The **E Series Evaluation Kit** is the best way to get started with the **E Series**, Particle's newest product family of industrialized cellular IoT modules. The Evaluation Kit includes an E Series Evaluation Board with 2G/3G global connectivity, a sample IoT sensor (temperature), and all the cellular accessories you need to build your first industrial-grade proof-of-concept on the Particle platform.

Excited to build your first prototypes with E Series modules? Add three spare E310 modules (2G/3G connectivity with global support) to your E Series Evaluation kit using the dropdown above.
E Series Evaluation Kit Contents

All E Series Evaluation Kits include the following:

- E Series Evaluation Board (see below for details)
- 2,000 mAh Li-Po battery
- Taoglas Penta-band antenna (u.FL)
- USB Micro cable
- Grove temperature sensor
- SMA to u.FL adapter for connecting external SMA antennas

E Series Product Features

Particle’s E Series is a new family of production-grade 2G, 3G, and LTE-enabled hardware that vastly reduces the cost and complexity of deploying cellular-connected IoT solutions at scale.

All E Series modules include the following features:

- *Embedded SIM card*, which resists vibration, corrosion, and mechanical failure
- *Surface-mountable design*, for PCB assembly in mass-production
- *Industrial temperature range* from -20 to 85C for deployment in hostile environments
- *Future-compatible pinout* with support for 2G and 3G today and a seamless transition to LTE M1 and NB1 in 2018
- *Fully certified design* virtually eliminating the cost and complexity of RF and carrier compliance
- *Built-in compatibility* with Particle’s development tools, messaging platform, and device management console

E Series Evaluation Board Features

The E Series Evaluation Kit contains a breakout board which provides easy access to all the pins and peripherals available on all E Series module variants. The Evaluation Board includes:

- Physical USB access for flashing and serial communications
- Li-Po battery connector for connecting external batteries
- Power barrel jack connector for external power
- MODE and RESET buttons
- Charge and status LEDs to appreciate device state at a glance

The E Series Evaluation board contains a soldered E310 module, which supports worldwide 2G and 3G connectivity and can be configured into a 2G only mode. All E Series variants will come in mass production quantities and will be available for purchase through our Wholesale Store in late October.

Specs:
- STM32F205 ARM Cortex M3 microcontroller
- 1MB Flash, 128K RAM
- Cellular modem: U-Blox SARA U-series (3G Global with 2G fallback)
- 36 pins total: 28 GPIOs (D0-D13, A0-A13), plus TX/RX, 2 GNDs, VIN, VBAT, WKP, 3V3, RST
- Board dimensions: 36mm x 43mm

Contents:
- Global E310 module mounted on an evaluation board
- 3 Global E310 spare modules (with additional purchase)
- Grove temperature sensor
- 3 months of Particle's 1MB monthly data plan (processed upon SIM activation)
- Li-Po battery (2000mAh)
- Pinout reference card
- Taoglas Penta-band Cellular Antenna

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

*Data rates vary by country and by data usage, see [here](https://store.particle.io/products/e-series-evaluation-kit) 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.