

FIREFLY™

GUIDED PRECISION AERIAL DELIVERY SYSTEM

The FireFly™ flies itself to a designated point on the ground after being dropped from altitudes up to 25,000 feet Above Mean Sea Level (AMSL). Capable of carrying payloads up to 2,200 lb (1,000 kg), the FireFly™ can glide up to 25 kilometers after being dropped and will land within 150 meters of a designated Impact Point (IP). This horizontal and vertical separation between the delivery aircraft and the unit receiving supplies increases safety for the air crew and improves security for the receiving unit. The ability to autonomously deliver supplies will also reduce the need for vehicular traffic, reducing the logistical footprint and the number of convoys required to sustain a deployed force.



Selected by US DoD

The FireFly was selected as the system of choice for the U.S. 2,000 lb. Joint Precision Aerial Delivery System (JPADS 2k) program.

To date, thousands of FireFly™ systems have been sold to the U.S. and International customers.

The FireFly™ is currently being used in operational theater to deliver supplies and equipment to US forces in remote locations.

Flight Algorithm

The FireFly™ Guidance, Navigation, and Control software analyzes its environment in real time, adjusting the flight algorithm several times each second. The ability to continually adjust the flight plan of the FireFly™ results in greater accuracy and higher reliability.

Ease of Use

To program the FireFly™ for a mission, the user only needs to enter the location of the impact point and the payload weight. There is no need to enter wind data into the system. Just as a jumper under canopy continuously reads the winds and makes the required corrections, the FireFly™ makes continual corrections until the final flare to land.

Mission Planning

The FireFly™ is compatible with the GPADS Mission Planner (GPADS MP) and is incorporated into all software releases of the GPADS MP. The FireFly™ is also configured with an 802.11 wireless interface which allows the user to program the system through the GPADS Mission Planner or the Remote Control Unit and 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 FireFly™ 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 FireFly™ 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.

FIREFLY™ TECHNICAL DATA	
Payload Capacity	700 - 2,200 lb (315 kg) - (1,000 kg)
System Weight	167 lb (75 kg)
Span	56 ft (17 m)
Chord	18 ft (5,5 m)
Cell Count	19
Opening Shock (Max)	4.5 g's
Max Release Altitude	25,000 ft (7620 m)
Min Release Altitude	3500 ft (1067 m)
Max Glide, L/D (no wind)	4.0 : 1

