



Asset Tracker Kit v2 + Data



Locate your stuff! The Asset Tracker Kit contains all of the hardware you need to build a GSM + GPS location tracker for your most prized possessions. In addition to a GPS Shield and Electron, the Asset Tracker Kit comes with a weatherproof enclosure, so it'll keep your electronics safe from the dust, dirt, and moisture of the great outdoors. Keep your bicycle, boomerang, and backpack safe--satellite lock onto this bargain project kit today!

Our new Asset Tracker v2 shield has the following new features and improvements:

- Improved GPS performance
- Smaller enclosure for space-constrained tracking applications
- Expandable with Grove, Seeed's huge library of sensors and firmware libraries
- Satellite support for GPS, GLONASS, Galileo, BeiDou

The Asset Tracker 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. Some US carriers are planning to sunset their 2G networks beginning in 2017, so we recommend the Electron 3G (Americas) for our customers in the US.

We offer two types of Electron 3G Kits—one for North and South America (850/1900 MHz) and one for Europe/Asia/Africa (900/1800/2100 MHz). Check the full list of compatible countries for the location in which your product will be deployed.

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 U-series (3G) or G-series (2G)
- 36 pins total: 28 GPIOs (D0-D13, A0-A13), plus TX/RX, 2 GNDs, VIN, VBAT, WKP, 3V3, RST
- Based on 72-channel u-bloxM8 engine
- GPS/QZSS L1 C/A, GLONASS L10F, BeiDou B1I, Galileo E1B/C, SBAS L1 C/A: WAAS, EGNOS, MSAS, GAGAN
- Update rates: Single GNSS: up to 18 Hz, 2 Concurrent GNSS: up to 10 Hz
- Position accuracy of 2.5 m
- Sensitivity of -167 dBm
- Acquisition times: Cold starts: 26s, Aided starts: 2s, Reacquisition: 1s
- On-board ROM
- Anti spoofing and anti jamming technologies
- Two quick connect grove sensor ports
- Built in 3 axis IMU
- On board ceramic GPS antenna with LNA and bandpass filter
- Ability to switch between on board antenna or external active antenna
- Operating temperature of -40° C to 85° C
- Board dimensions: 4.06" x 1.42" x 0.3" (0.5" including headers)

Contents:

- 3 months of Particle's 1MB monthly data plan
- Particle Electron PCB
- Weatherproof Enclosure
- Asset Tracker Shield PCB
- Particle SIM Card
- Li-Po battery (2000mAh)
- USB cable
- Breadboard
- Pinout reference card
- Components for a sample product

**Data rates vary by country and by data usage, see here for full pricing and bulk discounts.*

****** 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://store.particle.io/products/asset-tracker> 11-2-17