

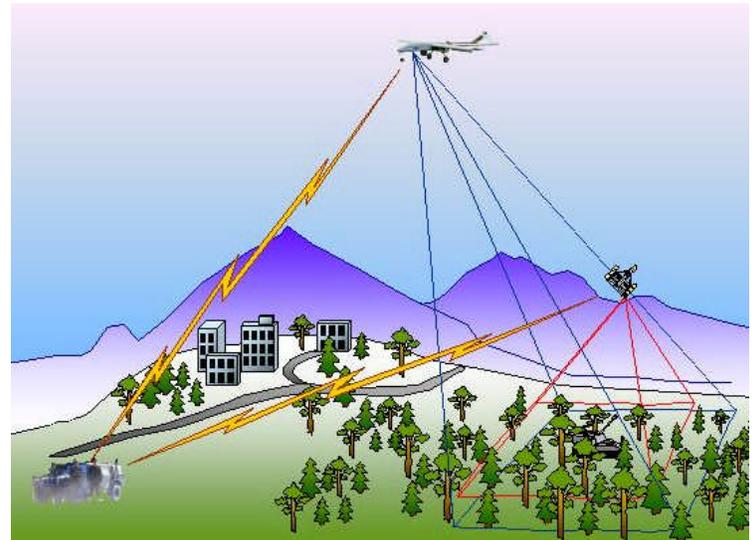
# 3D Flash LADAR / JIGSAW



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## VENDOR DESCRIPTION

Lite Cycles, Inc. (LCI) is developing a day/night eye-safe (1.56-micron) 3D flash imaging LADAR system that is designed to penetrate foliage and image vehicles and structures located under natural or man-made canopies and camouflage. The sensor utilizes a true 3D camera to capture a 260x260x20 volume image with a single laser pulse. The nominal voxel resolution at 1500' is 3"x3"x3". The laser operates at the eye-safe wavelength of 1.56 microns. The sensor package size, weight, and power budget is compatible with the payload capacity of small UAV platforms. The sensor architecture is scalable and can be deployed from higher altitudes with modest growth in volume. Incorporated in the design is a highly compact large-aperture integrated scanner-receiver that enables high-altitude operation with multi-aspect, multi-look interrogation patterns to improve detection under heavy foliage conditions.



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LIDAR

## Hardware

Power: 50 watts	Operating Altitude: 150 ft to 3000 ft AGL
Weight: 32 lbs	Operating Speed: 30 knots to 75 knots
Dimensions: 254mm x 280mm x 380mm	Operating Temp.: 0°C to 50°C
Internal Volume: 0.96 ft <sup>3</sup>	Storage Temp.: -10°C to 70°C
On Board storage capacity to handle 0.5 hours on station	Bandwidth Required: 10 Mb/s (RS-170)
Sensor Type: 3D eyesafe flash LADAR	
Sensor Field of View: ±6.5°	
Depression Angle: 15° from nadir	Maintainability: 2-level BIT to LRM level