

DRAGONFLY

GUIDED PRECISION AERIAL DELIVERY SYSTEM

The DragonFly™ is a fully autonomous GPS guided cargo delivery system capable of carrying payloads from 5,000lb (2.250 kg) to 10,000 lb (4.500 kg). The canopy is a fully elliptical ram air parachute with a glide ratio of 3.75:1 for maximum offset capability. The DragonFly™ is fully qualified for maximum payloads up to 25,000 ft MSL.

The DragonFly™ has repeatedly demonstrated the ability to land within 150 meters of the designated Impact Point (IP).

Selected by US DoD

The DragonFly™ has been selected as the system of choice for the U.S. 10,000 lb. Joint Precision Aerial Delivery System (JPADS 10k) program.



Modular Design for Packing and Maintenance

The DragonFly™ is unique in that the canopy is packed on a frame which can be separated from the Airborne Guidance Unit (AGU). This allows the AGU to be charged, maintained, and stored separately while the canopy is being packed. This modular approach allows for turnaround times of less than four hours between drops.

The DragonFly™ can be rigged for extraction or gravity drop and uses a conventional G-11 style deployment bag with one standard release away static line.

Ease of Use

The only data required to program the DragonFly™ is the location of the Impact Point (IP). No wind data is uploaded into the AGU. Using state of the art avionics, the AGU calculates its position four times per second and continually adjusts its flight algorithm to ensure maximum accuracy. Just as a jumper under canopy continuously reads the winds and makes the required corrections, the DragonFly™ makes continual corrections until the final flare to land.

Mission Planning

The DragonFly™ is already compatible with and included in the current US GPADS Mission Planner (GPADS MP). The Mission Planning software calculates the release point for the system by using forecasted wind data and the flight characteristics of the DragonFly™ canopy. The Airborne Systems Mission Planner is capable of running simulated missions in virtual operational environments when using terrain mapping software.

The DragonFly™ is configured with an 802.11 interface for wireless interface which enables remote health monitoring. This ensures maximum technical support can be provided to units deployed to isolated operational theaters.

This data sheet is for information only and shall not form part of a contract

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Control Unit

The Remote Control Unit allows a user to remotely program the system for a mission and can be used to monitor the status of systems while onboard the aircraft prior to drop.

After the DragonFly is dropped, the Remote Control Unit can be used to monitor the location and heading while in flight. If desired, an operator may override the Airborne Guidance Unit and fly the system manually.

Family of Systems

The DragonFly™ is part of a family of GPADS platforms developed and manufactured by Airborne Systems. The MicroFly™, FireFly™, and DragonFly™ systems are capable of delivering payloads from 100 lb (45 kg) to 10,000 lb (4,500 kg). Airborne Systems is also developing the MegaFly™ and the GigaFly which will increase the payload range to over 40,000 lb (18,100 kg). All operate with a common algorithm, user interface, and mission planner. The packing methodology for all systems is identical, so little additional training is required to qualify riggers on different systems.

DRAGONFLY™ TECHNICAL DATA

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| Payload Capacity | 5,000 - 10,000 lb (2,250 kg) - (4,500 kg) |
| System Weight | 508 lb (154 kg) |
| Span | 100 ft (30 m) |
| Chord | 35 ft (10,7m) |
| Cell Count | 35 |
| Opening Shock (Max) | 4.5 g's |
| Maximum Release Altitude | 25000 ft (7620 m) |
| Minimum Release Altitude | 4000 ft (1220 m) |
| Max Glide, L/D, No Wind | 3.75:1 |

