ROBOMASTER EP CORE
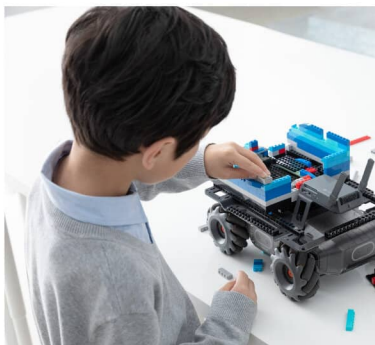## Learning Unleashed

DJI

➔ WHAT is the product?

This **advanced educational robot** provides a physical computing solution combining **computing, robotics, engineering & artificial intelligence** for a wide range of ages & experience levels.
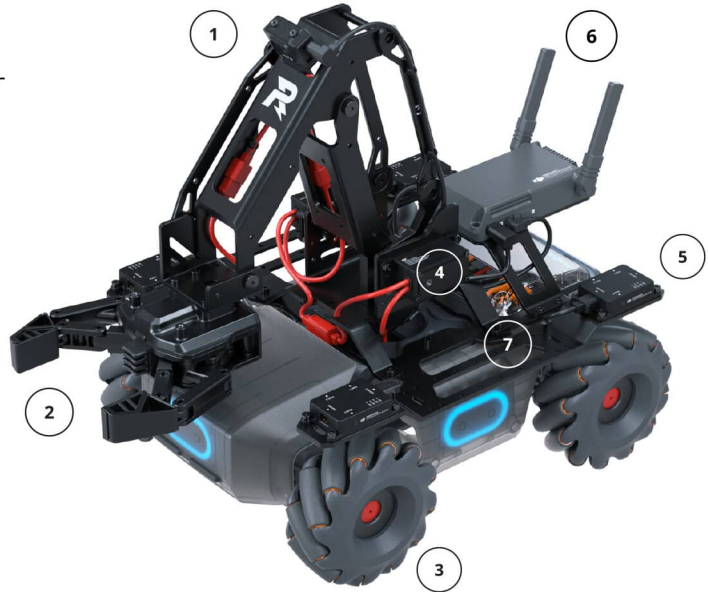
➔ WHERE does it stand out?

- **High-Performance** Mechanical Accessories for **Hands-On Learning**
- Increased **Expandability** via 3rd Party Hardware, such as:
  - Lego bricks, 3D printed objects
  - micro:bit, Arduino, Raspberry Pi
  - NVIDIA Jetson Nano
  - Sensors (4 sensor adaptors)
- **Real-World AI** Implementations
- **Project-Based** Courses
- Standards Aligned **Curriculum**

➔ WHO is it for?

- Middle Schools
- High Schools
- Scratch & Python Programmers
- STEAM Educators

FEATURES

1) Robotic Arm
- Durable, compact and flexible with precise controls

2) Gripper
- Adjustable gripping force to firmly and reliably grasp objects of various shapes, weight and size

3) Mecanum Wheels
- 12 rollers on each wheel allows omnidirectional movement and precise control

4) High-Performance Servo & Motor
- Ensures high control accuracy, large output torque
- Powers Robotic Arm

5) Sensor Adapters & Power Connector Module
- Sensor Adapters have two ports each, provide connectivity to various kinds of sensors
- Power Connector has multiple ports, provides power

6) Intelligent Controller
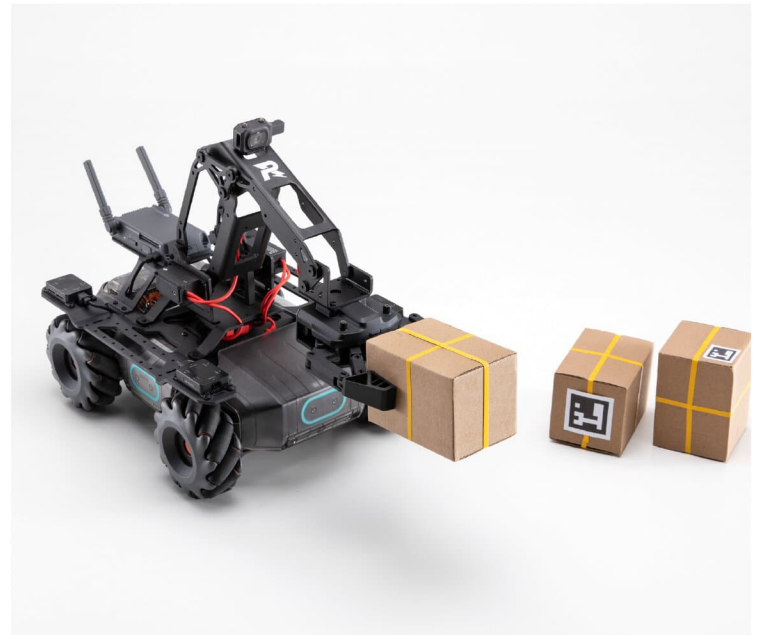- Powerful CPU supports simultaneous functions

7) Infrared Distance Sensor
- To avoid obstacles and sense the environment
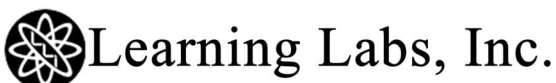
ROBOMASTER EP CORE

Learning Unleashed

➔ WHEN would it be used?

- STEAM-Based Classrooms
- Coding Courses (Scratch & Python)
- Artificial Intelligence (AI) Learning
- Custom Programming Projects
- Robotics Competitions

➔ WHY is it good for Education?

- **Teaching Resources**
  - 18 Project-Based Courses
  - Curriculum Standards (CSTA, NGSS)
- Open **DJI SDK** for Custom Programs
  - Video & Audio Streaming Data
  - Swarm for multiple units
- RoboMaster EP Core **Competition Database**
  - Rules & Operation Plans
  - Variety of Events & Activities
- School **Sample Program**

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FAQ

As a teacher without programming skills, can I use this?
  - Yes. Teachers can find rich educational resources in the product site and the RoboMaster app, including project-based courses, tutorials, an introduction to Scratch and SDK programming.

What is the recommended age group?
  - RoboMaster EP Core is recommended as a teaching tool for students in middle and primary school. It is also suitable for higher education.

How long is the battery life?
  - Battery life during use is 85 minutes, and the charge time is 90 minutes.

What is the video transmission range?
  - Max of 230 to 1,000 feet depending on Wi-Fi or Router connection.

How do I connect the RoboMaster EP Core with the app?
  - The RoboMaster EP Core can be connected via Wi-Fi or router.

What expansion ports does the RoboMaster EP Core have?
  - Apart from the PWM, SBUS, UART, and USB ports on the Intelligent Controller, the RoboMaster EP Core also provides 4 sensor adapters.