

UNITREE G1 Edu U1

Gamintojas: **UNITREE** · Modelis: **077286** · EAN: **5907085525617** · Prekės kodas: **760409**



42 969,90 €

Kaina su PVM

Be PVM: **35 512,31 €**

Sandėlyje



Prekė internetu

Nuskenaukite kodą arba apsilankykite www.shopro.lt



Aprašymas

G1 Edu: A Platform for Research and Development

The Unitree G1 Edu series is a professional line of humanoid robots, designed specifically for researchers, developers, and educational institutions. Building on the excellent physical platform of the G1 model, the Edu version opens the door to unlimited development and the implementation of custom algorithms. It is a tool intended not only for observation but, above all, for actively shaping the future of robotics, enabling pioneering research in the fields of artificial intelligence, autonomous navigation, and advanced manipulation.

Open Architecture and Increased Power

What sets the G1 Edu series apart is its openness to modifications and development. Each model is equipped with an expansion port featuring powerful computing power of 100 TOPS, dedicated to AI tasks. The platform offers support for low-level and high-level secondary development, allowing for full control over the robot's behavior. The Edu versions also feature improved physical specifications, including increased knee joint torque up to 120 N·m and a payload capacity of up to 3 kg, to meet the demands of advanced experiments. Comprehensive documentation and technical support ensure a smooth workflow even for the most complex projects.

Innovation and Creativity Without Limits

The G1 Edu is the ideal environment for testing groundbreaking concepts. It enables universities and research laboratories to work on control algorithms, perception systems, motion planning, and human-robot interaction under real-world conditions. Thanks to its modular design and expandability, the G1 Edu series grows along with the user's ambitions. It is a powerful tool that accelerates the research cycle and allows for the

transformation of theoretical ideas into practical, working solutions that will define the next generation of intelligent machines.

U1 Version

The G1 Edu U1 model is the fundamental developer version, designed as a powerful tool for launching professional research into humanoid robotics. This platform is fully open to secondary development, offering access to both low-level and high-level SDKs. At the heart of its AI capabilities is a dedicated computing unit with a processing power of 100 TOPS. This version features a reinforced structure with a knee joint capable of 120 N·m of torque and an arm payload capacity of up to 3 kg. Its kinematics include 23 degrees of freedom (DOF), consisting of six-axis legs, five-axis arms, and a single-axis waist. It is the ideal choice for teams looking to explore the fundamentals of autonomous navigation, motion dynamics, and task planning.

Dimensions and Weight

Dimensions (standing position)	1270 × 450 × 200 mm
Dimensions (folded)	690 × 450 × 300 mm
Weight (with battery)	approx. 35 kg

Kinematic and Degrees of Freedom

Total degrees of freedom (DoF)	23
One leg	6 DoF
Waist	1 DoF
One arm	5 DoF
Hand	optional dexterous hand wrist with 2 degrees of freedom

Joint motion ranges

Waist (Z-axis)	±155°
Hip	Pitch: ±154° Roll: -30° to +170° Yaw: ±158°
Knee	0° to 165°

Joint design

Cable routing	internal, hollow joint shafts
Encoders	dual encoders
Cooling	local air cooling

Mechanical parameters (EDU U1 extensions)

Max. knee torque	120 Nm (increased compared to the Basic model)
------------------	--

Max. arm payload	3 kg (increased compared to the Basic model)
Thigh + lower leg length	0.6 m
Arm span	approx. 0.45 m

Power supply and runtime

Power supply	battery pack (13 strings)
Battery	smart, quick-connect
Operating time	approx. 2 hours
Charger	1 included

Computing power and AI (key EDU U1 expansion)

Base processor	8-core high-performance CPU
Built-in expansion dock	100 TOPS of computing power AI algorithm development platform AI algorithms and technical support included

Development and programming

Support for high-level and low-level development	Yes
Secondary development	Supported
Access to	robot models APIs and development tools documentation and examples
Comprehensive technical and ecosystem support	Yes

Perception and communication

Perception sensors	depth camera 3D laser scanner
Audio	stereo speakers microphone array
Connectivity	Wi-Fi 6 Bluetooth 5.2

Controls and kit contents

Handheld controller	1 pc.
Included accessories	Remote control, charger, smart battery (quick-release)

Additional information

System updates	Smart OTA – supported
----------------	-----------------------

Gross weight: 50000, Net weight: 40000, Box length: 88,00, Box width: 53,00, Box height: 42,00, GPSR Link: https://psr-assets.innpro.pl/robots/robots_humanoid_robots.pdf, Information about data generation: <https://dataact.innpro.pl/unitree/5907085525617>

Techninė specifikacija

Specifications	
Sandėlio grupė	Robots/Roboty Humanoidalne/Seria G1 [+3][-1]
Matmenys ir svoris	
Matmenys (l × P × A)	88,00cm × 53,00cm × 42,00cm
Svoris	50,00kg