



The Sensor Kit 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. All Electrons also include Particle's development tools, access to a cloud platform with messaging, and a SIM dashboard for managing and updating your new connected hardware.

The Electron is a GSM-only device, and does not support CDMA networks.

Particle offers two types of Electron 3G Kits—**this one for North and South America (850/1900 MHz)**, and one for Europe/Asia/Africa (900/1800 MHz). 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>

### Contents:

- 3 months of Particle's 1MB monthly data plan (delivered by email)
- 10 sensors for measuring acceleration, distance, temperature, humidity, motion, vibration, and gases
- Particle Electron PCB
- Particle SIM Card
- Li-Po battery (2000mAh)
- Taoglas Cellular Antenna
- USB cable
- Breadboard
- Pinout reference card
- Components for a sample product

A full list of included components is available here. <https://docs.particle.io/datasheets/photonshields/#sensor-kit-includes>

### 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

3G Global version also available.

*\*Data rates vary by country and by data usage, see here for full pricing and bulk discounts.  
<https://www.particle.io/pricing#cellular-data>*

**\*\* 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>

# • Technical Details

## Specs:

- STM32F205 ARM Cortex M3 microcontroller
- 1MB Flash, 128K RAM
- Cellular modem: U-Blox SARA U-series (3G)
- 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)

Datasheet for the Electron <https://docs.particle.io/datasheets/electron-datasheet/>

## Click these links for all Particle product Troubleshooting:

- **Common Issues** <https://docs.particle.io/support/troubleshooting/common-issues/photon/>
- **Device LED Codes** <https://docs.particle.io/support/troubleshooting/troubleshooting-support/photon/>
- **Device Ownership** <https://docs.particle.io/support/troubleshooting/device-management/photon/>
- **Cloud Solutions** <https://docs.particle.io/support/troubleshooting/cloud-solutions/photon/>
- **Common Questions** <https://docs.particle.io/support/troubleshooting/common-questions/photon/>
- **System Modes** <https://docs.particle.io/support/troubleshooting/mode-switching/photon/>
- **Device Keys** <https://docs.particle.io/support/troubleshooting/key-management/photon/>
- **Connectivity Help** <https://docs.particle.io/support/troubleshooting/connection-help/photon/>
- **Troubleshooting Tools** <https://docs.particle.io/support/troubleshooting/troubleshooting-tools/photon/>



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