LEARN IoT KIT ARDUINO

Build custom IoT devices with full control over the processes and your data  
easily automate your home or workplace. Set-up, monitor, and control your connected devices with the ARDUINO IoT cloud.

This kit includes

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| --- | --- | --- | --- |
|  | Qty | Article | Image |
| 1 | 1 | Arduino MKR IoT Carrier: Featuring a color display, IMU, touch buttons, environmental sensors, battery charger, buzzer, and 2 relays. |  |
| 2 | 1 | Arduino MKR Wifi 1010 Board |  |
| 3 | 2 | Plug and play cables for sensors |  |
| 4 | 1 | Battery connection cable |  |
| 5 | 1 | Motion Sensor |  |
| 6 | 1 | Moisture Sensor |  |
| 7 | 1 | Plastic Enclosure |  |
| 8 | 1 | USB Cable |  |

This kit includes sensor accessories

|  |  |  |  |
| --- | --- | --- | --- |
|  | Qty | Article | Image |
| 1 | 1 | Adafruit HTU21D-F temperature and humidity sensor |  |
| 2 | 1 | Adafruit MiCS-5524 gas sensor |  |
| 3 | 1 | Adafruit TSL2591 light sensor |  |
| 4 | 1 | Adafruit MPL115A2 pressure sensor |  |
| 5 | 1 | Adafruit DRV8871 DC Motor Driver Breakout Board |  |
| 6 | 1 | Adafruit ADA1063 microphone |  |
| 7 | 1 | 2-Channel Relay Module |  |
| 8 | 2 | IR Break Beam Sensor 2168 |  |

**Arduino IoT Learning Kit - Technical Overview**

By using this kit, can easily create and automate projects for their homes or workplaces, while gaining a deeper understanding of IoT technology. The kit supports a range of sensors and connectivity modules, offering both flexibility and scalability for diverse projects.

**Kit Components**

1. **Arduino MKR IoT Carrier**
   * **Description**: A versatile base equipped with a color display, IMU (Inertial Measurement Unit), touch buttons, environmental sensors, battery charger, a buzzer, and two relays.
   * **Usage**: Ideal for building interactive IoT devices, environmental monitoring systems, or smart home control panels.
2. **Arduino MKR WiFi 1010 Board**
   * **Description**: The core microcontroller board of the kit, which provides WiFi connectivity to cloud services for real-time data transfer.
   * **Usage**: Used for managing and monitoring devices via WiFi, enabling projects like home automation or remote system monitoring.
3. **Motion Sensor**
   * **Description**: Detects movement and is suitable for applications like security systems or motion-activated automation.
   * **Usage**: Triggers actions such as turning on lights or sending alerts based on detected motion.
4. **Moisture Sensor**
   * **Description**: Monitors soil moisture levels, ideal for agriculture or gardening automation.
   * **Usage**: Integrates into automated irrigation systems or plant care monitors to maintain optimal moisture levels.
5. **Plug and Play Sensor Cables**
   * **Description**: Pre-configured cables for easily connecting sensors to the Arduino MKR boards.
   * **Usage**: Reduces wiring complexity, allowing quick prototyping of sensor-based applications.
6. **Plastic Enclosure**
   * **Description**: A durable housing to safely encase IoT devices during projects.
   * **Usage**: Provides physical protection for project components, especially in outdoor or harsh environments.

**Sensor Accessories List**

The kit also includes a selection of advanced sensors and components that expand the capabilities of IoT projects:

1. **Adafruit HTU21D-F Temperature and Humidity Sensor**
   * **Usage**: Ideal for environmental monitoring, such as smart home climate control or greenhouse automation.
2. **Adafruit MiCS-5524 Gas Sensor**
   * **Usage**: Measures gas levels, suitable for air quality monitoring or smart alarms.
3. **Adafruit TSL2591 Light Sensor**
   * **Usage**: Monitors ambient light, which is useful in smart lighting systems or energy-efficient building projects.
4. **Adafruit MPL115A2 Pressure Sensor**
   * **Usage**: Detects atmospheric pressure changes, perfect for weather stations or altitude monitoring systems.
5. **Adafruit DRV8871 DC Motor Driver Breakout Board**
   * **Usage**: Controls motors in automated systems, such as robotic arms or smart curtains.
6. **Adafruit ADA1063 Microphone**
   * **Usage**: Captures sound levels for voice-activated systems or noise monitoring.
7. **2-Channel Relay Module**
   * **Usage**: Controls high-power devices like fans or lights in automation projects.
8. **IR Break Beam Sensor**
   * **Usage**: Detects when an object crosses a beam of infrared light, suitable for counters or intruder detection systems.

A black box with several electronic components

Description automatically generated with medium confidence