

ARDUINO® MICROCONTROLLER STUDY CASE



Carrying case with ergonomic handle.
Dimensions: 534 x 374 x 190mm.
Powered by 230V-2P+E power cord.



ref. VAL-MC1

DELIVERED WIRED
AND SETAUTONOMOUS
WIFI NETWORKTEACHING RESSOURCES
STUDENTS / TEACHERSIMULATED ELECTRICAL
COMPONENTS

Learn how to program Arduino® microcontrollers quickly and easily with this simple and intuitive case. This learning solution allows students to acquire and validate their skills in a simple environment. Ideal for quickly and clearly introducing your students!

Discover the Arduino environment by interconnecting the various modules (LCD screen, relay, temperature sensor, light sensor) and creating automation systems in a home environment.

- Control lighting, roller shutters, electrical outlets, watering systems, etc.
- Launch automation systems from the web page hosted on the microcontroller, accessible from a web browser.

Programming is done using the free Arduino IDE software, compatible with Windows and MacOS.

Power wiring is entirely done with safety cables (provided).

The control section is wired with micro-cables (provided).

Component identification information and other technical specifications are screen-printed on the front panels. A Wi-Fi router is integrated into the case, creating a local network specific to the model and isolated from your school's network.

EDUCATIONAL OBJECTIVES

- Discover the Arduino® programming environment and the C language.
- Create electrical schematics
- Understand the interconnections between electronic modules.
- Analyze manufacturer datasheets.
- Create automation programs.
- Configure Wi-Fi components.
- Wire and connect electrical components using flying leads.
- Commission the installation.
- Configure Wi-Fi network settings for control from a web browser.

Practical works supplied

- Programming and wiring a temperature probe and a light sensor.
- Displaying data on an LCD screen via an I2C bus.
- Launching an automation system from a radio remote control.
- Programming and wiring relay outputs.
- Configuring the microcontroller for access from a web browser.

MODEL COMPOSITION

On the top side

- 9 simulation LED indicators:
3 simple lights, 1 roller shutter, 1 sprinkler, 1 garage door, 1 convactor.
- 1 remote control switch.
- 1 two-way switch.
- 1 push-button switch.
- 1 electrical outlet.
- 1 Wi-Fi router

On the bottom side

- 1 Arduino Wi-Fi microcontroller.
- 1 temperature sensor for microcontroller
- 1 light sensor for microcontroller
- 1 board with 8 power relays for microcontroller
- 1 I2C LCD screen for microcontroller
- 1 radio module with 2 dry contacts, supplied with 2 remote controls.

