iOS, Android), so no remote controller is needed; the SDK and documentation download from GitHub. We confirm the full packing list with your quotation.

Good to know

Motor-level development works below Noetix's own motion algorithms: follow the Noetix developer documentation, keep people at a safe distance while the robot moves and, as Noetix advises, hang the robot on a support frame while you debug (ask us about one). Some features are released progressively through software updates.