

Arduino Oplà IoT Kit product content:

INTRODUCTION

Add smart technology to your home and workplace with the first Open programmable IoT platform that allows you to build custom IoT devices. Experience the Internet of Things in your hands!



OVERVIEW

The Oplà IoT Kit allows you to add connectivity to devices around the home or workplace. It comes complete with a set of 8 Internet of Things self assemble projects ready to show you how to turn everyday appliances into 'smart appliances' and build custom connected devices that can be controlled with your mobile phone.

- Remote Controlled Lights - change color, light modes and switch on/off via your mobile
- Personal Weather Station - record and monitor local weather conditions
- Home Security Alarm - detect motions and trigger warnings
- Solar System Tracker - retrieve data from planets and moons in the Solar System

- Inventory Control - track goods in & out
- Smart Garden - monitor and control the environment for your plants
- Thermostat Control - smart control for heating and cooling systems
- Thinking About You - send messages between the Oplà and the Arduino IoT Cloud

For more advanced users the kit provides them with the potential to create their own connected devices and IoT applications through the open programmable platform providing the ultimate control.

The Oplà unit acts as the physical interface with the Arduino IoT Cloud providing you with total control at your fingertips via the Arduino IoT Remote app. Configure and manage all the settings via the Arduino IoT Cloud, with easy to create dashboards providing real-time readings from your smart devices around the home or workplace. Adjusting settings, switching devices on/off, watering plants etc is all controllable on the go with the Arduino IoT Remote app or fully automate the set-up then sit back and enjoy!

With the Oplà IoT Kit you can claim 12 free months of Arduino Create Maker Plan - the premium subscription to our online coding platform. You will benefit from unlimited compilation time and all the other premium features.

TECH SPECS

The kit includes:

Hardware:

 MKR IoT Carrier designed for this kit, including:

 Round OLED Display

 Five capacitive touch buttons

 On-board sensors (temperature, humidity, pressure and light)

 Two 24 V relays

 SD card holder

 Plug and play connectors for different sensors

 RGBC, Gesture and Proximity

 IMU

 18650 Li-Ion rechargeable battery holder

 Five RGB LEDs

 Arduino MKR WiFi 1010 board

 Plastic encasing

 Micro USB cable

 Moisture sensor

 PIR sensor

Plug-and-play cables for all the sensors

Content:

Access to an online platform including all the instructions, information, and activities you need to assemble and add connectivity to your device:

- 8 ready to go out of the box connected projects

- 2 'getting to know' guides to help understand the Internet of Things

Software:

The Arduino Create Maker Plan included in the kit offers unlimited compilation time and extended access to all the features of the Arduino IoT Cloud allowing the users to save more sketches, increase the number of properties, and get support for third-party boards and LoRa devices.

The Oplà IoT Kit includes a special code that allows you to claim 12 months of the Create Maker Plan for free. To redeem the code, simply go to the [Create Plans](#), select the Maker Plan and then add the code in the dedicated box at checkout. You will be asked to add your billing info and bank/credit card details - using the code you won't be charged*.

*After the 12 months free access expires, your subscription renews automatically at a charge of US\$5.99 per month (plus local applicable sales taxes) until cancelled. If you do not wish to continue the Create Maker Plan subscription, you can cancel the renewal at any time.

FAQs

What is the Internet of Things (IoT)?

The Internet of Things, or IoT, is a giant network of connected devices that collect and share data from all over the world. Billions of devices that are connected to the internet share information with each other. We use these types of devices in our everyday lives, such as controlling lights at home from your phone.

How is the Oplà IoT Kit content structured?

The Oplà IoT Kit is divided into two 'getting to know' activities to provide you with the basics, plus eight step-by-step projects ready to assemble. Each project includes goals, an intro to the components, and instructions with illustrations and videos to guide you through the assembly step-by-step. The hardware, configure the IoT Cloud and gradually build the code.

Who can use the kit?

This kit comes with complete step by step assembly instructions, hence only basic DIY experience is necessary. More advanced users can use the kit to customize and hack their smart applications and devices, providing complete control of the processes.

What languages does the online platform support?

The Oplà IoT Kit is currently available in English.

What application can you build with the Oplà IoT Kit cover?

The Oplà IoT Kit enables the users to build 8 different applications:

- remote controlled lights
- personal weather station
- home security alarm
- solar system tracker
- inventory control
- smart garden
- thermostat control
- thinking about you

Can I control multiple applications at the same time?

The eight Oplà projects are designed to be standalone. To control more than one application at the same time requires 2 or more kits.

What operating system is required?

Windows 7 or higher, Linux, or Mac OS.

What are the minimum requirements for using the kit?

To assemble the projects and configure the device, you will need a computer with an internet connection.

Will my devices be secure?

The crypto chip on the MKR WiFi 1010 board protects your device, ensures secure data transfer.

How do I gain access to the Create Maker plan?

The kit comes with a 12 months inclusive subscription to the Create Maker Plan. Your unique activation code can be found on the inside of the box. Simply go to opla.arduino.cc and it will guide you through the activation.

What is the Arduino IoT Cloud?

The Arduino IoT Cloud is an easy-to-use Internet of Things platform. Using the Cloud, you can connect objects quickly, simply, and securely. You can connect multiple devices to each other and allow them to exchange real-time data. You can also monitor them from anywhere you have an internet connection, using a simple user interface.

What is Arduino Create?

Arduino Create is an online platform that enables you to write code, access content, configure boards, and share projects. Arduino Create allows you to use the Web Editor to program your board, connect multiple devices with the Arduino IoT Cloud, browse a collection of projects on Arduino Project Hub, and connect remotely to your boards with Arduino Device Manager. With the Create Maker Plan, you gain unlimited compilation time and access to additional features to manage the connected projects.