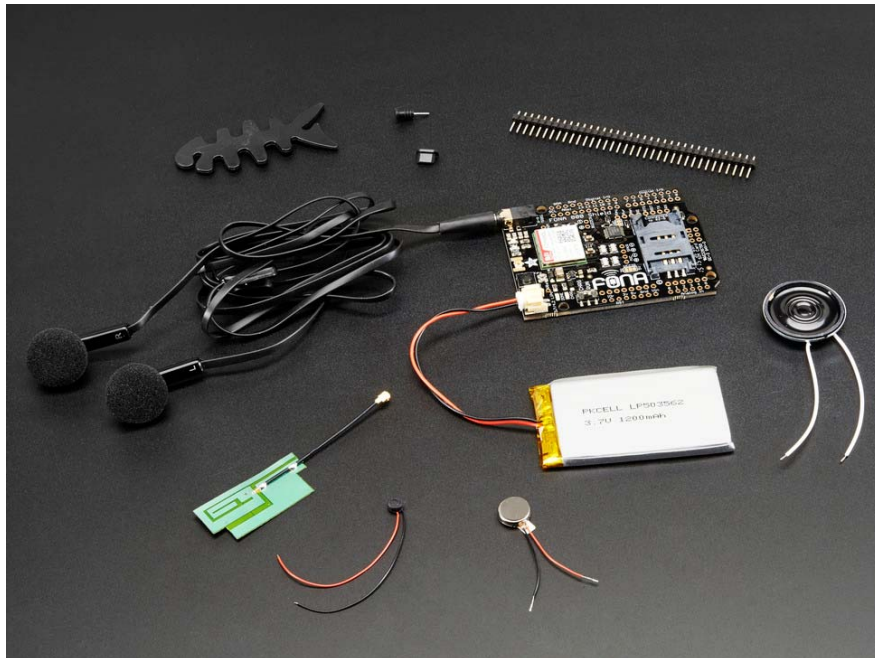# Adafruit FONA 800 uFL Shield Starter Pack

RODUCT ID: 2523

- # Description

Build your own cellular project and get off the grid with FONA. This pack comes with an uFL-antenna type FONA and paired with hand-picked accessories. It's the **Adafruit FONA 800 Shield Starter Pack**.

The FONA 800 Shield, is an adorable all-in-one cellular phone shield that lets you add voice, text, SMS and data to your project in an easy to use pluggable shield.

This shield fits on top of any classic Arduino or compatible, and packs a surprising amount of technology into it's little frame. At the heart is a GSM cellular module (we use the latest SIM800)

the size of a postage stamp. This module can do just about everything. This starter pack has a FONA 800 Shield. For the Breakout uFL version, click here! And for the Breakout SMA version click here!

- o Quad-band 850/900/1800/1900MHz - connect onto any global GSM network with any 2G SIM (in the USA, T-Mobile is suggested)
- o Make and receive voice calls using a headset OR an external 8Ω speaker + electret microphone
- o Send and receive SMS messages
- o Send and receive GPRS data (TCP/IP, HTTP, etc.)
- o Scan and receive FM radio broadcasts (yeah, we don't exactly know why this was included but it works really well)
- o PWM/Buzzer vibrational motor control
- o AT command interface with "auto baud" detection

Sounds delicious, right? So we plated this fine module onto a shield with all the extras you need to make your next project shine.

- o Onboard LiPoly battery charging circuitry so you can take your project on the go. Use any 500mAh+ LiPoly or LiIon battery and recharge via the Arduino when necessary. Two LEDs let you know when its charging and done. You can then flip the switch and use the battery to run your circuit!
- o Standard 4-pole TRRS headphone jack. Use any 'Android' or 'iPhone'-compatible headset with mic
- o Breakouts for external 8Ω speaker and electret mic if you don't want to use a headphone
- o Level shifting circuitry to make it Arduino-safe
- o Vibrational motor (buzzer) driver so you can have noiseless notifications
- o uFL connection for external antenna
- o Indicator LEDs for power and network connectivity
- o Any standard 2G SIM slides into a secure connector

On its own, this shield can't do anything. It requires a microcontroller like an Arduino to drive it!

Microcontroller not included! We recommend an Arduino UNO to go along **SIM card not included!** If you are in the USA, we recommend TING

This Pack Contains:

- o 1x Adafruit FONA 800 Shield - Voice/Data Cellular GSM for Arduino
- o 1x Slim Sticker-type GSM/Cellular Quad-Band Antenna - 3dBi uFL
- o 1x Lithium Ion Polymer Battery - 3.7v 1200mAh
- o 1x Mini Metal Speaker w/ Wires - 8 ohm 0.5W
- o 1x Wired Miniature Electret Microphone
- o 1x Cell-phone TRRS Headset - Earbud Headphones w/ Microphone
- o 1x Vibrating Mini Motor Disc

- # Technical Details

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  - o 1x Slim Sticker-type GSM/Cellular Quad-Band Antenna - 3dBi uFL
  - o 1x Mini Metal Speaker w/ Wires - 8 ohm 0.5W
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  - o 1x Adafruit FONA 800 Shield - Voice/Data Cellular GSM for Arduino
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  - o 1x Wired Miniature Electret Microphone
  - o 1x Cell-phone TRRS Headset - Earbud Headphones w/ Microphone

- **Datasheets:**
  - o **FCC TCB BT**
  - o https://cdn-shop.adafruit.com/datasheets/SIM800_FCC_TCB_BT.pdf
  - o **R&TTE Statement of Opinion**
  - o https://cdn-shop.adafruit.com/datasheets/SIM800_CE.pdf
  - o **FCC Part 15B Test Report**
  - o https://cdn-shop.adafruit.com/datasheets/SIM800_FCC_Part15.pdf
  - o **FCC Part 15C Test Report**
  - o https://cdn-shop.adafruit.com/datasheets/SIM800_FCC_Part15_BT.pdf
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