

# pixhawk<sup>®</sup> 4 mini

## The power of Pixhawk<sup>®</sup> 4 in a compact form

### Product Features

- Half the footprint of the *Pixhawk<sup>®</sup> 4*
- The same FMU processor and memory resources as the *Pixhawk 4*
- Aluminum casing for great thermal performance
- Easy to connect to commercial ESCs
- The latest sensor technology from Bosch<sup>®</sup> and InvenSense<sup>®</sup>
- Redundant IMUs for reliable performance
- NuttX real-time operating system
- Pre-installed with the most recent PX4 firmware



The *Pixhawk<sup>®</sup> 4 Mini* autopilot is designed for engineers and hobbyists who are looking to tap into the power of *Pixhawk 4* but are working with smaller drones. *Pixhawk 4 Mini* takes the FMU processor and memory resources from the *Pixhawk 4* while eliminating normally unused interfaces. This allows the *Pixhawk 4 Mini* to be small enough to fit in a 250mm racer drone. The *Pixhawk 4 Mini* is easy to install; the 2.54mm (0.1in) pitch connector makes it easier to connect the 8 PWM outputs to commercially available ESCs.

*Pixhawk 4 Mini* was designed and developed in collaboration with Holybro<sup>®</sup> and Aulerion<sup>®</sup>. It is based on the Pixhawk FMUv5 design standard and is optimized to run PX4 flight control software.

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## Technical Specifications

- FMU Processor: STM32F765
  - 32 Bit Arm® Cortex®-M7, 216MHz, 2MB memory, 512KB RAM
- On-board sensors
  - Accel/Gyro: ICM-20689
  - Accel/Gyro: BMI055
  - Mag: IST8310
  - Barometer: MS5611
- GPS: ublox Neo-M8N GPS/GLONASS receiver; integrated magnetometer IST8310

## Interfaces

- 8 PWM servo outputs
- 4 dedicated PWM/Capture outputs
- Dedicated R/C input for CPPM
- Dedicated R/C input for Spektrum / DSM and S.Bus with analog / PWM RSSI input
- 3 general purpose serial ports
  - 1 with full flow control
  - 1 with a separate 1A current limit
- 2 I2C ports
- 3 SPI buses
  - 1 internal high speed SPI sensor bus with 4 chip selects and 6 DRDYs
  - 1 internal low noise SPI bus dedicated for Barometer with 2 chip selects, no DRDYs
  - 1 internal SPI bus dedicated for FRAM
  - Supports dedicated SPI calibration FLASH located on sensor module
- 1 CANBuses for CAN ESC
  - CANBus has individual silent controls or ESC RX-MUX control
- Analog inputs for voltage / current of battery
- 1 additional analog inputs

## Electrical Data

### Voltage Ratings

- Power Brick Input: 4.75~5.5V
- USB Power Input: 4.75~5.25V
- Servo Rail Input: 0~24V
- Max current sensing: 120A

## Mechanical Data

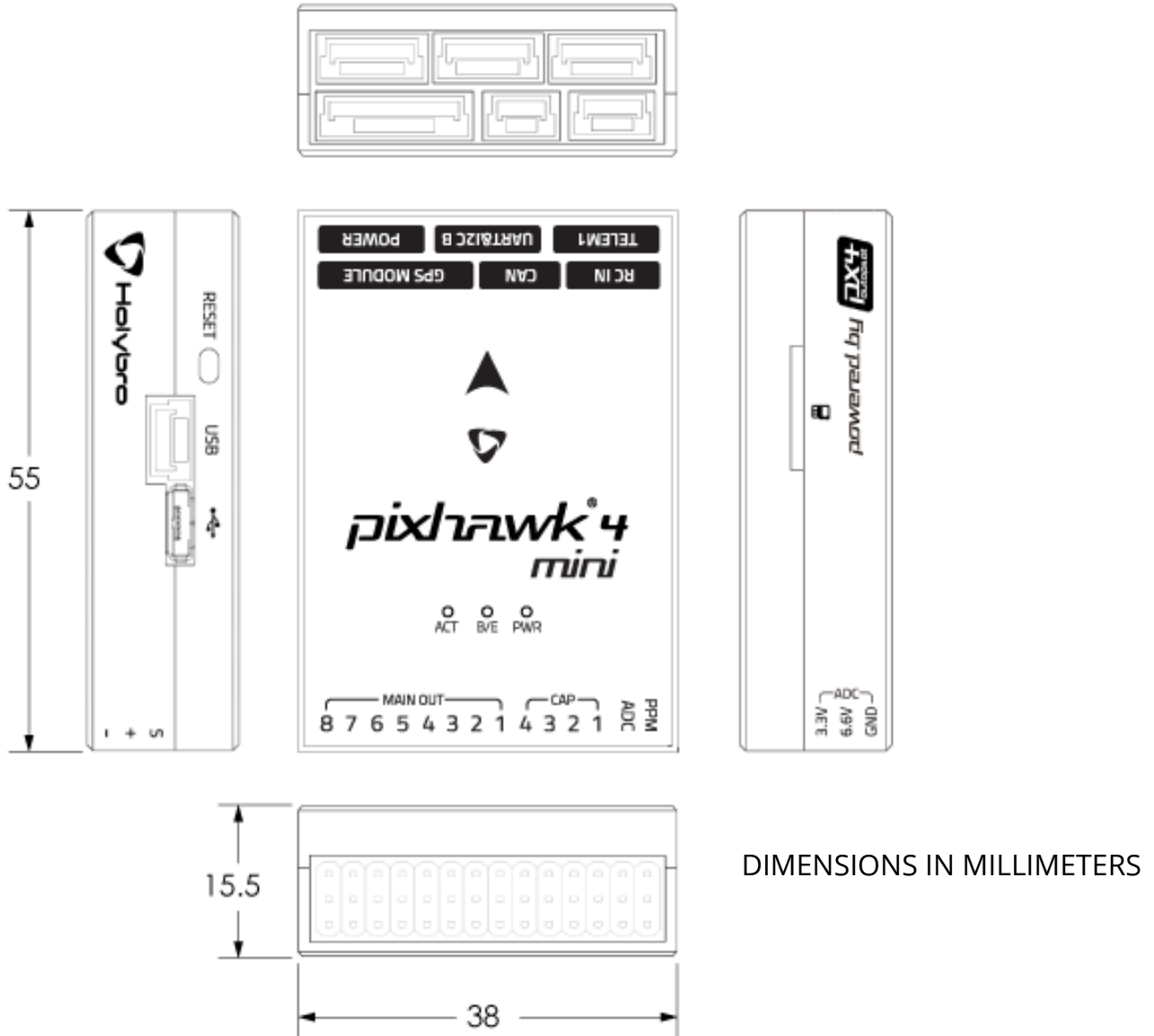
- Dimensions: 38x55x15.5mm

## Environmental Data, Quality & Reliability

- Operating temp. ~-40~85C
- Storage temp. -40~85C
- CE
- FCC
- RoHS compliant (lead-free)

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## Dimensions



For more information visit:

[www.dronecode.org](http://www.dronecode.org)

[www.pixhawk.org](http://www.pixhawk.org)

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