

ELLIPTIC SYSTEMS

UAV AVIONICS SUITE

ELLIPTICSYSTEMS

FLIGHT CONTROLLER

- Very high degree of reliability: triple redundant IMUs (3 x ICM-42688-P), Dual Barometers (2x DPS368).
- Top of the line H7 series MCU running at 480 MHz.
- Onboard IST8310 magnetometer for failsafe from GPS board.
- 2 MB Flash memory which facilitates support of the full Ardupilot feature set.
- Onboard 1W heater for extreme weather operation for complete thermal internal regulation.
- 14 PWM outputs for any kind of vehicle imaginable (Quadcopters, fixed wing, hybrid VTOL setups, helicopters, boats).
- Dual CAN bus transceivers for highly resilient peripheral comms.
- Vibration resistant Micro-SD card slot.
- Nothing is Chinese. PCB fabrication and assembly is all done in the UK and all components are non-Chinese.
- Extremely low weight compared to other industrial/military grade options (<10 grams for the FC).
- TCXO clock for reliability.
- Very compact (all boards are 4 cm x 4 cm).
- Conformally coated to be fully waterproof with nano-coatings or fully potted to IP67
 if required.
- Locking JST-GH connectors.
- Cost effective compared to other options in the market.
 - Ultra low noise LDOs.



GPS

- **ELLIPTIC**SYSTEMS
- Smallest possible dual band GPS receiver (4 cm x 4 cm) with good RF performance.
- State of the art RM3100 magnetometer.
- Onboard DPS368 barometer for failsafe from FC board. (In total 3 barometers in the stack).
- Low power MCU.
- TCXO clock for reliability.
- Onboard dual band antenna, no external antenna needed.
- CAN based reliable communications to FC.
- Dual CAN bus daisy chaining support for other peripherals.
- Ultra low noise LDOs.



AIR SPEED SENSOR

- State of the art AUAV-L30D-M25125 air speed sensor.
- Simplifies pitot tube installation and calibration requirements
- TCXO clock for reliability.
- Ultra low noise LDOs.
- Extremely compact design (<5 grams total weight).

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