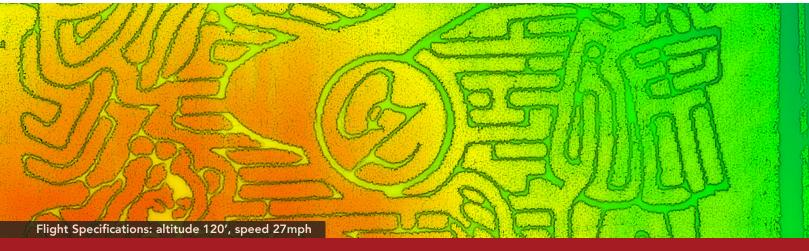
## APPLICATION PRECISION AGRICULTURE



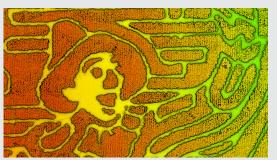


**High Resolution Images** 

**Superior Range** 

**High Point Density** 





Detail of High-Resolution Point Cloud Flight Specifications: altitude 120', speed 27mph

The RedTail LiDAR System – incorporating LiDAR technology licensed from the U.S. Army Research Laboratory – is designed to provide high-resolution imaging from multicopters, hybrid, and fixed-wing UAVs.

**Utilizing drone LiDAR to quickly and accurately** map agricultural land is quickly becoming an essential tool supporting the industry's efforts to streamline workflows in the field and make more informed crop and livestock management decisions.

Designed specifically for use on unmanned aerial vehicles, the RedTail LiDAR System combines the agility and operability of a drone with a superior point cloud generation tool to create high resolution, highly accurate 3D maps of your agricultural land.

Data collected with the Redtail LiDAR System can be used to: 1) create slope and sunlight exposure area maps, 2) monitor irrigation and fertilizer needs, 3) detect crop damage, analyze stand counts, and estimate harvest yield, 4) identify and minimize the impact of pests and disease 5) observe plant growth and detect areas of irregularities, 6) map water flow and catchments, 7) monitor erosion, soil loss, and assess storm damage, 8) calculate grove maturity, and 9) assess livestock health and determine optimal foraging areas.

The RedTail LiDAR System is the optimal solution for your agricultural mapping, monitoring and assessment needs. With a pulse repetition rate of up to 400,000 pulses per second, even ground-point distribution, superior ranging capability, and optimized scan angles, the RedTail LiDAR System provides you with timely and accurate information, reducing cost and increasing productivity.

## About the RedTail LiDAR System

The RedTail LiDAR System was designed to meet the market demand for high-quality, high-resolution point clouds from unmanned aerial vehicles. The microelectromechanical (MEMS) mirror-based technology was developed at the Army Research Laboratory (ARL) with the goal of generating accurate, high resolution point clouds over areas of interest on a single drone flight. At RedTail LiDAR Systems, our mission is to provide the optimal tool to rapidly and efficiently create superior point clouds for a broad range of commercial, academic and government customers.

