

# Particle IoT Starter Pack for Raspberry Pi – Includes Pi 3

### PRODUCT ID: 3312





### Description

Particle has partnered with Adafruit to put together this kit that makes IoT easy as Pi!

Connect your Raspberry Pi 3 to the Particle Cloud with this Particle Pi Starter Kit. The Raspberry Pi is already the world's most popular low-cost computer, and a powerful development tool for building connected projects.

This starter pack contains the essentials of our Raspberry Pi 3 Starter Pack with added sensors that will open up your Pi to a bunch of IoT applications.

If you would like to use the Particle Cloud, you can get the software by signing up for the Particle Pi Beta. Visit the signup page at https://particle.io/particle-pi

## By purchasing this pack, you are guaranteed to access to the Particle Pi Beta. Please follow the instructions in your confirmation email if you would like to enroll.

Connecting your Pi to the Particle Cloud gives it a few more key features that will make building IoT projects with your Pi easier than ever.

**Simple Arduino Code**: Use the existing Particle Web IDE, and program your Pi with Wiring. No more complicated tooling, setup, or scripting to perform simple tasks like toggling a pin, blinking an LED, or reading a sensor value.

**Over-the-Air Updates:** Safely reprogram code running on your Pis one at a time in the Web IDE or as a fleet of devices in the Console.

**Batch Script Execution:** Remotely execute customized scripts on groups of Raspberry Pi's using the exec command.

**Remote Data Collection:** Collect and publish data to the Particle Cloud, or store it locally by logging it on your Pi.

**Integrations:** Integrate with IFTTT, Google Cloud, or Microsoft Azure.

This kit was specifically designed with the home tinkerer in mind. Use the included remote control and particle connection to send a tweet, access IFTTT, or trigger a remote actuator over the web. When you aren't within remote range, remote into your Pi through the Particle Cloud and flip a light switch, turn off a circuit, or monitor a security camera.

#### This pack comes with a single Raspberry Pi 3 Computer!

#### Pack contains:

Raspberry Pi 3 - Model B - ARMv8 with 1G RAM AND built-in WiFi - The FRESHEST freshness that's EVEN MORE FRESH than the already fresh Pi 2. This is hot off the presses, selling-like-hotcakes, Wi-Fi enabled, blindingly fast, credit card sized computer with quad USB ports, quad-core ARMv8, 1G RAM, and a little BlueFruit Low Energy that all make this board essential.

Adafruit Raspberry Pi B+ Case - Smoke Base / Clear Top - We think it's the Single Greatest Raspberry Pi 2 Model B Case Ever. This will still work with your Pi 3.

Adafruit Assembled Pi Cobbler Plus – This is the soldered together version of our popular Pi Cobbler Plus Kit. Comes with a breakout board that's perfect for cobbling prototypes as well as a 40-pin GPIO cable for your Pi's pins. Still works with the Pi 3.

Full Size Breadboard - In the past, we've used the half-size breadboard for a lot of Pi projects - but no longer! With 40 pins to break out, you're going to need some space - and that's why we're including a full size breadboard in this pack.

Premium Male/Male Jumper Wires - 20 x 6" (150mm) - These jumper wires are great for making wire harness or jumpering between headers on PCBs. We include the longer ones so they work well with the full-size breadboard.

USB to TTL Serial Cable - An old standby, this cable's pretty much the easiest way to connect your Raspberry Pi to a USB port to log into the debugging/login console. Ideal for running the Pi 'headless'

8 GB SD Card pre-installed with the latest NOOBs distribution - As of October 24th, 2016 this pack now contains the 8GB microSDHC card programmed with the latest Raspberry Pi NOOBs distribution.

5V 2.4A Switching Power Supply w/ 6' MicroUSB Cable - The 5V 2A power adapter is the perfect choice for powering your Raspberry Pi B+ with 2 Amps of current output, and an extra long cord. Note: As of March 28th, 2016 we've updated our power supply to be 5V 2.4A.

Mini Remote Control - Handy for controlling a robot or other project from across the room. It has 21 buttons including directional buttons and number entry buttons. The remote uses the NEC encoding type and sends data codes 0 thru 26 (it skips #3, #7, #11, #15, #19 and #23) to address #0. You can use this to control something that is expecting NEC codes or you can pair this with our IR remote receiver sensor.

IR (Infrared) Receiver Sensor - TSOP38238 - Tuned to 38KHz, perfect for receiving commands from a TV remote control. Runs at 3V to 5V so it's great for any microcontroller.

MCP3008 - 8-Channel 10-Bit ADC With SPI Interface - This chip will add 8 channels of 10-bit analog input to your microcontroller or microcomputer project.

On-Off-On-Off Alternating Power Button / Pushbutton 3-Way Toggle - A breadboard-friendly push-button toggle switch that connects and disconnects the middle pin from either of the two side switches with every click. This clicky switch makes a great power switch or mode toggler and can reliably handle up to 500mA and up to 12VDC.

Photo cell (CdS photoresistor) - Tiny light sensor.

**BONUS PARTS!** Everyone loves bonuses so we include some parts that will get you through some of the tutorials on the Adafruit Learning System. These include:

1x extra Photo Cell
5x 10K 5% 1/4W Resistor
220 ohm 5% 1/4W through-hole resistors - Pack of 25 - Classic carbon film resistors, great for connecting to LEDs
5x 560 ohm 5% 1/4W Resistor
2x Diffused 10mm Blue LED
2x Diffused 10mm Red LED
2x Diffused 10mm Green LED
3x 12mm Tactile Switches
1x Electrolytic Capacitor - 1.0uF
1x Ceramic Capacitor - 0.1uF
2x 10K Trim Potentiometer