

# CAM FLIGHT

AERIAL MAPPING ROBOT

Camflight FX8 multirotor is a high end, heavy lifter UAS for professional LiDAR mapping. The highlights are : multiple payload connectivity, best-of-breed mission planning and flight control software from Lockheed Martin, reliability and stability, flight time endurance and comprehensive safety features.



## Features

- Up to 50 min flight endurance for coverage of large areas
- Needed space for takeoff and landing: 3 x 3 meter
- Autopilot from Lockheed Martin for high precision flights
- High stability in wind
- Lockheed Martin Virtual Cockpit ground control software for advanced flight plans
- Short time from arrival to airborne
- Stabilized brushless camera gimbal
- Flight case for protected transportation
- Hand controller
- 40 A fast charging system

## Options

- 15 m<sup>2</sup> rescue parachute with safety switch on RC and backup battery
- Phoenix Aerial Systems LIDAR
- SPECIM AISA Kestrel 10 hyperspectral imaging system
- Sony A7r in brushless gimbal

## Specifications

### Environmental

Dimensions	Diameter < 140cm (unfolded), height : 45cm
Propellers	28" or 29" two blade
Weight	< 24,75 Kg with maximum payload
Batteries	4 x 44 000 mAh 8S - 29,6 V
Maximum speed	15 m/s
Avionics / Ground control system	Lockheed Martin Procerus Kestrel Autopilot v3.1 & Virtual Cockpit v3.0 ground control software

### Communications

Frequency	2400 MHz (other frequencies optional)
Max Communication Range	2 km (depending on frequency)

## Failsafe routines (user configurable with Lockheed Martin Virtual Cockpit ground control software)

Loss of RC Comm 0.5 sec	Fly level
Loss of RC Comm 2 sec	Fly to the rally point
Loss of Comm 3 sec	Fly to the rally point
Loss of Comm 10 sec	Land at the land point
Loss of GPS 2 sec	Fly level
loss of GPS 10 sec	Land at current location
Low battery 3 sec	Land at land point
Critically low battery	Land at current location

If multiple failsafes are triggered the failsafe behavior with the highest priority will be implemented.

The failsafe priority in order of highest to lowest is:

- 1) Critically low battery
- 2) Loss of GPS
- 3) Loss of Comm
- 4) Low battery
- 5) Loss of RC Comm

Max Payload Capacity	8,2 kg
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## Payload & endurance

Payload mount type	Quick release
Max Payload Capacity	8,2 kg
Flight endurance with max payload	25 min to first failsafe stage (depending on weather and wind conditions)

## Lockheed Martin Virtual Cockpit ground control software

### Features

- Intuitive multi-function display and vehicle health monitoring
- User-friendly 3-D map interface
- Powerful mission planning tools with easy-to-use click/drag 3D waypoints
- 3D streaming maps from disk or online.
- In-flight re-tasking of flight plans
- Full waypoint navigation

