



Particle Sensor Kit 3G – Eur/Afr/Asia

PRODUCT ID: 3454



. Description

Quantify the world! **The Sensor Kit** from Particle is a curated mix of awesome sensors and electrical components specifically selected by the engineers on the Particle Team. If you want to measure temperature, sense loudness, measure distances, capture motion, or detect noxious gases, the Sensor Kit has you covered. Whether you're building a connected robot or measuring the world around you, the Sensor Kit is the place to start. For a full list of the sensors, check out the documentation!
<https://docs.particle.io/datasheets/particle-shields/#electron-sensor-kit>

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—one for North and South America (850/1900 MHz), and **this 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/particle-shields/>

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 Americas/Aus 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 or 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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