

xTool mBot2 V1.0 Educational Robot



Model: P1010132

Manufacturer: XTOOL

EAN: 6928819512115

Product Code: 1609032

R5,046

xTool mBot2 V1.0 Educational Robot

The xTool mBot2 V1.0 Educational Robot is a STEM kit designed for learning programming and robotics, as well as exploring topics related to artificial intelligence, the Internet of Things (IoT), and data analysis. Its control center is the CyberPi with an ESP32 microprocessor, and the kit includes, among other things, a microphone and light sensor built into the CyberPi, an external Ultrasonic Sensor 2, a quad RGB sensor, and precision motors with encoders. The robot can follow a line, detect obstacles, respond to light and sound, and perform precisely programmed movements. Support for block-based programming and Python means that mBot2 can accompany users both during their first coding exercises and when working on more complex projects.

CyberPi - Control, Programming, and Communication

CyberPi uses an ESP32 microprocessor and is responsible for running programs and handling the robot's communication. Support for Wi-Fi, Bluetooth, and USB connections offers several ways to

The product information provided is for reference purposes only. Technical specifications, photos, descriptions and prices may change without prior notice. The manufacturer and seller are not responsible for possible data discrepancies or typographical errors. We recommend checking the current information before purchasing.

itworkup.co.za | sales@itworkup.co.za | +27 (11)541-9950

work with the kit, depending on the device used and the project being developed. The mBot2 supports block-based programming, which makes it easier to learn the basics of creating algorithms, as well as the Python programming language, allowing users to gradually transition to more advanced coding. The available software enables learning on computers and mobile devices, so the robot can be used both at home and during educational activities.

Sensors that allow the robot to respond to its surroundings

The external Ultrasonic Sensor 2 detects objects and distances, allowing you to create programs that enable the robot to react to obstacles in its path. The Quad RGB Sensor uses four sensors to recognize colors and lines, enabling both basic and more advanced scenarios for following a designated path. Light and sound detection functions, on the other hand, are handled by components located directly within the CyberPi—the built-in light sensor and microphone. This solution allows you to combine data from various sources and create projects in which the robot’s behavior depends on changes in its environment.

Precise Movement and Expandability

The mBot2 uses motors with encoders that measure rotation with an accuracy of 1°, making it easier to control direction, distance traveled, and programmed maneuvers. The motors can reach speeds of up to 200 rpm, making the robot suitable for both gentle exercises requiring precise movement and more dynamic projects. The mBot2 Shield allows you to connect external components, including those compatible with the Makeblock ecosystem, enabling further development of your projects. As a result, the kit can be used not only to complete pre-designed exercises but also to build your own projects during STEM classes, in makerspaces, or at home.

Manufacturer	xTool
Model	mBot2 V1.0
Type	STEM educational robot
Controller	CyberPi
Microprocessor	ESP32

The product information provided is for reference purposes only. Technical specifications, photos, descriptions and prices may change without prior notice. The manufacturer and seller are not responsible for possible data discrepancies or typographical errors. We recommend checking the current information before purchasing.

itworkup.co.za | sales@itworkup.co.za | +27 (11)541-9950

Connectivity	Wi-Fi, Bluetooth, USB
Distance Sensor	Ultrasonic Sensor 2
Line and Color Sensor	Quad RGB Sensor
Light Sensor	built into CyberPi
Microphone	built into CyberPi
Motor Speed	up to 200 rpm
Operating time	over 5 hours
Supported platforms	Android, iOS, PC, Chromebook, macOS, and Linux
Expandability	mBot2 Shield and external components
Applications	learning programming, robotics, STEM, AI, IoT, and the basics of data analysis

Information about data generation: <https://dataact.innpro.pl/XTOOL/6928819512115>, GPSR Link: https://psr-assets.innpro.pl/toys/sg_toys_educational_robots.pdf, PPWR: <https://ppwr.innpro.pl/en/xtool>, Gross weight: 1190, Net weight: 1020, Box length: 18,50, Box width: 10,50, Box height: 21,50, Last delivery: 23.10.2026

The product information provided is for reference purposes only. Technical specifications, photos, descriptions and prices may change without prior notice. The manufacturer and seller are not responsible for possible data discrepancies or typographical errors. We recommend checking the current information before purchasing.

itworkup.co.za | sales@itworkup.co.za | +27 (11)541-9950