

# OpenLog Artemis (without IMU)

DEV-19426

## Product Overview

10/11/2022

For the most up-to-date information, visit [www.mouser.com](http://www.mouser.com) or the supplier's website.

## Description

SparkFun OpenLog Artemis (without IMU) is an open-source data logger that comes preprogrammed to automatically log GPS, serial data, and various pressure, humidity, and distance sensors. This board automatically detects, configures, and logs Qwiic sensors. The OpenLog Artemis (OLA) is specifically designed for users who just need to capture a lot of data to a CSV and get back to the larger project. All incoming serial data is automatically recorded to a log file with baud rates up to 500000bps. The OLA also has four ADC channels available on the edge of the board. Voltages up to 2V can be logged with 14-bit precision up to 1900Hz for one channel and 1000Hz logging all four channels.



The OpenLog Artemis is highly configurable over an easy-to-use serial interface. Simply plug in a USB-C cable and open a terminal at 115200bps. The logging output is automatically streamed to both the terminal and the microSD. This board automatically scans, detects, configures, and logs various Qwiic sensors plugged into the board without the need for soldering and programming.

## Specifications

- Operating voltage range:
  - 3.3V to 6.5V (via VIN with optional external power switch)
  - 5V with USB (via 5V or USB type C)
  - 3.6V to 4.2V with LiPo battery (via VBATT or 2-pin JST):
    - Built-in MCP73831 single cell LiPo charger
    - Minimum 450mA charge rate
  - 3.3V (via 3V3)
- Current consumption:
  - ~20mA (run)
  - ~80µA (sleep)
  - ~18µA (deep sleep - regulator shut down)

## Features

- Artemis module (Cortex-M4F-based Apollo3 microcontroller):
  - Configurable via CH340E and Artemis firmware upload GUI
- Ports:
  - 1x USB type C
  - 1x LiPo battery enabled
  - 1x Qwiic enabled I<sup>2</sup>C with power control
  - 1x SWD 2x5 header
  - 4x Analog-to-digital
  - 14-bit, up to 1900Hz, 2V max (3.3V compatible)
- Serial:
  - Logging speeds up to 500000bps
- 1x microSD socket:
  - Support for FAT32 and older FAT16 formats up to 32GB with power control
- RTC with 1mAhr battery backup
- LEDs:
  - Power
  - LiPo charge indicator
  - Serial Tx and Rx
  - Status

## Mouser Part Number

[View Part](#)

To learn more, visit <https://www.mouser.com/new/sparkfun/sparkfun-openlog-artemis/>