



Create[®] 3 Educational Robot

iRobot's Foundation for Mobile Robot Development



A Buildable, Mobile Robotics Platform

Tackle robotics projects with an affordable, trusted mobile robot development platform that features a buildable design to mount additional hardware.



Begin by Programming Basic Behaviors

Grasp the fundamentals of robotics, computer science, and engineering by programming the Create® 3 to perform simple behaviors, sounds, and movements.



Evolve to Advanced Robotics Applications

Tap into advanced applications including multi-robot exploration, navigation and mapping technology, and telepresence capabilities. Additional hardware not included. With over 30 years of building and programming robots, advance your robotics skills with the expert that brings you the Roomba[®] robot vacuum and Braava[®] robot mop.



Create[®] 3 educational robot features:



Build and test robotics applications

The new and improved version of its popular predecessor, the Create® 3 provides a full suite of modules, sensors, LED lights, and wheels to fuel robotics exploration.







Multi-language software support

Learn using ROS 2, the industrystandard software for roboticists worldwide. Or leverage the <u>iRobot</u> <u>Coding App</u> and the iRobot Education Python 3 SDK for increased access to robotics education and research.

Operational out of the box

Program, connect to, and control the Create® 3 educational robot out of the box with an easy onboarding process. Communicate with the robot using Wi-Fi, Ethernet over USB, or Bluetooth® Low Energy technology.

Equipped with smart technology

Affordably develop scalable robotics projects with the Create® 3 robot's combination of intelligent sensors and actuators. The robot comes with a Home Base® charging station for docked charging.

Educator resources available

Explore the iRobot Education <u>learning</u> <u>library</u> for tutorials and sample projects, or venture into expansive, online open source databases for access to software packages and libraries in ROS 2 or Python 3.

Specifications

PRODUCT CONTENTS

Robot Model	1 x Create [®] 3 Educational Robot
Battery Type	1 x 26 Wh Lithium Ion Rechargeable Battery
Charging Dock	Home Base® Station
Robot UPC	885155030948

CONNECTIVITY

ROS 2	Wi-Fi Ethernet over USB
iRobot Education Python 3 SDK	Bluetooth [®] Low Energy
iRobot Coding App	Bluetooth® Low Energy

SENSORS

1 x Power button
2x User buttons
2x Front bumper zones
2x Wheel encoders
4x IR cliff sensors
6x IR obstacle sensors
1x Downward optical flow sensor for odometry
1 x 3D gyroscope
1x 3D accelerometer
1 x Battery level monitor

ACTUATORS

2x Drive motors
6x RGB LED ring
1 x Speaker

CHARGING AND EXPANSION

1x Docking port 1x USB port, 3A at regulated 5V 1x Payload power, 2A at unregulated (nominal 14.4V)

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