



# Web of Things Kit

KIT-13832 RoHS



This is the Web of Things (WoT) Kit, a comprehensive and hands-on kit that teaches about the intersection of the Internet of Things (IoT) and modern Web technologies. This kit utilizes the Raspberry Pi 3 model as its medium to teach with an 16GB SD card and USB cable, a prototyping board with jumper wires, and all the various sensors (motion, humidity, temperature) and LEDs. In a few hours, you'll learn how to use Node.js to build a flexible REST API that allows anyone in the world to interact with your Pi in real time! You'll be out of the box and at "Hello, world" in no time!

Also included in each kit is the book *Building the Web of Things* which provides you with the skills needed to architect and implement scalable and secure IoT products, applications, and services by leveraging the scalability and flexibility of Web standards. We have collaborated with the authors of this book to bring you the WoT kit that contains all the hardware you need to build all the examples presented in the book.

After a broad introduction to the nuts and bolts of the Internet of Things (devices, sensors, standards, tools and more), *Building the Web of Things* quickly moves up the (protocol) stack and focuses on the Web of Things - the Application Layer protocol for the IoT. By providing the right balance between theory and practice, you will be rapidly able to navigate the complexity of the Web of Things and learn about a wide range of tools and techniques to connect IoT devices to the Web and built interactive applications on top.

Once you've configured your Raspberry Pi, you will learn how to wire various sensors to it and access them from Node.js applications. Afterwards, you will learn in detail the elements of the Web of Things architecture that you can leverage to REST APIs for physical objects, discover and describe devices using the latest developments in the semantic Web, sharing and securing data, and combining these components to rapidly build distributed applications and physical mash-ups. Each chapter will help you gain the knowledge and skills you'll need to fully take advantage of a new generation of real-time, web-connected devices and services and to be able to build scalable, enterprise-ready applications that merge the physical and digital worlds.

**Note:** We are still waiting on the status on how the RPi3 may be export restricted due to certain qualities it possesses. We may just need to verify a small amount of information before processing your order and hopefully nothing beyond that. Please keep this in mind before placing your order.

**Note:** Chapter 4 of the book is a step by step guide to installing the Pi and setting up the following components.

## Includes

- Raspberry Pi 3
- *Building the Web of Things* Book
- MicroSD Card with Adapter - 16GB (Class 10)
- Wall Adapter Power Supply - 5.25V DC 2.4A (USB Micro-B)
- Humidity and Temperature Sensor - RHT03
- PIR Motion Sensor (JST)
- Breadboard - Self-Adhesive (White)
- LED - Assorted (20 pack)
- Resistor 10K Ohm 1/6th Watt PTH - 20 pack
- Resistor 330 Ohm 1/6 Watt PTH - 20 pack
- Jumper Wires - Connected 6in. (M/M, 20 pack)
- Jumper Wires - Connected 6in. (M/F, 20 pack)