



## Electron 2G Kit (Global)



The Electron is a tiny development kit for creating cellular-connected electronics projects and products. It comes with a Particle SIM card with service in more than 100 countries worldwide, and includes 3 months of Particle's 1MB monthly data plan for IoT devices.

The Electron kit also includes Particle's development tools and access to a cloud platform for managing and updating your new connected hardware.

2G coverage will now exist in the United States until 2020 through T-Mobile. For T-Mobile's coverage map, click here. <http://maps.t-mobile.com/pcc.html?map=mvno-roamdcm-2>

Please note that the Electron is a GSM-only device, and does not support CDMA networks. Many global carriers are planning to sunset their 2G networks beginning as soon as late 2016 and early 2017, so please confirm continued 2G service with your local carrier. We recommend 3G Electrons for anyone concerned about long-term cellular support in their home country. 2G Electrons will not work in Japan, where 2G networks have already been discontinued.

### **Basic Data Charges\*:**

- Particle's 1MB monthly data plan:
  - 3 months included with kit
  - \$2.99/month for 1MB (thousands of messages)
  - No contracts, cancel anytime
- \$0.99/each additional MB

### **Specs:**

- STM32F205 ARM Cortex M3 microcontroller
- 1MB Flash, 128K RAM
- Cellular modem: U-Blox SARA G-series (2G)
- 36 pins total: 28 GPIOs (D0-D13, A0-A13), plus TX/RX, 2 GNDs, VIN, VBAT, WKP, 3V3, RST
- Board dimensions: 2.0" x 0.8" x 0.3" (0.5" including headers)

## Contents:

- 3 months of Particle's 1MB monthly data plan (processed upon SIM activation)
- Particle Electron PCB
- Particle SIM Card
- Li-Po battery (2000mAh)
- Taoglas Cellular Antenna
- USB cable
- Breadboard
- Pinout reference card
- Components for a sample product

## Country compatibility\*\*:

- North America (limited timeline)
- South America
- Europe
- Asia
- Oceania

\*\* Continent compatibility is *simplified* and exceptions exist. Please be sure to check the full list of compatible countries for the location in which your product will be deployed.

<https://s3.amazonaws.com/particle-marketing-assets/CountryListings.png>

<https://store.particle.io/products/electron-2g> 11-2-17