

Holybro Docs

Overview



The Pixhawk® 6C is the latest update to the successful family of Pixhawk® flight controllers, based on the Pixhawk® FMUv6C Open Standard and [Connector Standard](#). It comes with PX4 Autopilot® pre-installed.

Inside the Pixhawk® 6C, you can find an STMicroelectronics® based STM32H743, paired with sensor technology from Bosch® & InvenSense®, giving you flexibility and reliability for controlling any autonomous vehicle, suitable for both academic and commercial applications.

The Pixhawk® 6C's H7 microcontroller contain the Arm® Cortex®-M7 core running up to 480 MHz, has 2MB flash memory and 1MB RAM. Thanks to the updated processing power, developers can be more productive and efficient with their development work, allowing for complex algorithms and models.

The FMUv6C open standard includes high-performance, low-noise IMUs on board, designed to be cost effective while having IMU redundancy. A vibration isolation System to filter out high-frequency vibration and reduce noise to ensure accurate readings, allowing vehicles to reach better overall flight performances.

The Pixhawk® 6C is perfect for developers at corporate research labs, startups, academics (research, professors, students), and commercial application.

Key Design Points

- High performance STM32H743 Processor with more computing power & RAM
- New cost-effective design with low-profile form factor
- Newly designed integrated vibration isolation system to filter out high frequency vibration and reduce noise to ensure accurate readings
- IMUs are temperature-controlled by onboard heating resistors, allowing optimum working temperature of IMUs