

UNITREE R1 Basic Humanoid Robot - Crismon Hero

Gamintojas: **UNITREE** · Modelis: **080993** · EAN: **5907085529905** · Prekės kodas: **760426**



13 700,90 €

Kaina su PVM

Be PVM: **11 323,06 €**

Sandėlyje



Prekė internetu

Nuskenaukite kodą arba apsilankykite www.shopro.lt



Aprašymas

UNITREE R1 Basic Humanoid Robot - Crismon Hero

The Unitree R1 Basic is a lightweight humanoid robot approximately 121 cm tall, designed as an open platform for working with robotics and artificial intelligence algorithms. Its compact design, combined with high motion dynamics, allows it to move steadily, climb stairs, and react to obstacles in its environment. The device offers intuitive controls and support for popular simulation environments, facilitating the testing and development of algorithms.

Smooth Movement and Natural Dynamics

Its compact, lightweight frame allows the robot to operate freely in spaces designed for humans. With as many as 24 degrees of freedom, the Unitree R1 Basic moves confidently and smoothly—effortlessly navigating stairs, avoiding obstacles, and flexibly adapting its movement to environmental conditions. Its movements remain dynamic yet fully controlled, making the device well-suited for both testing and demonstrations where the natural behavior of a humanoid robot is essential.

Movement as a Form of Expression

From the very first moments, it's clear that movement is one of the Unitree R1 Basic's greatest strengths. The robot moves smoothly and decisively, maintaining confidence and stability even during sudden changes in position. The platform also allows for the programming of complex movement sequences, which opens up a wide range of possibilities for experimentation. You can create and test complex transitions, performance

choreography, or martial arts-inspired demonstrations—the only limit is your imagination.

Freedom of Programming and Development

The platform was designed without imposing predefined operating patterns, giving the user complete freedom to work. It provides direct access to joint and sensor controls, allowing the robot's behavior to be precisely shaped according to the program's specifications. It enables users to create their own actions, combine them into smooth sequences, and build complete behavioral scenarios. The system supports integration with large multimodal language and collaboration with popular simulation environments, which allows for the efficient transfer of algorithms from a virtual environment to real-world testing and significantly shortens the path from prototype to practical applications.

Conscious Orientation in the Environment

The wide-field-of-view binocular camera provides detailed data about the environment, supporting precise spatial orientation. Visual data can be used for navigation, obstacle avoidance, and responding to changes in the environment. As a result, the robot operates with confidence and performs well in a variety of spaces.

Natural communication with the user

The integrated audio system, which includes a speaker and a set of microphones, enables communication that closely resembles natural conversation. The robot can respond to voice commands, play back messages, and participate in pre-programmed interactive scenarios. The combination of sound, perception, and precise movement makes the Unitree R1 Basic ideal for shows, demonstrations, and educational activities where engaging interaction with the audience is key.

High Computing Power

The computing module, based on an eight-core CPU, provides sufficient power to simultaneously control movement, process data, and run artificial intelligence algorithms. This configuration allows you to conduct experiments and tests without having to offload computations to external systems, simplifying your work and accelerating project development.

Stable Power Supply

The Unitree R1 Basic robot uses a lithium-ion battery designed for intensive use. A full charge provides approximately 1 hour of operation, allowing you to conduct tests, educational activities, or presentations at your own pace. Thanks to the quick-swap battery system, you can efficiently continue working without long interruptions, which is particularly important during research sessions and demonstrations.

Wide Range of Applications

The R1 Basic model is ideal for education, research, and technology demonstrations. It can be used to teach programming and robotics, to test motion and perception algorithms, and as an eye-catching demonstration piece at trade shows, conferences, or industry events. Thanks to its high flexibility, it easily adapts to various scenarios and user expectations, regardless of the nature of the project.

Included in the set

- Unitree R1 Basic humanoid robot
- Charger
- Smart battery
- Handheld controller / remote control
- Carrying case

Manufacturer	Unitree
Model	R1 Basic

Color variant	Crismon Hero
Dimensions (standing position)	1210 × 357 × 190 mm
Weight (with battery)	Approx. 25 kg
Total degrees of freedom	24 DoF
Degrees of freedom of the legs	6 DoF per leg
Degrees of freedom of the waist	2 DoF
Degrees of freedom of the arms	5 DoF per arm
Degrees of freedom of the head	None
Range of motion of the waist joints	Yaw: ±150° Roll: ±30°
Range of motion of hip joints	Yaw: ±157° Pitch: from -168° to 146° Roll: from -60° to 100°
Range of motion of the knee joints	From -10° to 148°
Joint design	Internal cable routing through hollow axes
Encoders	Dual + single encoder
Cooling	Local air cooling
Maximum arm payload	2 kg
Calf + thigh length	0.675 m
Arm span	Approx. 0.435 m
Power supply	Lithium-ion battery
Operating time	Approx. 1 h
Base processor	High-performance 8-core CPU
Perception sensor	Humanoid binocular camera / dual-eye camera
Audio	Speaker, microphone array
Connectivity	Wi-Fi 6, Bluetooth 5.2
Smart OTA Updates	Yes
Secondary Development Capability	No

GPSR Link: https://psr-assets.innpro.pl/robots/robots_humanoid_robots.pdf, Gross weight: 47320, Net weight: 40000, Box length: 74,50, Box width: 51,00, Box height: 43,50

Techninė specifikacija

Specifications	
Sandėlio grupė	Robots/Roboty Humanoidalne/Seria R1 [+2][-3]
Matmenys ir svoris	
Matmenys (I × P × A)	74,00cm × 51,00cm × 43,00cm
Svoris	47,32kg