OFFSHORE AVIATION OA-8C
DRAGONFLY HEAVY LIFT

Offshore Aviation Group

AIRCRAFT SPECIFICATION

OA-8C DRAGONFLY

HEAVY LIFT WORKHORSE

The Offshore Aviation OA-8C heavy lift multi rotor aircraft aimed at high weight payload lifting. These are very tough aircraft, immensely powerful yet maintaining good agility. They offer excellent resistance to wind, have high forward speed, great maneuverability, and can be built to resist water ingress for bad weather environments if necessary.

Standard features include super bright RGB LED navigation lights, water resistant enclosure, side-mounted batteries, forward facing FPV camera in a single axis gimbal (if required), quick-release landing gear, and a dual cam lever tool-less folding mechanism for the airframe. Together with an X8 configuration for maximum redundancy and stability in extreme conditions the OA-8C provides a dependable platform onto which can be tailored a system to match precisely any project requirement.

The unusual airframe design allows for an unprecedented level of flexibility in the overall aircraft configuration, for more information on this, please see ‘Configuration’ pages below.

FEATURES:

- Extremely tough durable design
- Redundancy throughout
- Weather resistant
- High resilience in harsh conditions
- Folding for transport
- Fully autonomous operation
- Very heavy lift capable
- Flexible specification
- Custom configurations available

PLUS tailored builds to match exacting or project-specific needs

ELECTRIC

HYBRID

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The OA-8C is a heavy lift Octo-copter with a payload weight up to 55 lbs.

Payload, sensors, communications, flight control, even the physical design of the aircraft can be adapted to align the OA-8C aircraft with any real world demand a project requires.

For more information on each aircraft please see the individual specification tables below. Because the OA-8C build is essentially a custom built in the USA, we encourage you to discuss specific requirements with us from the outset of your project.

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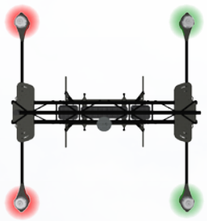
OA-8C DRAGONFLY
CONFIGURATION OPTIONS

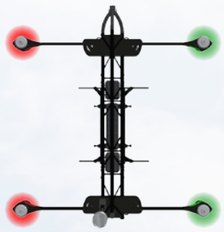
DIRECTION OF FLIGHT



'H' FORMAT

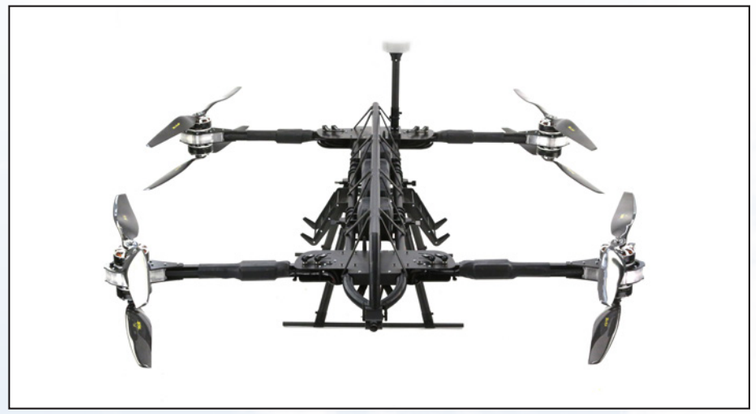
In '**H**' format the front of the aircraft is between the arms with the core frame running crosswise. This has advantages for certain payloads where the clear gap between the propellers is needed or the operator needs to clearly see what the payload is doing. Normally this would be for close quarter operations such as accurate spraying or item placement, and with this in mind a camera system can be included on the GPS tower giving excellent operator view.

DIRECTION OF FLIGHT



'I' FORMAT

The '**I**' format is a more conventional aircraft layout with the core frame structure running fore and aft. In this configuration there is good flexibility for mounting the payload or multiple sensors, lower wind resistance in forward flight, different battery mounting options and the aircraft will normally be fitted with a single axis gimbal and small FPV camera in the nose for pilot view forward or straight down. This is a very useful aid for payload management and remote landing.



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OA-8C All-Electric

The OA-8C Electric version is highly agile and resilient, and can fly reliably in some of the worst conditions of any multi-copter aircraft.

The specification here is a guideline only to give an idea of what the aircraft is capable of, but we design and optimize all our aircraft to produce the best possible solution for our customers. Flight times quoted are realistic and reflect what you are likely to see flying in real world conditions.

Optimization for your particular application is highly recommended. Contact us to discuss what you need to achieve and see what we can offer!

PHYSICAL	
Configuration	H8 Coaxial
Airframe diameter (through rotor hubs)	~ 1400mm
Dry weight*	~ 14kgs (subject to spec)
Length	~ 1400mm
Width	~ 1150mm
Operating voltage	37V – 44.4V nominal (10s – 12s LiPo)
Propeller size	28" dual blade
Anti-vibration mount	Optional
Flight controller	Various options available most commonly Pixhawk 2.1
FPV	1200 TVL 1 axis gimbal
Lights	DayBright navigation lights
FLIGHT	
Max speed	50mph
Rate of climb/descent	Adjustable. 2 m/s default recommended
Max operating altitude	5000 feet ASL
Max distance from pilot	Subject to RC controller/data link/ legal requirements
Max range	Subject to flight speed and weather conditions
Flight time with recommended batteries	
No payload	>30 mins
5kg payload	~ 22 mins
10kg payload	~ 16 mins
15kg payload	~ 12 mins
	Flight time estimates subject to the usual factors that affect flight time
Operating temperature	0–35°C
Max wind resistance	30mph
Max take off weight	40kgs
Max payload	Subject to battery choice
Weather	Subject to specification
Control link frequency	433Mhz – 2.4Ghz
Video link frequency	5.8Ghz (or alternative)
Autonomous operation	Yes
Failure modes	Multiple
Motor redundancy	Yes

OA-8C Hybrid (Coming Soon)

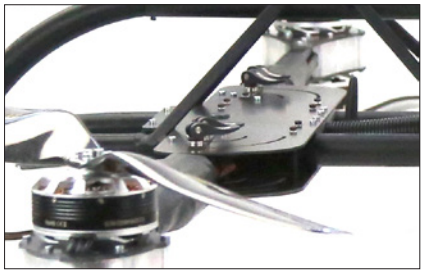
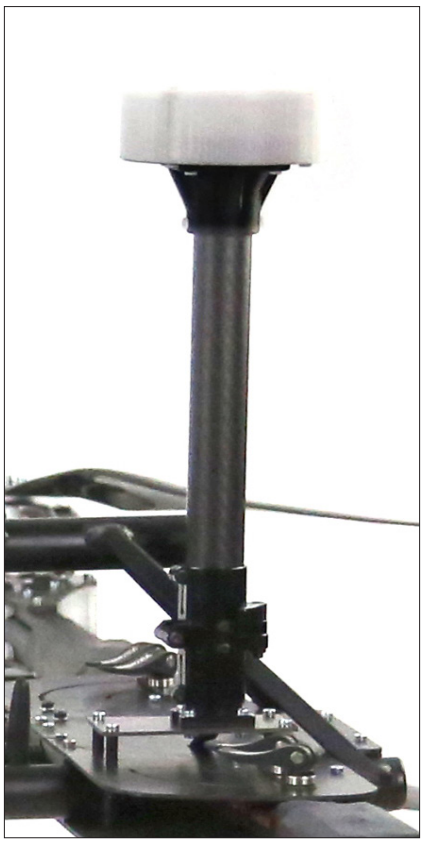
The OA-8C Hybrid version in test is a gas hybrid powered OA-8C Series variants capable of carrying payloads of up to 55 lbs for 4-5 hours. Just like its all electric counterpart this aircraft will be highly agile and resilient, and capable of flying in very difficult conditions.

The specification listed here is only a guideline to give an idea of what may be possible. The flight times we quote are what you are likely to see in the real world with actual flying, not just hovering in perfect conditions.

Flexibility of the design is key and optimization for the particular application is highly recommended. Contact us to discuss the details of you requirement, customization is what we do!

PHYSICAL	
Configuration	H8 Coaxial
Airframe diameter (through rotor hubs)	~ 1400mm
Dry weight*	~ 16kgs (subject to spec)
Length	~ 1400mm
Width	~ 1150mm
Operating voltage	44.4V nominal (12s LiPo)
Propeller size	27.5" Tri – 32" dual blade
Anti-vibration mount	Optional
Flight controller	Various options available most commonly Pixhawk 2.1
FPV	1200 TVL 1 axis gimbal
Lights	DayBright navigation lights
FLIGHT	
Max speed	50mph
Rate of climb/descent	Adjustable. 2 m/s default recommended
Max operating altitude	5000 feet ASL
Max distance from pilot	Subject to RC controller/data link/ legal requirements
Max range	Subject to flight speed and weather conditions
Flight time with recommended batteries	
No payload	>5 hours
10kg payload	~ 4 hours 30 mins
25kg payload	~ 4 hours
	Flight time estimates subject to the usual factors that affect flight time
Operating temperature	0–35°C
Max wind resistance	30mph
Max take off weight	55kgs
Max payload	Subject to battery choice
Weather	Subject to specification
Control link frequency	433Mhz – 2.4Ghz
Video link frequency	5.8Ghz (or alternative)
Autonomous operation	Yes
Failure modes	Multiple
Motor redundancy	Yes

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MADE IN USA